# Aklavik

What the name means: Barren Ground Grizzly Place

Alternate Name: Ak**l**4



#### POLITICAL

Located in the future territory of: Western Arctic

RWED Administrative Region: Inuvik

Member of the NWT Legislature: David Krutko

Member of Parliment: Ethel Blondin

Mayor: Charlie Furlong

Senior Administration Officer: Nellie Gruben GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Mackenzie Delta Languages Spoken: Inuvialuktun/Gwich'in

Land Claim Area: Gwich'In

#### **LOCATION** *Longitude: 135.00; Latitude: 68.13*

Aklavik is located on the west shore of the Peel Channel in the Mackenzie Delta at 68'13'N latitude, 135'00'W longitude. The Community is 58' air km west of Inuvik, 1143 air km north-west of Yellowknife, and 113 km from the Beaufort Sea.

#### **CLIMATE**

Aklavik receives an average of 10.5 cm of rainfall and 110.9 cm of snowfall annually. Mean annual precipitation measures 20.7 cm. July mean high and low temperatures are 18.3 C and 9.7 C. January mean high and low temperatures are -25.5 C and -33.2 C. Winds are generally from the west and annually average 10.7 km/h.

# the west and annually TRANSPORTATION

A 914 m x 23 m gravel runway is operated by the Hamlet of Aklavik. Scheduled service is available from Inuvik. An unlicensed float plane dock operates in the summer months. In winter an ice road links the Hamlet to Inuvik. Summer barge traffic originates from Hay River. There are roughly 6 km of proper roads within Aklavik. Boardwalks connect most of the community. A drainage improvement program, consisting of reshaping and resurfacing the existing roads, was implemented in 1991.

#### **GEOLOGY**

The terrain is characterized by alluvial deposits of fine sand and silt, with stratified layers extending 11 m below the ground surface. The Community sits at the edge of the treeline and, due to continuous permafrost conditions, is surrounded by many swamps and ponds. The active layer ranges from 0.3 - 0.9 m.

Situated 3.5 m above the summer water level and 10 m above sea level, the Hamlet is susceptible to frequent flooding. Prior to the implementation of remedial steps to protect the river, erosion of the riverbank on the settlement side averaged 1.22 m per year. An ongoing program designed to increase riverbank stabilization consists of adding riprap insulation to the riverbank.

#### **VEGETATION**

The area is within the Boreal Forest Zone. White spruce, balsam, poplar, and black spruce are the tree species found on high ground, while willows and alders collect in low-lying areas. Marshy areas and muskeg are typical of low-lying land and areas inland of the channel banks, which are lined by tree cover.

#### 1981 Air Photo



#### **HISTORY**

Primarily as an excellent trapping area and a key transportation centre, Aklavik had become the major community in the Delta by 1920. The Hudson Bay Company established their post in 1912, and in 1926, the Roman Catholic Mission was built.

In the winter of 1931-1932, Albert Johnson, later known as "The Mad Trapper of Rat River", was approached by an RCMP officer concerning trapline tampering. For reasons known only to himself, Johnson shot through the door and injured the Mountie. Upon the officers return to Aklavik, a manhunt was organized. A fire-fight finally forced Johnson out of his cabin, where he began his run from the law. After a 42-day chase in freezing cold weather, which included more fire-fights and the death of a few officers, Johnson was shot and killed.

The incident is famous for introducing the airplane and communications radio as tools to help track a person. Updates of the chase were broadcast nationwide and the event attracted quite a following. Museums dedicated to Albert Johnson (or is it Arthur Nelson - no one is sure which) can be found in Aklavik and in Fort Smith. Regina also has an archival submission of the event.

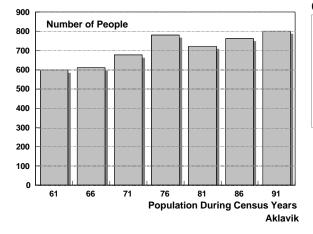
The height of erosion of the Peel Channel banks in the early-1950's coincided with the rapid development of the community. Exposure of ice lenses due to melting permafrost led to disastrous flooding. The flood of 1960 deposited enough silt on the shore to raise the ground level enough to build a short runway in the space allocated for the strip years before. The clearing of trees at the airstrip site by bulldozer caused the permafrost to melt and the Department of Transport machinery to be completely ineffective in the mud.

In the early 1950's, severe flood damage prompted the federal government to begin construction of Inuvik. Peaking at nearly 1600 in 1952, the population begin to decline when, in 1955, the Navy base, the hospitals and residential schools of both missions, and a few government buildings were either abandoned or moved to Inuvik. Moose Kerr, the school principal, organized a committee to save Aklavik, writing protest songs which his students would sing at pep rallies. More people and buildings than expected stayed at Aklavik, including the Hudson Bay Company, the two missions, and the electric power generator and crew. Eventually, a new school, a health clinic, and handicraft workshops were built and the community's economy recovered.

The economy remains based on hunting, fishing, and trapping. Transportation, tourism, handicraft sales, and mineral and gas exploration play secondary roles. Tourism is based on the attraction of the Mackenzie Delta, access to the Richardson Mountains, fishing, and the many arts and crafts that are sold. Local businesses include hotels, service stations, taxis, food, truck transport, oil and gas support services, and general retail.

Aklavik gained Hamlet status on January 1, 1974. Its traditional name is "Aklarvik", meaning barren-ground grizzly place.

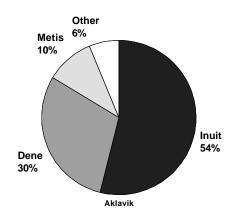
#### **POPULATION**

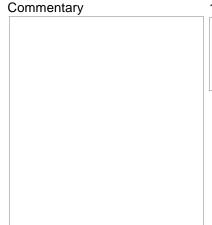


Commentary
According to the 1991 Census,
Aklavik had a population of
801. As seen in the chart, the
community has grown little
since 1976. The cummunity
currently accounts for 1.4% of
the NWT's total population.

Source: Census

#### **ETHNICITY**



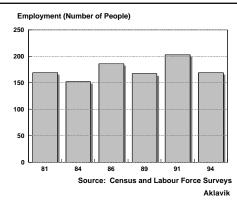


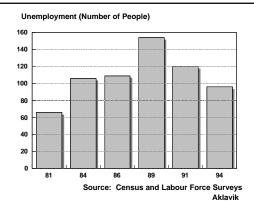
### 1991 Ethnicity

Inuit: 432 Dene: 238 Metis: 81 Other: 50

Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**





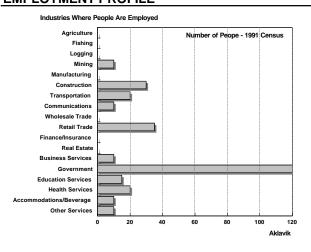
Source: 1994 Labour Force Survey, Bureau of Statistics

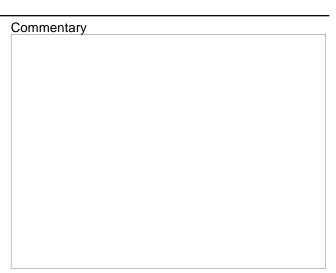
# **Employment Statistics 1994**

Over 15 Pop:	481	Abor. Employed: 124
Labour Force:	265	Unemployed: 96
Employed:	169	Ab. Unemployed: 96

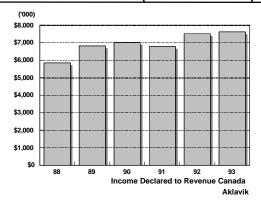
# Commentary

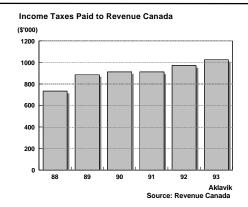
# EMPLOYMENT PROFILE





### **INCOME AND TAXES (Revenue Canada)**





Average Incomes 1993: \$18,593

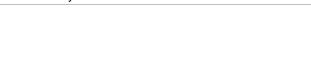
1992: \$19,241

1991: \$16,940

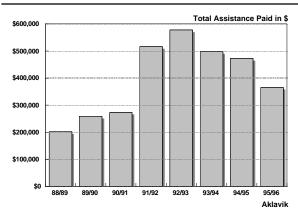
People Paying Inc.Tax 1993 410 1992 410 1991 400

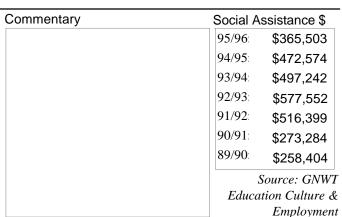
Source: Revenue Canada - Community Data

### Commentary

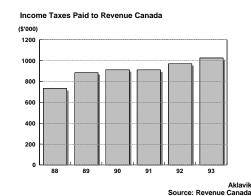


# **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES



Number of People

Trapped Some: 38 Arts & Crafts: 85 Hunted in 93: 143

Source: GNWT Bureau of Statistics - Labour Force Survey

Commentary

#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Daadzaii Lodge accommodates ten (shared) with kitchenette and television available.	95/96 94/95 93/94 92/95
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary Ownership/Type of Housing Units Occupied private dwellings increased 10.8% between 1986 and 1991. As of 1994, Owned: 70 the Housing Corporation owned 150 housing units. The Housing Assistance Program, Rented: 145 the Alternative Housing Program, and the Government Lease-to-Own Program have Band Owned: 0 accounted for 54 new homes in the community. Due to the permafrost conditions and the unpredictable flooding in the spring, the ground has a tendency to freeze and thaw Detached: 155 unevenly. Original housing foundations set on mud sills were susceptible to shifting Apartment: 15 and cracking, while others were not. Houses are now built on piles to allow for Row House: 45 adjustment to changing ground movements. Trailer: 0

Health

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Fire

Moose Kerr School teaches grades K-9. Nine teachers are on staff. The Aklavik Education Committee is the local education authority. Vocational and continuing education opportunities are available through the Adult Education Centre, with one adult educator on staff, or the Arctic College Extension Program.

Aklavik has a small volunteer fire department (6-8 members). They use a triple combination pumper in conjunction with a portable gasoline pump. NorthwesTel Westcom 931 is the alarm system used to notify of emergencies. The Hamlet has a firehall.

# **Recreation Services**

The arena/curling rink/community hall was completed in 1988. The gymnasium, located within the school, was built in 1972. A seasonal above-ground pool is available for use during the summer months. Other recreation facilities include an ice rink, a playfield, and a playground. Aklavik has a community library. The Active Recreation Committee organizes an annual spring carnival.

The health centre (443 m2) was built in 1966 and

renovated in 1984. The facility staffs seven while

maintaining two beds, one bassinet, and one crib.

#### Police, Mail, Electrical and Other Services

The RCMP detachment has a staff of five. The Community Social Services Office, with a staff of two, assists with the Aged and Handicapped Program at the Joe Greenland Centre and the Community Alcohol Program. Churches services are available from the Aklavik Baptist, All Saints Anglican, Roman Catholic Mission, and Aklavik Christian Assembly churches.

Mail is delivered five times per week. NorthwesTel local and long distance service and CBC Radio are available through microwave transmission. CBC Television is available via the Anik satellite system. The Community is also serviced by a low-power local FM radio station, three Cancom television channels, and one community channel. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides up to 1350 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a parking garage, and a maintenance garage. The hamlet office is leased through Community Works funding.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

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#### **COMMUNITY WATER**

#### Water Supply

In the past, the water supply during spring break-up and in the summer months had been Pump Lake, located 300 m from the community. During the fall and winter water was pumped from the Peel Channel. Problems with contamination of Pump Lake led to the upgrade of treatment facilities and the use of the Peel Channel year-round. The water treatment plant was completed in 1979.

Dual intakes into the Peel Channel consist of 250 mm diameter Series 100 HDPE pipe. Intake #1 extends 70 m into the Peel Channel while the head of the other 80 m intake diverges 6 m downstream from intake #1 on the river bottom. Originally, the insulated intake pipes were buried for the first 50 m from the pumphouse and the uninsulated pipes where placed on the river bottom. Due to gradual build-up of silt and sand from the river, the pipes are now buried up to the intake filters. In 1990 the intake facilities were examined and it was found that the pipes had formed an inverted "U" about 7 m above the riverbed, just offshore. The intake had been lifted from the riverbed by the ice of the river. Damage to the intake and a subsequent deterioration of water quality were averted.

The insulated portion is 75 mm polyurethane foam covered with a 20 gauge galvanized jacket and 45 mm polyethylene outer black jacket. A heat trace conduit on the first 50 m section of the water supply lines consists of a self-limiting Chemelex 8 ATV AutoTrace heat trace cable inside a 19 mm Series 160 polyethylene pipe. The heat trace was replaced in 1991. The intake stabilizers consist of American Standard Channels (150 mm x 50 mm) welded to 13 mm steel plates. Sediment accumulation within the intake casings began to cause restricted flow rates. The casings were cleaned, repaired, and re-stabilized in 1991.

### Water Storage

Water storage includes three storage tanks. There are two 227,000 L bolted galvanized storage tanks, one of which was repaired and insulated with 50 mm of polyurethane foam. The other, an uninsulated tank, is not used but is still adequate for storage. A 75 mm diameter water line leads from the treatment plant to the insulated storage tank just outside. A 38 mm diameter re-circulation line runs parallel to it. An 81,800 L welded steel tank is also used for storage. Water is delivered entirely using a trucked system. All water deliveries are metered.

#### Water Treatment

In 1979, a Neptune Water Boy WB 82 package treatment plant was installed in the existing building, which is heated and insulated. The plant includes a Neptune FTC - 25H tube settler/flocculator, a rapid mix chamber, a filter area of 1.1 m2, a 4.5 L/s effluent pump (1.1 kW), and a 16.4 L/s backwash pump (3.7 kW). A 13,600 L storage tank is used for backwash and a backwash drainage pit was constructed to accommodate WB-82 and FTC-25H wastes. The water is chlorinated using a Wallace and Tiernan Series 94 Solution Metering Pump. A 200 mm diameter Series 45 HDPE insulated backwash waste water outfall extends roughly 27 m from the water treatment plant to the river embankment edge.

#### Water Quality

Water quality is often challenged by severe seasonal fluctuations in sediment loading of the Peel River. Comparison of the chemical analysis for the raw and treated water to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits. The treated water was found to be undersaturated with respect to CaCO3, well buffered, and not turbid, making it of good chemical quality for domestic use.

#### **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected using two 3/4 ton pickup trucks. Spent fuel drums are grouped to store domestic waste prior to collection. Each group of barrels serves a small number of houses. The solid waste site is located between Clearing Lake and Pump Lake. The site is operated using the cell disposal method. In this method, cells are excavated in the soil and waste is compacted and covered until the cell is full. The site has been designed with a potential for twenty cells.

#### Sewage Disposal

All residential units are equipped with sewage pumpout tanks. Waste water is disposed of in the holding tanks. The sewage contractor uses a 5450 L sewage pumpout truck. The sewage disposal site, located 2 km north (downstream) of the community at a site 450 m from the river channel, was completed in 1989. The main disposal area is Clearing Lake has a surface area of 16 ha and an estimated retention time of 3 years. Clearing Lake discharges into a treatment area consisting of a vast array of ponds and lakes before reaching the Peel Channel.

Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay. GNWT.

# Arctic Bay

Alternate Name: Ikpiarjuk What the name means: Pocket

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Levi Barnabas

Member of Parliment: Jack Anawak

Mayor: Silas Attagutsiak

Senior Administration Officer: Mike Richards GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: High Arctic Languages Spoken: Inuktitut

Land Claim Area: TFN - Baffin

**LOCATION** *Longitude:* 85.10; *Latitude:* 73.02

Arctic Bay is located at Admiralty Bay on the Borden Peninsula at the northern edge of Baffin Island. Its geographic co-ordinates are 73'026 N and 85'116 W. It is the most northerly community on Baffin Island, 1,216 air km north-west of Iqaluit and 1,674 air km north-east of Yellowknife.

### **CLIMATE**

Arctic Bay receives an average of 5.2 cm of rainfall and 71.5 cm of snowfall per year. Mean annual precipitation totals 11.8 cm. July mean high and low temperatures are 9.5 C and 1.7 C. January mean high and low temperatures are -25.9 C and -33.5 C. Winds are generally northnorth-west and annually average 24 km/h.

#### **TRANSPORTATION**

The Hamlet and the GNWT jointly operate the 475 m x 15 m gravel runway, located five km south-east of the community. The airstrip is not certified. It has no runway lights, navigational aids, or shelter and is only used for emergencies. The larger strip at Nanisivik provides full service via Resolute. Expansion of the airstrip at Arctic Bay is unlikely due to its unfavourable location nestled between two hills.

Marine transportation is available from Eastern Arctic Sealift and Transport Canada (Montreal). Facilities consist of a groomed dry cargo landing east of the harbour with limited marshalling area. There is also anchorage for bulk fuel tankers. Marine traffic operates mid-July to October. There is an all-weather, 37.5 km gravel road linking Arctic Bay to Nanisivik. Within the community itself, there are 5.6 km of gravel surface road. Calcium chloride is applied annually to 4.4 km to act as a dust suppressant and surface stabilizing agent.

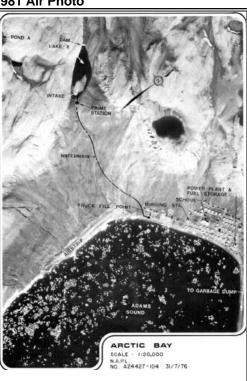
#### **GEOLOGY**

Arctic Bay is enclosed on three sides by high hills. The highest is King George V Mountain at 564 m, located 1.6 km to the east of the community. In the southern half of the community there are some grassy areas on a talus base intermixed with clays. The beach consists of a gravel spread 6 to 20 m in width. Underlain with clays mixed with gravel to humus and tundra over continuous permafrost. Evidence of slow creep and drainage problems could be detrimental to future planning and construction.

### **VEGETATION**

Arctic willows, grasses, mosses, and lichens grow on a cover of humus in the southern part of the Hamlet.

#### 1981 Air Photo



#### Thursday, July 20, 1995

#### **HISTORY**

The Arctic Bay area has been occupied by successive waves of nomadic Inuit hunters dating back 5000 years. Named after the whaling vessel "Arctic Bay", the community was first visited by Captain William Adams in 1872. The Hudson Bay Company established a trading post at the site during the 1920s. The Inuit, who trapped white fox in the surrounding area, tended to meet at the post.

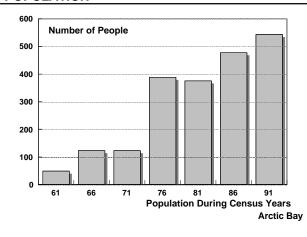
The Federal Department of Transport operated a weather station from 1942-1952. In 1962, the opening of a Federal school provided an incentive for year-round settlement living, resulting in a gradual development of the community. Continued oil exploration and the construction of the nearby lead-zinc mine at Nanisivik transformed Arctic Bay from a subsistence to a wage-earning economy by the early 1970s.

The Community will be affected when the Nanisivik mine eventually closes. With the hope to minimize net job losses at the end of the century, re-development plans are underway, including increased tourism and marketing of the nearby Bylot Island Bird Sanctuary.

Marine mammal harvesting, hunting, and fishing are still major contributors to the economy. The creation of handicrafts and carvings is popular. Kooneak soapstone, known for its distinctive colour, is quarried locally.

Arctic Bay gained Hamlet status on July 1, 1976. Its traditional name is "Ikpiarjuk", meaning pocket.

#### **POPULATION**



# Commentary

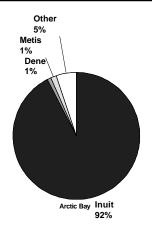
The 1991 population of Arctic Bay was 543, according to the 1991 Census. The community has a very high annual rate of population growth as can be seen from the bar charts. The community accounts for slightly less than 1% of the NWT's population.

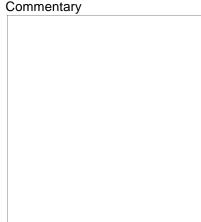
# Population Statistics

1961:49 1966: 123 1971: 123 1976: 388 1981: 375 1986: 477 1991: 543

Source: Census

#### **ETHNICITY**



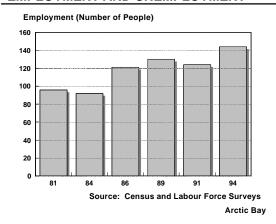


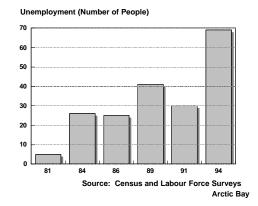
# 1991 Ethnicity

Inuit: 502 Dene: 5 Metis: 8 Other: 28

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





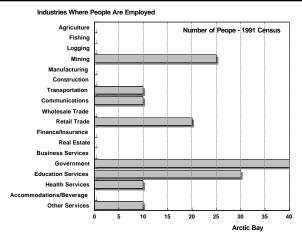
Source: 1994 Labour Force Survey, Bureau of Statistics

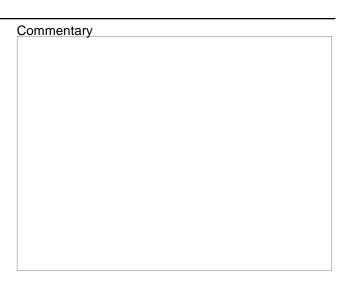
# **Employment Statistics 1994**

Over 15 Pop:	308	Abor. Employed: 114
Labour Force:	212	Unemployed: 68
Employed:	144	Ab. Unemployed: 67

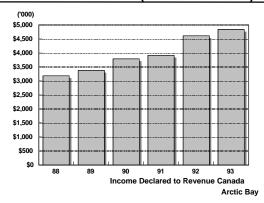
# Commentary

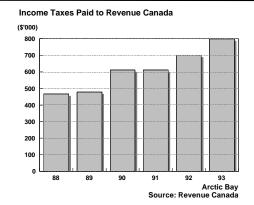
# **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$23,052 1992: \$21,943

1991: \$18,633

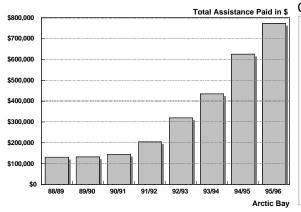
1993: 210 1992: 210 1991: 210

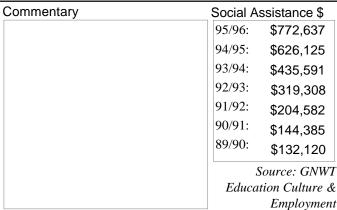
Source: Revenue Canada - Community Data

#### Commentary

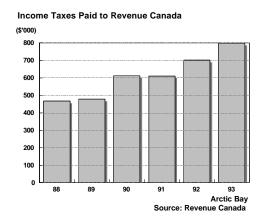


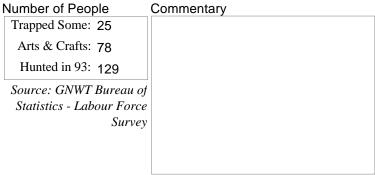
#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Thursday, July 20, 1995

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Enokseot Hotel accommodates eight people.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary Ownership/Type of Housing

The number of occupied private dwellings in Arctic Bay increased 24.7% between 1986 and 1991. As of 1994, the Northwest Territories Housing Corporation owned 95 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 23 new homes in the community.

Owned: 10
Rented: 95
Band Owned: 0

Detached: 105 Apartment: 0 Row House: 0 Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Inuujaq School teaches grades K-11. Eleven teachers and two language specialists are on staff. Vocational and continuing education opportunities are available. An adult educator is on staff in the Hamlet.

#### Health

The health centre (660 m2), built in 1972, contains two medical beds, one bassinet, and one crib, and employs five medical staff.

### Fire

Fire protection consists of a fourteen-person volunteer fire brigade. Equipment includes a 1985 IHC model s-1800 triple combination pumper fire truck, with a capacity of 4546 L. The pumper acquires its water supply directly from Marcil Lake. There is also a telephone and siren alarm system. The firehall is 120 m2 in area.

#### **Recreation Services**

Recreation facilities include an arena (1580 m2), a gymnasium (460 m2), a community hall/multi-purpose complex (100 m2), a playground and a playfield. Some trail development has taken place. There is also a Sod House Museum in the community. A community recreation committee and the recreation co-ordinator organize such events as the Midnight Sun Marathon (June-July). This world famous marathon, with its gravel road, steep hills, inclement weather and other difficulties, attracts many top-class runners to this unique event.

#### Police, Mail, Electrical and Other Services

RCMP services are available from Nanisivik. The Community Social Services Office has one staff member. Social services include the Drug and Alcohol Committee and the Youth Committee. The Anglican Church and Roman Catholic Mission provide church services.

Mail is delivered twice per week. NorthwesTel telephone, CBC Radio, and CBC Television services are broadcast via the Anik satellite system. Power is provided by the NWTPC 970 kW capacity diesel generator.

Other infrastructure funded by Municipal and Community Affairs programs includes the Hamlet office (272 m2), a two-bay maintenance garage (239 m2), a four-bay parking garage (240 m2), and a three-bay parking garage (160 m2).

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

### **COMMUNITY WATER**

#### Water Supply

Water is trucked from Marcil Lake, located approximately 9 km south-east of the community on the road to Nanisivik. At Marcil Lake, a truck suction line is used to fill the trucks.

#### Water Storage

Water distribution is entirely by trucked delivery and is managed by the Hamlet. Water is delivered to holding tanks in each of the buildings. The Hamlet uses three water trucks with capacities of 4546 L (1994), 6819 L (1990), and 9092 L (1988). All water deliveries are metered.

#### Water Treatment

Water treatment consists of the addition of sodium hypochlorite prior to delivery.

#### Water Quality

Water is trucked from Marcil Lake, located approximately 9 km south-east of the community on the road to Nanisivik. At Marcil Lake, a truck suction line is used to fill the trucks. Water treatment consists of the addition of sodium hypochlorite prior to delivery.

#### **COMMUNITY WASTE**

#### Solid Waste

Solid wastes are collected daily by the Hamlet. A two-person collection crew uses a Ford model F-350 garbage compactor (9 m3 capacity) to collect solid waste. Burning of wastes in oil drums is not practiced at homes.

The solid waste management site is located 2.5 km south-west of the Hamlet, adjacent to the solid waste sites. This unfenced, open site was opened in 1980 and occupies an area of 3600 m2 on sloping land. It is estimated that the site will adequately service the community for several more years. Bulky wastes are stored in a separate 8000 m2 area. Solid wastes are burned at the end of each day and compacted monthly. Each summer the site is covered with granular material to prevent the scattering of litter.

#### Sewage Disposal

Sewage is collected in holding tanks attached to each building. All new and refurbished houses are equipped with 1596 L sewage holding tanks. Two trucks are used to pick up sewage; the 1986 truck has a capacity of 4546 L and the 1993 truck has a capacity of 6819 L. Sewage is trucked 2.5 km from the community and released into a 400 m2 sewage lagoon which provides primary treatment. The community's honeybag site is 100 m2 in area. Bagged sewage is collected daily by the Hamlet.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# rviat

Alternate Name: Eskimo Point What the name means: Bowhead Whale

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Keewatin

Member of the NWT Legislature: Kevin J. O'Brien

Member of Parliment: Jack Anawak

Mayor: David Alagalak

Senior Administration Officer: Darren Flynn GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Keewatin

NWT Legislature Riding: Kivalivik Languages Spoken: Inuktitut Land Claim Area: TFN - Keewatin

#### **LOCATION** *Longitude:* 94.04; *Latitude:* 61.07

Arviat is located on the northern shore of a narrow peninsula on the west coast of Hudson Bay, at 61'056 N latitude, 94'006 W longitude. It is 265 air km north of Churchill, 241 air km south-west of Rankin Inlet, and 1,080 air km east of Yellowknife.

#### **CLIMATE**

The District of Keewatin has a continental climate whose temperatures are effected by the rapid warming and cooling of the land. In winter, ship access through Hudson Bay becomes constricted by the accumulation of pack ice. February and March are the coldest months, while August is normally the warmest month. Cooler water temperatures cause local cloud and fog conditions along coastal areas.

Arviat receives 16.0 cm of rainfall and 118 cm of snowfall per year. The average total precipitation is 27.8 cm. July mean high and low temperatures are 13.1 C and 4.5 C. January mean high and low temperatures are -27.9 C and -35.0 C. The winds are generally north and annually average 21 km/h.

#### 1981 Air Photo



#### **TRANSPORTATION**

The GNWT and the Hamlet of Arviat jointly operate a 1,219 m x 30 m certified Arctic B gravel runway. Facilities and services include a terminal building as well as navigational aids and weather-reading equipment. Scheduled flight service is available via Rankin Inlet and Churchill. An unlicensed water aerodrome provides float plane access from break-up (July 1) to freeze-up (October 30). Conditions are often poor due to fog or heavy seas.

Marine service is provided by NTCL barge from Churchill. The facilities include a beach pushout for landing dry cargo east of the community wharf and an offshore anchorage for petroleum products discharge. There is no year-round road access to Arviat but Bombardier and Terex access to Churchill is usually possible in winter. Within Arviat, roads link the airport and sewage lagoon with the community. Of the 20 km of gravel surface roads, calcium chloride is applied to 6 km of road to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

Arviat is situated on a low-lying peninsula which slopes into Hudson Bay. One-third of the peninsula is covered by shallow lakes or ponds, and it contains three eskers. The Community is in the Hudson Bay Lowland Physiographic Region. This region is characterized by low topographic variation, occasional bedrock outcrops and a thick mantle of glacial and glacio-fluvial debris whose features include till, fine-grained marine deposits, and extensive beaches. The permafrost is continuous, extending to depths from 30 m to over 100 m. The active layer varies between 0.5 m and 0.3 m.

#### **VEGETATION**

Vegetation consists of mosses and lichens growing on rocky outcrops, with hardy grasses growing in more sheltered areas. Sage marshes grow in swampy locations.

Thursday, July 20, 1995

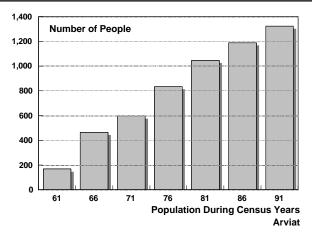
Arviat had been a summer camp for the inland Pallirmuit Inuit for centuries. The Edthen Eldeli Chipewyan tribe, enemies of the Inuit for a long period of time, also used the area. In the late 16th century the two groups made peace and the Chipewyans became middlemen for the trading of ivory and furs from the Inuit to the Hudson Bay Company farther south.

Permanent settlement in the area began after a Hudson Bay Company Trading Post was established in 1921. Roman Catholic and Anglican Missions were built in 1926. The first school opened in 1959.

Arviat has the largest number of small businesses in the Keewatin. Many residents depend on income from the sale of arts and crafts. Hunting and trapping remain an important ingredient in the local economy. Future development of inland fishing lodges and local tourism resources show much economic potential.

Arviat, which means bowhead whale, gained Hamlet status on December 1st, 1977. The Hamlet changed its name from Eskimo Point on June 1st, 1989.

#### **POPULATION**

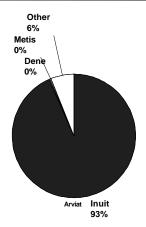


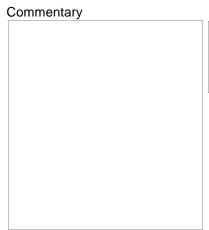
Commentary Arviat has one of the fastest growth rates in the NWT. The community accounts for 2.9% of the NWT's total population.

Population Statistics 1961:168 1966: 464 1971: 598 1976: 835 1981: 1,047 1986: 1,189 1991: 1,323

Source: Census

#### **ETHNICITY**



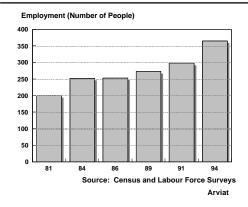


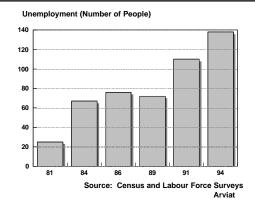
1991 Ethnicity

Inuit: 1,235 Dene: 4 Metis: 4 Other: 80

Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**





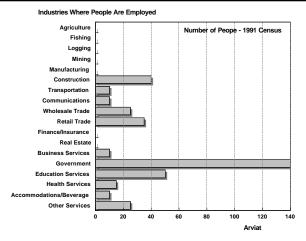
Source: 1994 Labour Force Survey, Bureau of Statistics

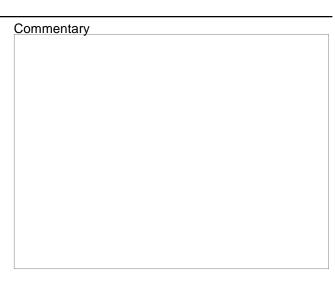
# **Employment Statistics 1994**

Over 15 Pop: 883 Abor. Employed: 308 Labour Force: 505 Unemployed: 140 Employed: 365 Ab. Unemployed: 137

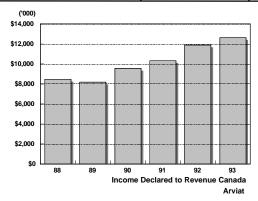
# Commentary

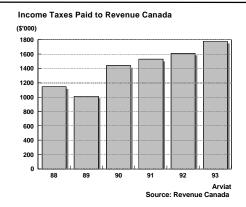
# **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$20,347 1992: \$19,833

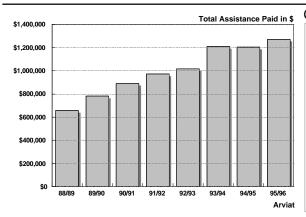
1991: \$18,100

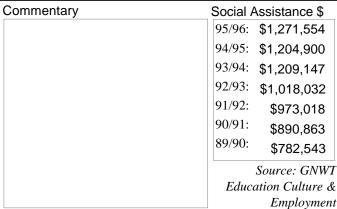
1993: **620** 1992: **620** 1991: **570** 

Source: Revenue Canada - Community Data

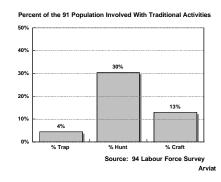
#### Commentary

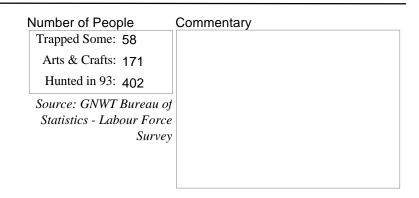
#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Ootakevik Motel accommodates 12 in four rooms. The Tugalik Inn accommodates 22.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type	of Housing
The number of occupied private dwellings increased 32.3% between 1986 and		Units
1991. As of 1994, the Housing Corporation owned 231 housing units. The Housing	Owned:	30
Assistance Program, the Alternative Housing Program, and the Government Lease-to-	Rented:	260
Own units have accounted for 74 new homes in the community.	Band Owned:	0
	Detached:	220
	Apartment:	0
	Row House:	70

Source: 1991 Census Data

Trailer: 5

#### **COMMUNITY SERVICES**

#### Education

Qitiqtiq School teaches grades K-12. Twenty-eight teachers and eight language specialists are on staff. Vocational and continuing education opportunities are available through the Arctic College Extension Program. An outreach worker and an adult educator are employed.

#### Health

The health centre (670 m2) was built in 1977. The facility houses three medical beds, one bassinet and two cribs. Five nurses, one therapist, and one community health representative are on staff.

#### Fire

The fire department is staffed by 23 volunteers. Equipment includes a 1979 International 625 g/min. capacity triple combination pumper, a chemical trailer, and a telephone/siren alarm system. The Community also has a firehall.

#### Recreation Services

The two gymnasiums, built in 1975 and 1988, are located in the school. The indoor arena, built in 1989/90, includes arena, curling, and hall facilities. The Hamlet has a softball field, a playground, and a library.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office has three staff members. Four churches are active within the Community: the Anglican Mission, the Glad Tidings Church, the Roman Catholic Mission, and the Arviat Alliance Church.

Mail is delivered three times per week. NorthwesTel local and long distance telephone service, CBC Television and CBC Radio are available via the Anik satellite system. There are also local radio broadcasts and an IBC Television broadcast station. The Rankin Inlet NWTPC area office provides 1,620 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a community hall (160 m2), a hamlet office (240 m2), two two-bay maintenance garages (each 222 m2), three three-bay parking garages (two at 120 m2 and one at 125 m2), and a two-bay parking garage (120 m2).

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Shared Care

### **COMMUNITY WATER**

#### Water Supply

Prior to the construction of the present water storage reservoir, water was obtained from a shallow lake adjacent to the community. The lake (0.8 m deep) freezes to the bottom in winter. An earth fill reservoir adjacent to the lake was filled every fall to provide water throughout the winter. Due to the poor quality of this water, many residents used cut blocks of ice.

Water was later obtained from Miquaq Lake, 3.2 km west of the community and 2.1 km west of the present reservoir. This source is now used as an emergency water supply. A new water source re-supply and reservoir system was established in 1978. In 1989, a second reservoir cell with twice the capacity was added to the system, as well as a new truckfill/pumphouse facility.

In 1993, the water source was moved to Wolf Creek, about 8 km south-west of the Hamlet. Water is pumped from the creek to the reservoir through a 200 mm diameter HDPE summer fill line, 7.4 km long. The pipe has flanged joints 122 m apart. The pump is a Gormann-Rupp Model 04b3-F41L self-priming centrifugal 100 mm with a 4 cylinder air-cooled diesel engine, permanently housed on site in a pre-engineered building on skids. The intake line is a flexible fire hose with a floating suction strainer. There is no road access to the pumphouse or to most of the pipeline. Fuel is brought to the pumphouse overland in spring while the ground is still frozen and stored in an 11,000 L tank, with secondary containment located adjacent to the pumphouse. Access to the site in summer is by ATV.

A new truckfill/pumphouse facility was completed in 1988. This facility houses several features in a small, practical building, which helped to reduce heating and construction costs. These features include intake terminations, chlorination equipment, overhead truckfill arm, intake cross connections, valving, water meter, and winches for pump removal. A separate building houses the emergency generator unit.

#### Water Storage

The two reservoirs have a combined capacity of 35,400,000 L. The first cell, with a capacity of 8,200,000 L, was completed in 1976. The second cell, with a capacity of 27,200,000 L, was completed in 1988. Both cells are constructed of granular material and furnished with liners.

#### Water Treatment

Chlorination equipment consists of two polyethylene tanks, one mounted above the other. The upper tank is used to mix the chlorine solution which, after an allowance for settling, is then decanted to the lower tank via plastic piping and a plastic valve. A Wallace and Tiernan impeller mixer is mounted on the upper tank. A chlorine feed pump draws chlorine from the lower tank through a microscreen. The chlorine system is designed to use calcium hypochlorite and pump a mixed 1% chlorine solution.

#### Water Quality

Thursday, July 20, 1995

Prior to the construction of the present water storage reservoir, water was obtained from a shallow lake adjacent to the community. The lake (0.8 m deep) freezes to the bottom in winter. An earth fill reservoir adjacent to the lake was filled every fall to provide water throughout the winter. Due to the poor quality of this water, many residents used cut blocks of ice. Water was later obtained from Miquaq Lake, 3.2 km west of the community and 2.1 km west of the present reservoir. This source is now used as an emergency water supply. A new water source re-supply and reservoir system was established in 1978. In 1989, a second reservoir cell with twice the capacity was added to the system, as well as a new truckfill/pumphouse facility.

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#### **COMMUNITY WASTE**

#### Solid Waste

Residents place domestic waste and bagged sewage in separate oil drums on wooden stands near the road. A four-person crew collects solid waste at least twice per week using two Ford model F-350 garbage compactors, a 1988 and a 1991 model. The solid waste management site, a modified landfill, is located 2.5 km south of the community. The site is 100,000 m2 in area, and a separate bulky waste management site covers an area of 10,000 m2. The wastes are burned regularly and compacted several times during summer. Granular material for waste cover is readily available 100 m from the site.

#### Sewage Disposal

Approximately 200 houses have sewage pumpout tanks. Pump-out service is provided by the three Hamlet sewage trucks, each of which has a capacity of 4550 L. Less than ten homes are still on the bagged sewage system. Bagged waste is collected at the same time that the solid waste is collected. The sewage is treated at the 32,450 m2 two-celled sewage lagoon, located 2.8 km south of the community.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Baker Lake

What the name means: Far Inland Alternate Name: Qamanittuaq

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Keewatin

Member of the NWT Legislature: Kevin J. O'Brien

Member of Parliment: Jack Anawak

Mayor: William Noah

Senior Administration Officer: Dennis Zettler GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Keewatin

NWT Legislature Riding: Kivalivik Languages Spoken: Inuktitut Land Claim Area: TFN - Keewatin

**LOCATION** *Longitude:* 96.02; *Latitude:* 64.19

The Hamlet of Baker Lake is located at the north-west end of Baker Lake near the mouth of the Thelon River. It is bounded on the north by a ridge and on the south by Baker Lake itself. Baker Lake is situated within the Canadian Shield on the Wager Plateau near its boundary with the Kazan Upland at 64'186 N latitude and 96'036 W longitude. Located 257 air km north-east of Rankin Inlet and 946 air km north-east of Yellowknife, it is the community nearest to the geographic centre of Canada.

#### **CLIMATE**

Baker Lake receives an average of 13.8 cm of rainfall and 100 cm of snowfall per year. Mean annual precipitation totals 23.5 cm. July mean high and low temperatures are 16.0 C and 6.0 C. January mean high and low temperatures are -29.5 C and -36.4 C. Winds are generally north and annually average 21.6 km/h.

#### 1981 Air Photo



#### TRANSPORTATION

The GNWT and the Hamlet jointly operate a 1,280 m x 31 m certified Arctic B gravel runway. Facilities and services include a terminal building, navigational aids, and weather-reading equipment. Scheduled flight service is available via Rankin Inlet. An unlicensed water aerodrome provides float plane access with limited services. Break-up is in mid-July and freeze-up in late October.

Marine service is provided by a Northern Transportation Company Ltd. barge from Churchill. Transport Canada operates a dock facility, however, it has limited manoeuvrability as the area is shallow. There is no year-round road access to the community. Within the community there are approximately 19 km of gravel roads. Calcium chloride is applied annually to 7.2 km of road to act as a dust suppressant and surface stabilizing agent. Road maintenance is an necessity since the spring thaw runoff washes out roads each year.

The severity of the Hamlets snowdrifting problems have been considerably reduced by construction of the initial sections of a community snowfence on the north-western side of the community. From the start of construction in 1990 to the end of 1995, 771 m of fencing had been constructed. When finally completed, the fence will be over 2200 m long. The fence was constructed using steel pile posts and steel pile braces, which are fixed in the ground using the ad-freeze method. Steel brackets are welded to the posts and wooden stringers are bolted to the brackets. The 25 mm wide slats are nailed vertically to the stringers on 50 mm centers to leave 50% of the fence face open.

Snowfence Data Pile Spacing 4.8 m Height Of Fence Above Grade 5.5 m Depth Of Pile Below Grade 4.4 m Fence Pile 114.3 m diameter 6.33 mm wall thickness 9.14 m long, A53 steel pipe piles Brace Pile same as fence (4.57 m long) Stingers And Braces 4.48 m long rough sawn wood Slats 25 mm x 150 mm x 4880 mm long rough sawn wood

#### **GEOLOGY**

Near Baker Lake, silty sand and silty clay deposits lie over boulder till, beach deposits and reworked till. Beach ridges are well developed both east and south of the community. Well developed higher hills are located inland to the west and north. The land slopes upward from the beach toward rocky ridges approximately 1 km inland.

Permafrost conditions are prevalent. Thawing of the active layer in the summer months creates unstable surface and subsurface conditions. The maximum active layer thickness is approximately 1.5 m.

Historically the Hamlet has experienced severe snowdrifting. Prevailing north-west winds piled snow to incredible heights in locations along the lee of the northern ridge, virtually burying most of the community under snow and limiting vehicle access along community roads. This problem has been substantially reduced with the construction of an extensive community snowfence.

#### **VEGETATION**

Surficial soils tend to be covered by a layer of organic soil, which supports moss, lichen, or sedge grass.

Named after Sir William Baker of the Hudson Bay Company, Baker Lake is unique to Inuit-based society found around the globe. The local Inuit are descendants of the Copper Eskimos and are the only true inland Inuit. The Copper Eskimos are in turn believed to be descendants of the Thule Inuit, who lived a distinctive lifestyle dependent on the caribou and fish of the interior rather that the marine mammal hunting traditions of coastal Inuit groups.

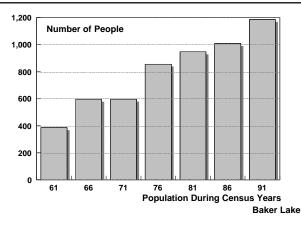
Throughout the late-19th and early-20th centuries whaling ships frequented the area near Baker Lake, often wintering in Hudson Bay. A trading post was established by the Hudson Bay Company in 1916. The Anglican Mission was built in 1926 and the Roman Catholic Mission was built in 1927. The RCMP outpost was built in 1929.

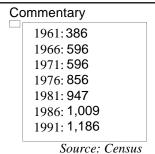
A meteorological station was built in 1948 following the use of the settlement as an advance base for a snowmobile expedition two years earlier. An airstrip, weather station, nursing station and school were all built at this time.

Due to little economic activity, job creation is now a major issue for the Community. The traditional activities of hunting, trapping and fishing still support the area for the most part. Outfitting and the visitor centre are two channels into the tourism industry. Local business includes arts and crafts manufacturing, construction, taxi service, sale of building materials, general retail, food sales, recreational vehicles sales, sporting goods sales, gift sales, building management, expediting, hotels, outfitting, restaurants, and amusement centres.

Baker Lake gained Hamlet status on April 6, 1977. The Hamlets traditional name is "Qamanittuaq", meaning far inland.

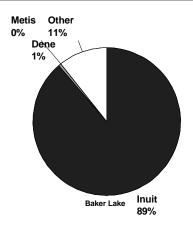
#### **POPULATION**





**Population Statistics** 

#### **ETHNICITY**



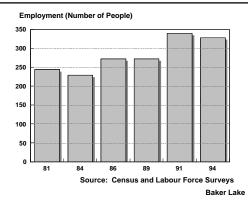


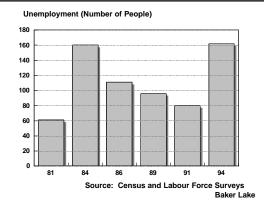
1991 Ethnicity Inuit: 1,052

Dene: 7 Metis: Other: 127

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





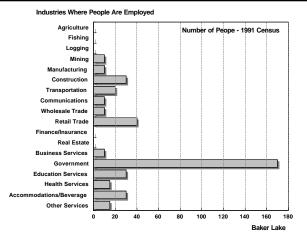
Source: 1994 Labour Force Survey, Bureau of Statistics

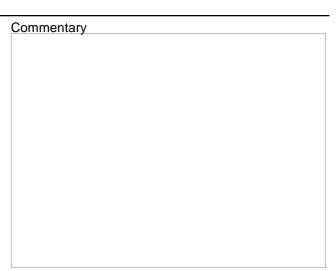
# **Employment Statistics 1994**

Over 15 Pop: 860 Abor. Employed: 260 Labour Force: Unemployed: 159 487 Employed: Ab. Unemployed: 159 328

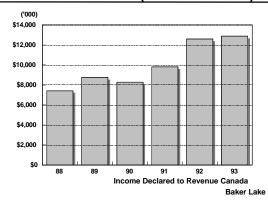
# Commentary

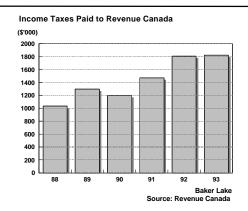
### **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

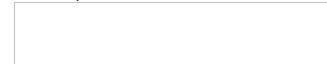
1993: \$20,131 1992: \$20,988

1991: \$16,634

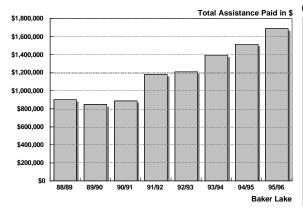
1993: 640 1992: 640 1991: 590

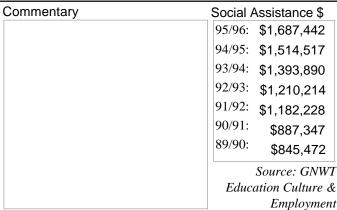
Source: Revenue Canada - Community Data

#### Commentary

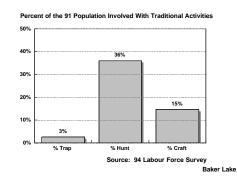


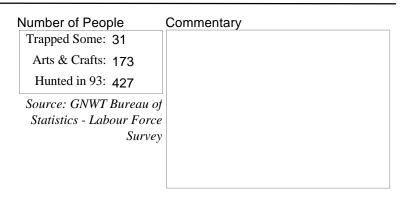
#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Iglu Hotel accommodates 55 people. The Baker Lake Lodge, accommodating 20, operates only during the summer months.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary

The number of occupied private dwellings increased 33.9% between 1986 and 1994. As of 1994, the Housing Corporation owned 271 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 56 new homes in the community.

Detached: 210
Apartment: 15

Apartment: 15
Row House: 75
Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Ilitsijaqturvik School, teaching grades K-12, employs nineteen teachers and two language specialists. Vocational and continuing education opportunities are available through the Arctic College Extension Program. An adult educator is on staff.

#### Fire

The firehall (158 m2) stores a 1978 International Superior triple combination pumper truck. Pagers and a siren system assist the 21-person volunteer brigade in responding quickly to calls.

#### Health

The health centre (619 m2), built in 1985, houses three medical beds, one bassinet, and one crib. Four nurses and one therapist are on staff.

#### **Recreation Services**

Baker Lake has a large arena/curling rink that was built in 1986/87. The community gymnasium, built in 1976, is located within the school. A large community hall was built in 1987/88 and accommodates events such as square dances and traditional games. There is also a summer pool, playgrounds, a softball diamond, a campground and a community library. Trail development is in the planning stages. Other community events include dog team races, fishing derbies, the Keewatin Student Games, the Keewatin Slowpitch Tournament, the Keewatin Senior Mens Hockey Tournament, the Kivalliq Cup (Mens Regional Tournament), and the Keewatin Ladies Hockey Tournament.

Police, Mail, Electrical and Other Services

The RCMP detachment staffs three officers. The Community Social Services Office has a staff of three. The community has a day care centre. Churches in the Hamlet include the Bahai House, the Christian Arctic Fellowship, and the Roman Catholic Mission.

Mail is delivered three times per week. NorthwesTel local and long distance telephone service and CBC Television are broadcast via the Anik satellite system. Community radio, IBC Television recording equipment, community programming, CITS-TV, and CKQN-FM radio are also available. Power is provided by NWTPC with a 1,980 kW capacity diesel generator.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a community office (401 m2), a two-bay parking garage (161 m2), and a six-bay parking garage (480 m2), and a three-bay maintenance garage (272 m2).

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Baker Lake Day Care

#### **COMMUNITY WATER**

Water Supply

Baker Lake is a good source of potable water itself. The 90 km long, 25-30 km wide lake is fed mainly by the Thelon River from the east and the Kazan River from the south.

The current pumphouse was constructed in 1966 and is located near the centre of the community on the shore of Baker Lake. It is an insulated steel building on a concrete slab. The intake structure consists of a plywood box with a 19 mm mesh screen top. The intake line is a 100 mm iron pipe approximately 120 m long. Originally, the water flowed by gravity through the intake line into the 4.6 m deep wetwell below the pumphouse. It was then drawn from the wetwell by a 2 hp transfer pump. During the early 1980's, in an attempt to increase the intake flow rate, the pump suction connections of the 2 transfer pumps were hard piped to the intake line and the wetwell was no longer used. This arrangement still prevails.

#### Water Storage

Two separate water distribution systems operate out of the pumphouse. A piped system serves four public buildings and four residences and a trucked system serves the remainder of the community. Within the pumphouse, each system has its own storage tanks. For the piped system, water is stored in a painted steel tank with a working storage of about 4500 L. At the base of the piped system storage tank, 2 Jacuzzi 2 hp pumps are connected in parallel. One of the pumps is always on. The piped system has two mains, each with its own water meter. One of the mains, owned by the GNWT, serves the Health Centre, the Group Home, the Hospice, and the Nurses Residence. This main (250 m in length) loops back to the pumphouse and discharges the unconsumed water back into the piped water storage tank. The length of the loop is about 250 m.

The other main belongs to Transport Canada and is known as the MOT main. The MOT main serves four houses and a garage, all owned by Transport Canada. This main is a remnant of the original MOT system which served 14 houses, the MOT complex, and the garage. The original main suffered serious problems with freeze-ups and breakages. As houses on the main passed into the control of the community they were taken off the main and retrofitted with the water tanks. By 1995, only the four Transport Canada houses and the garage were still being served by the main. That year, Transport Canada rebuilt portions of the main and abandoned the remaining sections of the main not required to serve its buildings.

At present, the MOT water main is about 530 m long. The first 250 m of this line, which runs from the pumphouse to the houses, consists of 75 mm diameter polyethylene pipe, heat traced and coated with 75 mm of polyurethane foam insulation. The remainder forms a 280 m, 50 mm diameter loop. The water in this section is kept moving by a circulation pump located in the garage.

For the truckfill system, water is stored in 4 fibreglass tanks having a total working capacity of about 16,000 L. One of the two Bell and Gosset 3 hp centrifugal pumps draw water from the tanks and delivers it to the trucks through a water meter and a truckfill arm on the exterior of the building. The fill rate is 1100 L/min. Water delivery is provided by the Hamlet. The fleet consists of three water trucks (1990, 1993, 1986) with 4540 L capacity tanks and a 1994 truck with a 11,350 L capacity tank. Delivery is provided five days per week, with each house receiving service two to three times per week. Frequency of water service per house is dependent on water tank size, and whether the house has a pressure (sewage pumpout) or a non-pressure (bagged sewage) water system. Most of the new buildings have 1135 L tanks. Older homes usually contain 204 L fibreglass water containers. All water deliveries are metered.

Water Treatment

Chlorination treatment is done using a Wallace and Tiernan A745 hypochlorinator. Whenever the transfer pumps are operating, chlorine is automatically injected into the waterlines, which discharge into the storage tanks.

#### Water Quality

Baker Lake is a good source of potable water itself. The 90 km long, 25-30 km wide lake is fed mainly by the Thelon River from the east and the Kazan River from the south.

The current pumphouse was constructed in 1966 and is located near the centre of the community on the shore of Baker Lake. It is an insulated steel building on a concrete slab. The intake structure consists of a plywood box with a 19 mm mesh screen top. The intake line is a 100 mm iron pipe approximately 120 m long. Originally, the water flowed by gravity through the intake line into the 4.6 m deep wetwell below the pumphouse. It was then drawn from the wetwell by a 2 hp transfer pump. During the early 1980's, in an attempt to increase the intake flow rate, the pump suction connections of the 2 transfer pumps were hard piped to the intake line and the wetwell was no longer used. This arrangement still prevails.

Chlorination treatment is done using a Wallace and Tiernan A745 hypochlorinator. Whenever the transfer pumps are operating, chlorine is automatically injected into the waterlines, which discharge into the storage tanks.

#### **COMMUNITY WASTE**

#### Solid Waste

Domestic solid wastes are collected from 205 L drums by a 1988 Ford model F-350 compactor (9 m2 capacity). Collection is three times per week by a crew of three. Residents burn wastes at the point of storage, prior to collection. The existing solid waste management site (25,000 m2) is located 3.3 km north-east of the community on high ground, approximately 0.8 km north of Baker Lake. The wastes are burned daily and compacted monthly during the summer. A separate area (100 m2) to the south of the access road is set aside for bulky wastes. Used oil is stored of along the perimeter of the dump and is used to burn garbage. Each year the community participates in a spring cleanup.

### Sewage Disposal

Almost all of the buildings in the Hamlet have sewage holding tanks which are pumped out by the Hamlet's sewage trucks. The exceptions are a few houses which still have bagged sewage service and those buildings on the MOT piped system. For the rest of the community, holding tanks are pumped out three times per week by the Hamlet. Four trucks are used to collect pumpout sewage; two 1989 models, and a 1993 model each have 4540 L tanks, and a 1994 truck has an 8172 L tank.

The newer buildings are equipped with 2275 L holding tanks. Bagged sewage is collected three times per week the garbage packing truck. Honeybags are stored on the ground beside the garbage drums prior to collection. In 1991, a new honeybag cell was excavated beside the present sewage disposal site; the cell is fenced. Baker Lake produces about 35,000,000 L of sewage annually. The volume produced is increasing by about 5% per year. The sewage is presently treated by the natural wetlands method. At the sewage truck dumpsite, located 3.5 km north of the community, the trucks discharge their loads into a small holding cell. The sewage effluent exits the cell and then flows 200 m through a thicklyvegetated wetlands area to a small pond known as Lagoon Lake. From Lagoon Lake the sewage flows 300 m to Finger Lake, 600 m through Finger Lake and 1000 m along a stream to the inlet to Airplane Lake.

The Water Board considers that the inlet to Airplane Lake constitutes the end of the sewage treatment area. From the end of the sewage treatment area the treated sewage flows an additional 1300 m to the mouth of Garbage Creek where it enters Baker Lake. As the Hamlet's water intake is located in Baker Lake about 2 km west of the mouth of Garbage Creek, concerns have been expressed that the water supply may be contaminated by the sewage.

In 1994, the Water Board carried out a study "to determine the possible effects of the effluent and run-off from the sewage lagoon, the solid waste disposal site, and surface run-off from the community, on the quality of drinking water obtained from Baker Lake". The Board sampled 8 locations along the sewage flowpath beginning at the inlet to Finger Lake and ending at the water supply pumphouse. The locations were sampled four times between June and September. Twenty-four parameters were analyzed including fecal coliform, ammonia-nitrogen and metals. The study concluded that "the drinking water in Baker Lake does not appear to be threatened by contamination from run-off from the waste disposal facilities or from surface run-off from the community". The results of the Water Board Study demonstrate that the wetlands treatment system is highly effective and the quality of the effluent produced greatly exceeds Water Board requirements.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Baker Lake Page 9

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Bathurst Inlet

What the name means: Like a Nose

Alternate Name: Kinggauk

POLITICAL 1981 Air Photo

Located in the future territory of: Nunavut RWED Administrative Region: Kitikmeot Member of the NWT Legislature: Kelvin Ng Member of Parliment: Jack Anawak

Mayor:

Senior Administration Officer:

GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Kitikmeot

NWT Legislature Riding: Kitikmeot Languages Spoken: Inuinnaqtun Land Claim Area: TFN - Kitikmeot

**LOCATION** *Longitude:* 0.00; *Latitude:* 0.00

**CLIMATE** 

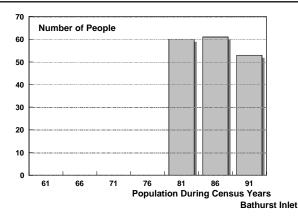
# **TRANSPORTATION**

**GEOLOGY** 

#### **VEGETATION**

# **HISTORY**

#### **POPULATION**



# Commentary

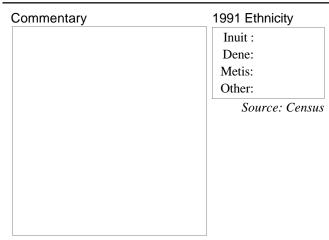
1961: 0 1966: 0 1971: 0 1976: 0 1981: 60 1986: 61 1991: 53

Source: Census

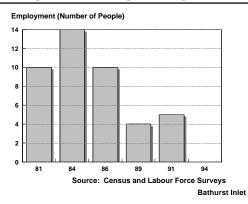
Air Photo

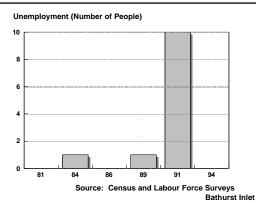
Population Statistics

# **ETHNICITY**



# EMPLOYMENT AND UNEMPLOYMENT





Source: 1994 Labour Force Survey, Bureau of Statistics

# **Employment Statistics 1994**

Over 15 Pop:	Abor. Employed:
Labour Force:	Unemployed:
Employed:	Ab. Unemployed:

# Commentary

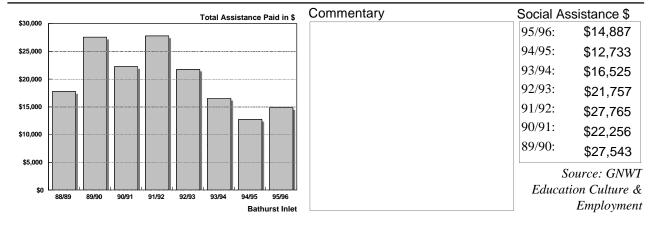
# **EMPLOYMENT PROFILE**

Commentar	у		
	•		

# **INCOME AND TAXES (Revenue Canada)**

Average Incomes	People Paying Inc.Tax	Commentary
1993:	1993:	
1992:	1992:	
1991:	1991:	
Source: Revenue Can	ada - Community Data	

# **SOCIAL ASSISTANCE PAYMENTS**



# **TRADITIONAL ACTIVITIES**

Number of People	Commentary	
Trapped Some:		
Arts & Crafts:		
Hunted in 93:		
Source: GNWT Bureau o	4	
Statistics - Labour Force		
Survey	,	

#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations  95/96 94/95 93/94 92/93	Visitor Center Signings
	Source: Non-Resident Only: RWED	

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Bathurst Inlet Page 4

HOUSING AND HOME OWNERSHIP		
Commentary		Ownership/Type of Housing
		Units
		Owned:
		Rented:
		Band Owned:
		Detached:
		Apartment:
		Row House:
		Trailer:
		Source: 1991 Census Data
COMMUNITY SERVICES		
Education	Health	
Fire	Recreation Services	
	Recreation Services	
Police, Mail, Electrical and Other Services $\hfill\Box$		
DAY CARE SERVICES - NONE REGISTERED	F BLANK	
COMMUNITY WATER		
Water Supply		
Water Storage		
Water Treatment		
Water Quality		
COMMUNITY WASTE		
Solid Waste		
Sewage Disposal		

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# 3roughton Island

Alternate Name: Qikiqtarjuaq

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Tommy Enuaraq

Member of Parliment: Jack Anawak

Mayor: Jacopie Koksiak

Senior Administration Officer: Don Pickle GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Baffin Central

Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

**LOCATION** *Longitude:* 64.02; *Latitude:* 67.33

The Hamlet of Broughton Island is located on Broughton Island, near the eastern coast of Baffin Island at 67'336 N and 64'026 W. It is 480 km north of Igaluit and 2,373 air km north-east of Yellowknife.

#### **CLIMATE**

Broughton Island averages 3.7 cm of rainfall and 250 cm of snowfall per year. Mean annual precipitation totals 28.8 cm. July mean high and low temperatures are 7.4 and 1.4 C. January mean high and low temperatures are -19.9C and -26.4C. Winds are generally north-west and annually average 8.3 km/h.

#### **TRANSPORTATION**

The Hamlet of Broughton Island and the GNWT operate a 1059 m x 33 5 m certified Arctic C gravel runway. Airport facilities and services include a terminal building, navigational aids and weather-reading equipment. Regularly scheduled service to Broughton Island is available via Iqaluit. Marine transportation is available from Eastern Arctic Sealift and Transport Canada (Montreal). Facilities include a beach landing for dry cargo, offshore anchorage for resupply tanker and a POL discharge via floater hose to a shore manifold. Broughton Island has a about four km of gravel surface roads. Calcium chloride is applied annually to three km of road to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

Situated on a rocky spur covered with glacial drift, Broughton Island has low, sandy hills, moraines, and outwash plains covering much of the bedrock. Bedrock outcrops are evident throughout the settlement area. Soils are a mixture of fine rock silt mixed with beach sand and gravels. Granular material for roads and solid waste cover is abundant, especially near the shore.

#### **VEGETATION**

Vegetation consists of mosses and lichens growing on humus material.

#### 1981 Air Photo



#### **HISTORY**

The original settlers of the area were the South Baffin Inuit, who had a strong tradition of marine-mammal hunting. European explorers began to arrive in the early 17th century. That year, James Baffins ship, entrapped by ice, drifted along the east coast of the then unnamed Baffin Island. He would discover many of the traditional camps of the Baffin Inuit. Whaling began in the Davis Strait soon after Baffins journey. After the Inuit began to settle near a whaling station in the area, Christianity was introduced by the Europeans. It was not until a century later that significant permanent settlement began.

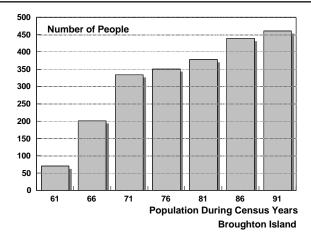
Permanent settlement began in 1956-57 as the DEW-line was being built. An administrative office was established in 1958 and the Hudson Bay Company opened its post in 1960. Families from Pangnirtung, Kivitok, and Padloping Island, moved to Broughton Island in the 1960's.

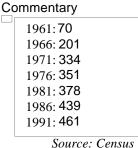
Much of the current economy is based on the harvest of marine mammals. Right whale, ring seal, harp seal, bearded seal, beluga whale, narwhal, walrus and killer whale are all hunted. Game hunting is also prevalent in the area.

The tourism industry is supported by offshoots of Auyuittuq National Park, whose entrance is near the Hamlet. A new hide tanning industry, combined with general retail and tourist accommodation, may help offset the economic loss caused by the recent closing of the DEW-Line station.

Broughton Island gained Hamlet status on August 31, 1979. The Hamlets traditional name is "Qikiqtarjuaq", meaning big island.

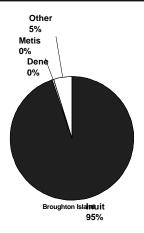
#### **POPULATION**

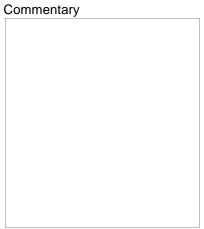




**Population Statistics** 

#### **ETHNICITY**

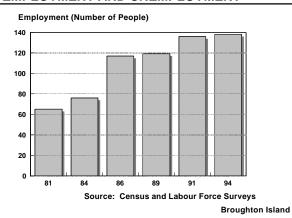


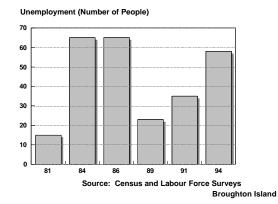


Inuit: 437
Dene: 0
Metis: 2
Other: 22

Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**





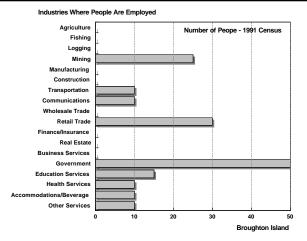
Source: 1994 Labour Force Survey, Bureau of Statistics

# **Employment Statistics 1994**

Over 15 Pop: 307 Abor. Employed: 119
Labour Force: 195 Unemployed: 57
Employed: 138 Ab. Unemployed: 57

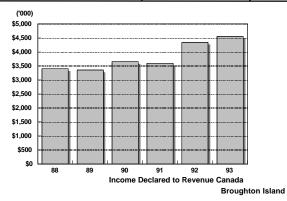
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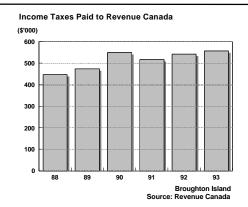
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$18,975 1992: \$18,100

1991: \$16,341

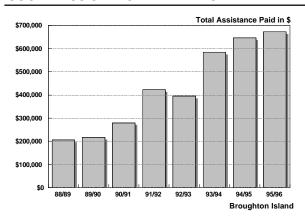
1993: 2401992: 2401991: 220

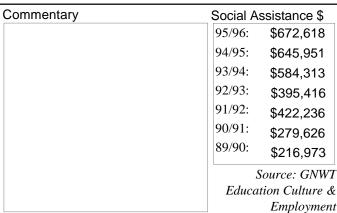
Source: Revenue Canada - Community Data

# Commentary

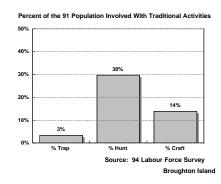
# **,**

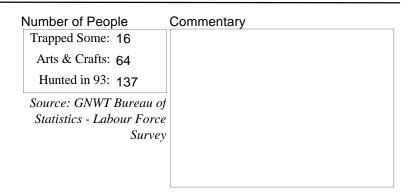
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Tulugak Hotel accommodates ten people.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

### HOUSING AND HOME OWNERSHIP

Commentary Ownership/Type of Housing The number of occupied private dwellings increased 10% between 1986 and 1991. As of 1994, the Northwest Territories Housing Corporation owned 90 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own Program have accounted for seven new homes in the community.

Owned: 5 Rented: 90 Band Owned: 0

> Detached: 85 Apartment: 10 Row House: 5 Trailer: 0

Source: 1991 Census Data

Units

# **COMMUNITY SERVICES**

### Education

Qiqitarjuaq School teaches grades K-9. Eight teachers and three language specialists are on staff. The Adult Education Centre has one resident adult educator. The Arctic College Extension Program is available for those wanting continued education opportunities.

### Health

The health centre (389 m2), built in 1972, contains two medical beds, one bassinet, and one crib. A five-person medical staff, including two nurses, is employed.

### Fire

A fourteen-person volunteer firefighting brigade uses a triple combination pumper 1985 IHC model S-1824 truck (4546 L capacity) to fight fires. Fire phones are stationed throughout the community. The Hamlet has a firehall (120 m2).

# **Recreation Services**

A multi-purpose hall (112 m2) was built in 1970. The community centre-gymnasium (450 m2) was built in 1990. Other facilities include a school gymnasium (550 m2), a playground, trail development, an outdoor arena, and a pool hall.

### Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. There is a Community Social Services Officer in the Hamlet to provide social services; duties include the arrangement of the Drug and Alcohol Awareness Program.

Mail is delivered to the community twice per week. NorthwesTel telephone service, CBC Radio and CBC television are available via the Anik satellite system. There is also a radio station. NWTPC provides 1110 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs include a Hamlet office (80 m2), a threebay parking garage (132 m2), a two-bay parking garage (146 m2), and a four-bay maintenance garage (392 m2).

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

### **COMMUNITY WATER**

# Water Supply

The potable water source for the Hamlet is the Tulugak River, located east of the community. The water is of good to excellent chemical quality for domestic use. The water is clear, extremely soft, poorly buffered, slightly acidic, and low in dissolved solids.

# Water Storage

A 300 m long pipe connects the Tulugak River to the reservoir for gravity-fed refill each summer. The reservoir, having capacity of 21,000,000 L, is located approximately 3.5 km east of the community. It was constructed in 1978 to provide for winter water storage. The reservoir is designed to operate with 1 m freebound and 1.5 m maximum ice thickness, leaving 7.5 m of water depth for use during the winter. The reservoir capacity under winter design conditions is about 20,000 m2. This will provide approximately eight months storage for a future design population of 876 and a maximum anticipated consumption rate of 90 Lcpd. In 1987 the reservoir was upgraded extensively with repairs to the liner, exterior, and top berms.

The 8 m x 6 m truckfill building is located on the berm of the reservoir, 10 m above the bottom. It has been designed to fill trucks at a minimum rate of 500 L/min. Power for the station is supplied by a 10 kW generator, operating 24 hours per day.

### Water Treatment

Water is treated by hypochlorination and aeration at the truckfill station. Microbiological analysis of the raw supply water indicates the presence of low concentrations of corrosion-causing and corrosion-intensifying bacteria. However, analysis of the water, once treated, shows batch chlorination as having successfully eliminated or greatly reduced most of these bacteria for the location sampled.

## Water Quality

The potable water source for the Hamlet is the Tulugak River, located east of the community. The water is of good to excellent chemical quality for domestic use. The water is clear, extremely soft, poorly buffered, slightly acidic, and low in dissolved solids.

Water is treated by hypochlorination and aeration at the truckfill station. Microbiological analysis of the raw supply water indicates the presence of low concentrations of corrosion-causing and corrosion-intensifying bacteria. However, analysis of the water, once treated, shows batch chlorination as having successfully eliminated or greatly reduced most of these bacteria for the location sampled.

### **COMMUNITY WASTE**

### Solid Waste

Garbage is collected daily from 295 L barrels from in front of houses by a one or two-person crew using a Ford model F-350 Haul-All garbage compactor. An annual spring clean up is scheduled for mid-July. Large, bulky wastes are collected by the two-person crew.

The fenced solid waste disposal site, completed in 1993, is located 2.3 km east-north-east of the Hamlet. Metal waste is separated from the garbage disposal area. The municipal landfill and bulky waste site occupy a total area of 3,000 m2. Wastes are burned everyday and once a year the site is covered with granular material.

### Sewage Disposal

There are five residences which use bagged sewage service. Collection is provided by the Hamlet twice per week using a stake truck. Pumpout of sewage holding tanks is six times per week, coordinated with water delivery. Two sewage trucks, one 1985 model (capacity 4546 L) and one 1995 model (capacity 6819 L) are used.

The sewage treatment site (4,200 m2) is located 2.3 km east north-east of the Hamlet.

## NOTES AND COMMENTS

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# Cambridge Bay

What the name means: Good Fishing Place

Alternate Name: Ikaluktutiak

### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Kitikmeot Member of the NWT Legislature: Kelvin Ng

Member of Parliment: Jack Anawak

Mayor: Wilf Wilcox

Senior Administration Officer: Henry Brown GNWT Assigned Level of Development: Level 2

Government of Canada Administrative Region: Kitikmeot

NWT Legislature Riding: Kitikmeot Languages Spoken: Inuinnaqtun Land Claim Area: TFN - Kitikmeot

**LOCATION** *Longitude: 105.03; Latitude: 69.07* 

Cambridge Bay is located on the south-east coast of Victoria Island, 960 air km north-east of Yellowknife and 320 km north of the Arctic Circle. The Hamlet is located at 69'076 N latitude and 105'036 W longitude.

# **CLIMATE**

The community receives an average of 6.8 cm of rainfall and 76.8 cm of snowfall per year, making the mean annual precipitation 13.6 cm. July mean high and low temperatures are 11.9 C and 3.9 C. January mean high temperature is -30.0 C. The winds are generally north-west and annually average 21.8 km/h. During August and September, winds tend to be from the east.

### **TRANSPORTATION**

The GNWT and a local contractor operate the 1,524 m x 46 m certified Arctic A gravel runway. Facilities and services include a terminal building, weather/communications equipment, and navigational aids. Scheduled service is available via Yellowknife and Iqaluit. Charter services are also available. An unlicensed water aerodrome provides float plane access with two docks and limited services.

Marine barge service is available from Hay River. Facilities include a beach landing and a small dock with limited marshalling area. There is no direct road access to Cambridge Bay. Within the community there are approximately 18 km of gravel surface roads. Major routes throughout the community, including the airport road, are in good repair. They have a top width of 4-5 m and drainage is aided by ditches and culverts. Drifting tends to create some problems for wheeled vehicles in the winter. Calcium chloride is applied annually to 6.5 km of road to act as a dust suppressant and surface stabilizing agent.

Snowdrifting has been a problem for the community, mainly on the lee side of buildings. Houses on the periphery of the Hamlet have acted like snow fences, experiencing repeated problems with snow accumulation and spring runoff drainage. Snow fences have been installed by Municipal and Community Affairs to mitigate snow build-up.

# **GEOLOGY**

Cambridge Bay lies within a large regional basin of Palaeozoic sedimentary bedrock. Occasional outcrops of dolomite and shale near exposed steep slopes are susceptible to shattering during freeze-thaw activity. The level shore gradually rises to an elevation of 15 m. The most significant land form in the area is Mount Pelly, a drumlin (teardrop) shaped hill approximately 16 km to the north-east of the Hamlet.

Due to extensive glaciation, remnant knobs and ridges of sedimentary bedrock are present above the kettled till plain. Till particles tend to be jagged rather than rounded.

# **VEGETATION**

Hardy grasses grow in low-lying areas, while lichens cover rock outcrops. A large variety of small flowering plants bloom in the short summer period. Willows grow in sheltered areas.

# 1981 Air Photo



### **HISTORY**

Cambridge Bay, with its abundance of natural wildlife resources, has been an important location to the Inuit for many generations. The Copper Inuit would barter in copper with other Inuit groups. Explorers and Hudson Bay Company traders were in contact with the Inuit of the region in the nineteenth century. A Hudson Bay Company post was opened in 1921, operating intermittently throughout the 1920's. Although few Inuit lived year-round at Cambridge Bay, the post did serve as the centre for the sale of white fox, at that time, the basis for trade.

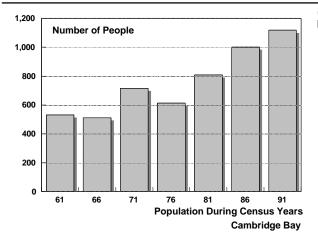
The Community became a strategic military site in the 1940's and 1950's, when a navigational beacon was installed and the DEW-line station was built. An influx of Inuit from the outlying camps were drawn to Cambridge Bay in this time of prosperity. The community became the main transport and supply centre for all the DEW-line sites in the sector. A school was built in 1958. In 1981, Cambridge Bay became the Territorial Government's Kitikmeot Region administrative centre.

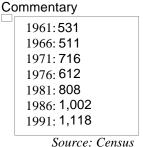
The Hamlets economy is oriented toward both government and traditional directions. Transportation and communications are major economic activities. Many of the Inuit still work in the commercial fishery, fish independently, or trap. The economy is quite diversified; local business includes meat product sales, building contractors, diving services, accounting, security services, engine repair, hotels, and travel services.

A number of new developments are proposed for Cambridge Bay. These include a business services centre, a joint venture for a rock crushing plant, a new retail/office complex, a replacement Co-op store, a fish processing plant, an Arctic College Extension Program expansion, the opening of Mount Pelly Park, and added campgrounds.

Cambridge Bay gained Hamlet status on April 1, 1984. The Communitys traditional name, "Ikaluktutiak", means good fishing place.

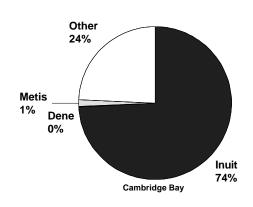
### **POPULATION**





Population Statistics

# **ETHNICITY**





1991 Ethnicity

Inuit: 828

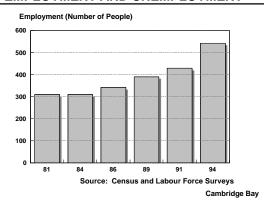
Dene: 1

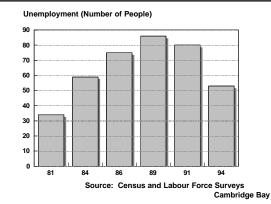
Metis: 16

Other: 271

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





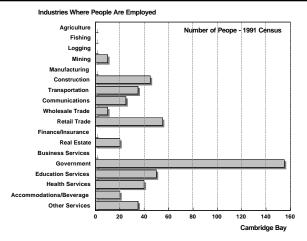
Source: 1994 Labour Force Survey, Bureau of Statistics

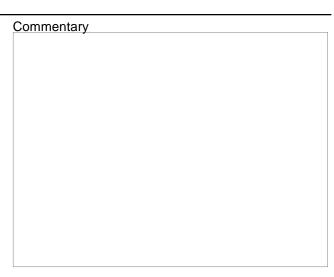
# **Employment Statistics 1994**

Over 15 Pop: 827 Abor. Employed: 310 Labour Force: 594 Unemployed: 52 Employed: 542 Ab. Unemployed: 52

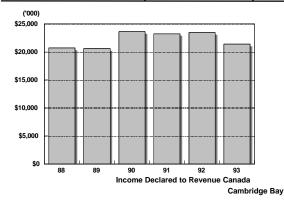
# Commentary

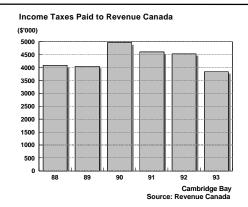
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$30,999 1992: \$34,528

1991: \$34,719

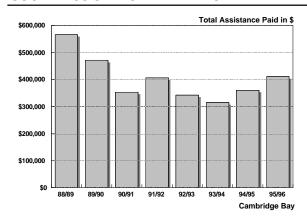
1992: 690 1991: 670

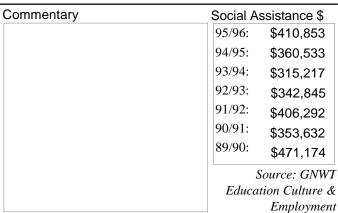
1993: 690

Source: Revenue Canada - Community Data

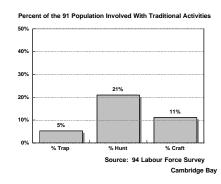
# Commentary

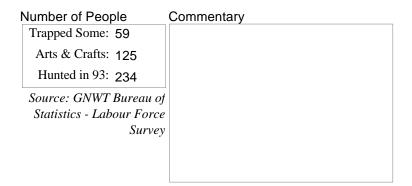
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





### **TOURISM**

The Healyktytick Hotel	Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
accommodates 22 guests, the Enokhok Hotel accommodates 7 and the Arctic Island Lodge accommodates 25.  Source: Non-Resident		Enokhok Hotel accommodates 7 and the Arctic Island Lodge	93/94

### HOUSING AND HOME OWNERSHIP

Commentary
Ownership/Type of Housing
Occupied private dwellings increased 17.9% between 1986 and 1991. As of 1994,
the Housing Corporation owned 190 housing units. The Housing Assistance Program,
the Alternative Housing Program, and Government Lease-to-Own units have
accounted for 34 new homes in the community.

Ownership/Type of Housing
Units
Owned: 20
Rented: 295
Band Owned: 0

Detached: 160
Apartment: 15
Row House: 140
Trailer: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

### Education

Ilihakvik School teaches grades K-12. Nineteen teachers, five language specialists and one term teacher are on staff. Vocational and continuing education opportunities are available at the Adult Education Centre and through the Arctic College Extension Program.

### Fire

A twenty-person volunteer fire brigade uses a 1980 IHC model triple combination pumper (1824 L capacity) to fight fires. In addition, there is a pull box and pager system in place. The community has a five-bay firehall.

### Health

The health centre (548 m2) was built in 1958 and renovated in 1990. The facility houses six medical beds, two bassinets and two cribs. The medical staff includes four nurses, one doctor, and one dentist.

# **Recreation Services**

The S.M. Hodgson Community Centre, renovated in 1986, includes an arena, curling rink, and weight room. There are two gymnasiums for use in Cambridge Bay; one is located in the high school and the other is in the elementary school. Luke Novoligak Hall is a large community centre. Other facilities include a playground, a playfield, a developed trail system, and a seasonal above-ground pool, completed in 1990. Activities in the community include dances, movies, scuba diving, community events, Umingmuk Froliks, and the May Festival. Cambridge Bay has an Active Recreation Committee.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs five officers. The Community Social Services Office has five staff members. Social service facilities include the Children's Group Home, the Kaimavik Centre (drug and alcohol treatment), the Centre for Young Offenders, and a day care centre. Four churches in the community include the St. George's Anglican Mission, the Anglican Church, the Glad Tidings Church, and the Roman Catholic Mission.

Mail is delivered three times per week. NorthwesTel local and long distance service, CBC Radio and CBC Television are available via the Anik satellite system. There is access to FM radio, an Inuit radio station (LPAM), and a community radio station. NWTPC has an area office in Cambridge Bay and generates power for the community with a 2,815 kW diesel generator.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the Hamlet Office (located within the community complex), and two three-bay parking garages.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

Cambridge Bay Child Care Society Kool Kids Family Day Home

# **COMMUNITY WATER**

### Water Supply

The current water source, Water Supply Lake, found 2 km north of the Community, provides a year-round source of quality water. The intake facility consists of a small pumphouse situated close to the edge of the lake. Water is taken in by a pipe with an intake screen filter, extending approximately 20 m into the lake to a depth of about 4 m. The discharge line has a submersible pump attached at the intake and the water flows through insulated, electrically heat-traced piping.

A supply line about 2.9 km long connects the lake intake facility to the distribution pumphouse located in the centre of town. The insulated line contains a smaller heating conduit which is heat traced for freeze protection. Water is pumped intermittently through the water supply line to the water treatment and storage facility by a submersible pump at the intake. This pump is controlled automatically by level signals from the storage reservoir to maintain the reservoir at full capacity.

The distribution pumping station houses two circulating pumps (one is on standby) to circulate heated water through the supply line, an additional circulation pump to circulate water between the storage tank and boilers, a truckfill pump and a truckfill fire pump. Boilers heat water circulating to the water storage tank and supply line to prevent freezing.

Water Supply Lake is distanced from both the community and human activity, making it relatively free from potential contamination. The water is of proven quality for potable use, being hard, well-buffered, slightly alkaline, and slightly under-saturated with respect to calcium carbonate. Microbiological analysis of treated water shows that the addition of chlorine successfully eliminates most of the organisms tested. Comparison of the chemical analysis of raw and treated supply water to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

### Water Storage

A steel water storage tank (222,740 L) is located adjacent to the distribution pumphouse. Water is delivered by five trucks, three with 11,500 L capacity and two with 4546 L capacity tanks. Services are contracted by the local council and delivery is six days per week.

Residence water storage tanks are generally 455 L to 2,273 L, while the schools, hostels, and nursing station tanks range from 4,320 L to 45,500 L. All water deliveries are metered.

### Water Treatment

Facilities to treat and store the water are housed in the distribution pumphouse. Treatment consists of chlorination using a hypochlorinator and mixing tank. Sodium hypochlorite is added to obtain a total residual concentration of approximately 1.0 mg/L. The addition of chlorine is carried out at a very controlled rate, utilizing two tanks. The chlorine injection pump is energized by the flow switch mounted on the incoming supply line and the switch contacts open to shut down the pump when the raw water flow stops.

### Water Quality

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# **COMMUNITY WASTE**

### Solid Waste

Solid waste is collected twice per week by a 1989 Ford truck and a two-person crew. The waste is left in 205 L drums for pick-up. Burning of wastes in the oil drums is not practiced at the home; waste is taken to a solid waste management site, 21,000 m2 in area, 0.8 km from the community. Bulky wastes are disposed of at a separate 15,000 m2 site. Both sites are to be fenced in the near future.

Garbage is burned once per week. A small, adjacent hill provides a good source of granular material. Because of permafrost, modified landfill practices are used and the wastes are only covered in the summer.

# Sewage Disposal

Most homes are equipped with holding tanks, those with pressure water systems also store wastewater. The Hamlet provides pumpout service six days per week. Four pumpout trucks are used, two with 6819 L tanks and two with 4546 L tanks. Pumpout sewage is treated in a single cell lagoon (45,000 m2) approximately 1.1 km from the community.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Cape Dorset

What the name means: Mountains Alternate Name: Kingnait

### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Goo Arlooktoo

Member of Parliment: Jack Anawak

Mayor: Akalayok Qavavau

Senior Administration Officer: Timoon Toonoo GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Baffin South

Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

## **LOCATION** *Longitude: 76.32; Latitude: 64.14*

Cape Dorset, located at 64'146 N and 76'326 W, is on Dorset Island, off the south-west coast of Baffin Island. It is approximately 400 air km west of Igaluit and 1,891 air km north-east of Yellowknife.

### **CLIMATE**

Cape Dorset receives an average of  $15.2~\rm cm$  rainfall and  $117.8~\rm cm$  snowfall per year. Mean annual precipitation totals  $26.7~\rm cm$ . July mean high and low temperatures are  $7.2~\rm C$  and  $3.3~\rm C$ . January mean high and low temperatures are  $-23.3~\rm C$  and  $-28.9~\rm C$ . Winds are generally west and annually average  $18.5~\rm km/h$ .

# **TRANSPORTATION**

The Hamlet of Cape Dorset and the GNWT jointly operate a 1219 m x 30 m certified Arctic egravel runway. Facilities and services include a passenger shelter, navigational aids, and weather/communications equipment. First Air flies to Cape Dorset via Iqaluit and Air Inuit flies there via Montreal. A privately licensed water aerodrome allows for float plane access between July 15 and November 15. Facilities for the aerodrome are limited to fuel supply and a passenger shelter.

Marine transportation is available from Eastern Arctic Sealift and Transport Canada (Montreal). Facilities include a beach landing, a small breakwater, and an offshore anchorage for bulk fuel. There is no road access to Cape Dorset. The Hamlet has 18.8 km of gravel surface roads. Calcium chloride is applied annually to 5 km of road to act as a dust suppressant and surface stabilizing agent.

# **GEOLOGY**

Most of the area consists of exposed bedrock. The soil consists of granular matter ranging from fine sand to gravel and rock fragments. The community occupies two minor coastal valleys. At each valley mouth extensive mud flats are found.

Permafrost is found at an average of 0.60 m - 0.75 m below the surface.

# **VEGETATION**

The area supports various species of tundra vegetation, with lichens being the most predominant.

### 1981 Air Photo



# **HISTORY**

Cape Dorset was named by Captain Luke Foxe on September 24, 1631 for Edward Sackville, Earl of Dorset. In turn, Cape Dorset gave its name to the Inuit people who flourished in the area, circa 1000 A.D., now known simply as The Dorset.

The Hudson Bay Company established a post in 1913. The Roman Catholic Church was open from 1938 until 1960. Between the late 1940's and early 1950's, the market for white fur collapsed. A gradual decline in the local standard of living of residents led to overcrowding. Epidemics to follow were slowed by the opening of the federal nursing station in the 1950's.

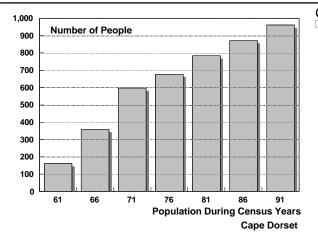
The Anglican Church was built in 1953 under the Inuits own initiative. A second church was built in 1961. The West Baffin Co-op was established in 1959 and the RCMP established a post in 1965.

With its strong arts and crafts industry, Cape Dorset was named as the first community in the NWT to receive control over its own economic development, social services, housing and public works. Control was granted in May, 1994.

The market in arts and crafts began in 1953 when the Houston, a southern couple versed in the arts world, arrived in Cape Dorset. They would find talented artists, encourage carving and handicraft production, and introduce print making. Since that time, carving and graphic art have been an economic mainstay. A number of residents are world-renowned artists. The arts community helps to support a thriving tourism industry.

Sealing is one of the communitys major economic activities, although other marine mammals and game are hunted as well. Cape Dorset gained Hamlet status on April 1, 1982. The Communitys traditional name, "Kingnait", means mountains.

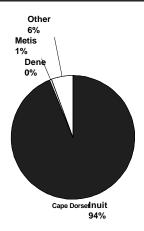
# **POPULATION**

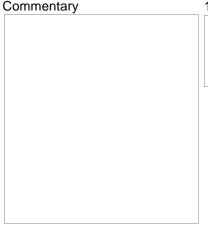




Population Statistics

# **ETHNICITY**





1991 Ethnicity

Inuit: 902

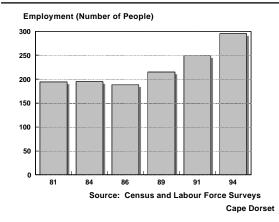
Dene: 0

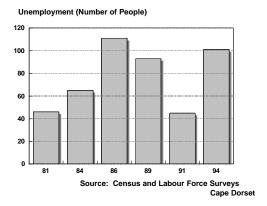
Metis: 5

Other: 54

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





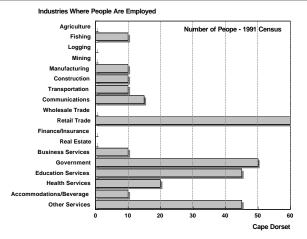
Source: 1994 Labour Force Survey, Bureau of Statistics

# **Employment Statistics 1994**

Over 15 Pop: 638 Abor. Employed: 230
Labour Force: 393 Unemployed: 98
Employed: 295 Ab. Unemployed: 92

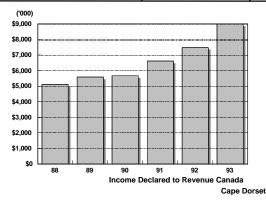
# Commentary

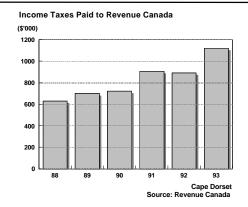
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax 1993: 480

1993: \$18,735 1992: \$17,421

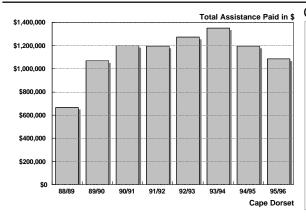
1992: 480 1991: 420

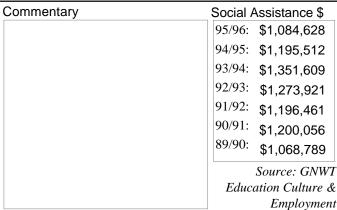
1991: \$15,755

Source: Revenue Canada - Community Data

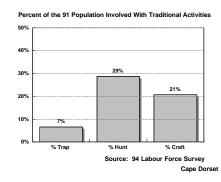
# Commentary

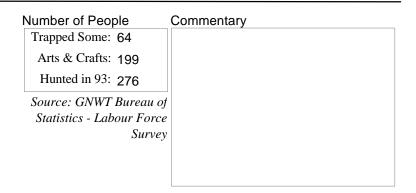
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations \	/isitor Center Signings
	The Kingait Inn accommodates seventeen people and Huit Huit Tours accommodates two.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

### HOUSING AND HOME OWNERSHIP

Commentary

Ownership/Type of Housing
The number of occupied private dwellings increased 13.2% between 1986 and

Units

The number of occupied private dwellings increased 13.2% between 1986 and 1991. As of 1994, the Northwest Territories Housing Corporation owned 214 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 29 new homes in the community.

Owned: 10
Rented: 190
Band Owned: 0

Detached: 165 Apartment: 25 Row House: 15 Trailer: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

### Education

Pitseolak School teaches grades K-11. Fourteen teachers and five language specialists are employed. The Adult Education Centre has a resident adult educator on staff. The Arctic College Extension Program offers continuing education opportunities.

### Health

Services include a seven-person medical staff. The health station (480 m2), built in 1983, contains three medical beds, two bassinets, and one crib.

# Fire

A 22-person volunteer fire brigade uses a 1981 International model S-1800 truck (4546 L capacity) to fight fires. A telephone and siren alarm system are in place for quickened response. The Community has a firehall (162 m2).

# **Recreation Services**

Cape Dorset has a large (2,375 m2) indoor arena/curling rink and large (436 m2) community hall, both built in 1988. Additional facilities include a school gymnasium, a playground, developed trails, a swimming pool a pool hall, and the community library. Various events are organized by a recreation committee.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs three officers. Social services are under the jurisdiction of the Hamlet. The Roman Catholic Mission provides church services.

Mail delivery is twice per week. NorthwesTel local and long distance telephone service, CBC Radio and CBC Television are available through a link-up with the Anik satellite system. The Iqaluit NWTPC area-office provides 1350 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a Hamlet office (250 m2), a maintenance garage (421 m2), and three parking garages [three-bay, (280 m2), two-bay (144 m2), and two-bay (133 m2)].

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

Saipaaqivik Day Care

# **COMMUNITY WATER**

## Water Supply

The source for water is Tee Lake, located 1 km south-east of the community. In general, Cape Dorset's water supply is of good to excellent chemical quality for domestic use. The water is clear, very soft, poorly buffered, slightly acidic, low in dissolved solids and greatly undersaturated with respect to calcium carbonate.

# Water Storage

The water supply system has been in operation since 1973. In 1991/92, new facilities were constructed in conjunction with a subdivision expansion. These included a new pumphouse/truckfill building at a location outside the limit of the new subdivision, a new water storage tank adjacent to the new pumphouse/truckfill, and new mechanical piping, electrical, and control features.

Intake facilities pump from the source at the south end of Tee Lake to a preheating system which is located near the lake at a high point above the community. From the heater house, water discharges from a 1300 L head tank, flowing 1000 m by gravity to the new truckfill. At the truckfill station, the water discharges into a 543,000 L storage tank. The insulated tank is adjacent to the pumphouse/truckfill building. Water is released to the water trucks via an overhead truckfill arm equipped with a metering device.

### Water Treatment

Water is treated by an in-line chlorination system and provisions have been made for the future installation of fluoridation equipment. Microbiological analysis of the raw water supply indicates the presence of corrosion-causing and corrosion-intensifying bacteria. However, once treated, further analysis shows batch chlorination as having successfully eliminated these microorganisms for the location sampled. Cape Dorset's water supply has also shown to be potentially corrosive when used in contact with metallic materials. However, chemical analysis of the raw and treated water samples showed those parameters tested as below the recommended maximum limits.

# Water Quality

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# **COMMUNITY WASTE**

### Solid Waste

Garbage is collected twice per week with the 9.2 m2 capacity garbage compactor. Solid waste is taken to a management site (500 m2) 1 km west of the community. Bulky and metal waste is taken to a separate site (60,000 m2). Periodically, the wastes are burned, covered and compacted.

# Sewage Disposal

Sewage waste is collected by two 4546 L capacity sewage trucks and taken to a holding pond west of the Community. Service is as required. The trucks are capable of meeting the demand by working eight-hour shifts, five days per week. One-percent of the community has bagged sewage service, but this system is planned to be phased out. Bagged sewage is collected by the same 9.2 m2 capacity truck as is used for solid waste collection.

Both bagged and pumpout liquid sewage are treated at adjacent sites approximately 1 km from the centre of the Community, 400-450 m west of the most westerly houses. The municipal sewage lagoon is 2500 m2 in area. Discharge from the west end of the pond follows a shallow drainage ditch to the sea. Bagged sewage is disposed of in a separate landfill (450 m2).

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Cape Dorset Page 7

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Chesterfield Inlet

What the name means: Place With Few Houses

Alternate Name: Igluligaarjuk

### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Keewatin

Member of the NWT Legislature: Manitok Thompson

Member of Parliment: Jack Anawak

Mayor: Lizzie Ippiak

Senior Administration Officer: Roy Mullins GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Keewatin

NWT Legislature Riding: Alvilik Languages Spoken: Inuktitut Land Claim Area: TFN - Keewatin

**LOCATION** *Longitude:* 90.42; *Latitude:* 63.20

Chesterfield Inlet is located on a small bay on the south shore of Chesterfield Inlet. It sits on a 240 km long arm of the sea on the western side of Hudson Bay. Located at 63'216 N latitude and 90'426 W longitude, the community is 101 air km north-east of Rankin Inlet and 1,147 air km east of Yellowknife.

# **CLIMATE**

Chesterfield Inlet receives an average of 14.6 cm of rainfall and 112.5 cm of snowfall per year. Mean annual precipitation totals 25.9 cm. July mean high and low temperatures are 13.1 C and 4.6 C. January mean high and low temperatures are -27.8 C and -35.2 C. Winds are generally north-west and annually average 22.3 km/h.

Directed by prevailing northerly winds across exposed surfaces, snowdrifting on the lea side of buildings assumes a characteristic northwest orientation. Snow accumulation, which builds to drifts of up to 4 m, is further influenced by local landforms. Limiting communication and mobility, snowdrifts have also contributed to fire hazard by restricting the safe exit of buildings. With the recent construction of snowfencing (see section A.7), snowdrifting problems have been greatly reduced.

# 1981 Air Photo



### **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 914 m x 30 m certified Arctic C gravel runway. Facilities and services include a terminal building, navigational aids and weather reading equipment. Scheduled flight service is available via Rankin Inlet. An unlicensed water aerodrome provides float plane access. Break-up is at the end of May and freeze-up is in mid-October.

Marine service is available from the Northern Transportation Company Ltd. via Churchill. Facilities include beach access, a deep water port, a pushout for dry cargo and an offshore anchorage for POL discharge. There is no all-weather road to Chesterfield Inlet. Within the community there are 11 km of gravel surface roads. Calcium chloride is applied annually to 3 km of road to act as a dust suppressant and surface stabilizing agent.

Snowdrifting problems on the access roads have been given priority in the Hamlet's program of snow clearing. The severity of the problem has been considerably reduced by the construction of initial sections of snowfencing on the north-western side of the community, which began in 1994. By the end of 1995, 274 m of a planned 530 m length had been completed.

Snowfence Construction Method

Steel Pile Posts

fixed in the ground by the ad-freeze method

Wooden Stringers bolted to the posts

Slats 25 m wide slats nailed vertically to the stringers on 50 mm centers to leave 50% of the fence face open

Pile Spacing 3.8 m

Height Of Fence Above Grade 3.5 m

Depth Of Pile Below Grade4.2 m

**Snowfence Specifications** 

Piles 141 mm diameter x 9.53 mm wall thickness x 9540 mm long A53 seamless steel pipe

Stringers 150 mm x 150 mm x 4270 mm long rough sawn wood

Slats 25 mm x 150 mm x 3050 mm long rough sawn wood

Bolts 19 mm diameter x 500 mm long steel

# **GEOLOGY**

Because of rock ridges and many scattered inland lakes, development is restricted to a narrow coastal strip. Rock outcrops, local ponded areas and variable permafrost conditions impose further restrictions. The Hamlet is within the defined continuous permafrost zone; thawing of the active layer in the summer creates unstable surface and subsurface conditions. The depth of the active layer is dependent upon subsurface composition and ranges from 0 to 1 m.

Surface material within the developed area consists of sand and gravel beach deposits with scattered boulders, bare rock and patches of muskeg. Bedrock is composed mainly Precambrian granite and gneiss.

# **VEGETATION**

Mosses, grasses, and lichens are common.

### **HISTORY**

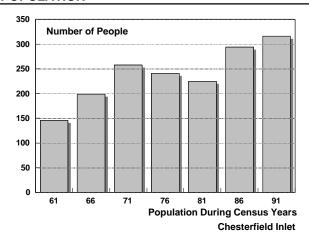
Historically, Chesterfield Inlet was a meeting place for Inuit who hunted seal in the spring and early summer. The Inlet was visited regularly during the 18th and 19th centuries by those seeking the Northwest Passage to the East. The Inlet was visited frequently as European exploration began to build in the search for the Northwest Passage. The Hudson Bay Company and the Roman Catholic Mission established posts in 1912. Before this time, there were no trading stations on the Keewatin coast north of Churchill. Trade was carried on by sloops and schooners along the

Chesterfield Inlet steadily grew in importance as a religious, medical, and educational centre. After 1912, groups of Netsilingmiut migrated from the Foxe Basin to join the small group of Karnilmiut who had traditionally lived in the area. The Federal Government hired a resident doctor in 1929 and by 1931 the new hospital had effectively made Chesterfield the regional medical headquarters.

The Roman Catholic Mission ran a large school/hostel between 1954 and 1969, bringing school children from across the Arctic for ten or eleven month periods each year. Chesterfield Inlet has declined as an educational centre now that most communities have schools.

The Hamlet maintains a very traditional economy; private sector development is limited. Major economic activities include hunting, trapping, carving, and some commercial fishing. Tourism activities focus on char fishing expeditions. Some local businesses include construction, taxi service, general retail, food service, and hotels. Chesterfield Inlet gained Hamlet status on April 1, 1980. "Igluligaarjuk" is a traditional name for the Hamlet, meaning place with few houses.

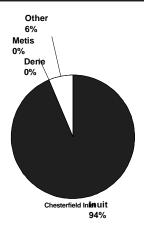
# **POPULATION**

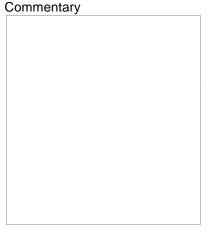




Population Statistics

# **ETHNICITY**

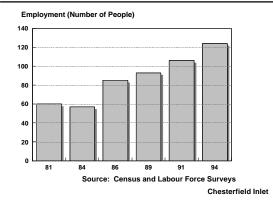


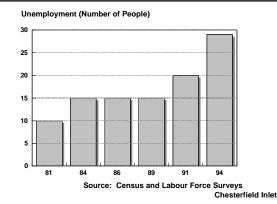


Inuit: 296
Dene: 0
Metis: 0
Other: 20

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





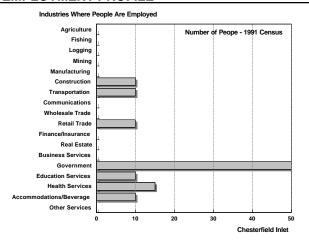
Source: 1994 Labour Force Survey, Bureau of Statistics

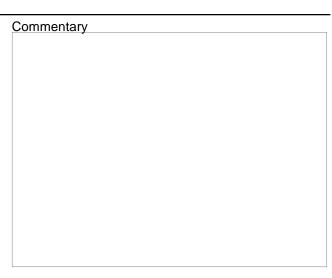
# **Employment Statistics 1994**

Over 15 Pop: 213 Abor. Employed: 108
Labour Force: 154 Unemployed: 30
Employed: 124 Ab. Unemployed: 29

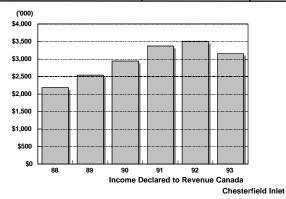
# Commentary

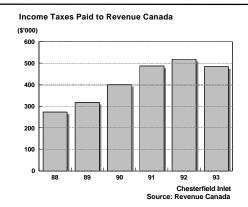
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$22,536 1992: \$23,387

1991: \$21,044

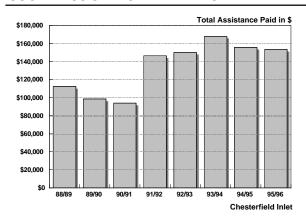
1992: 140 1991: 160

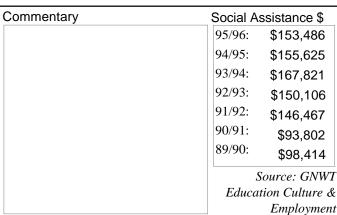
1993: 140

Source: Revenue Canada - Community Data

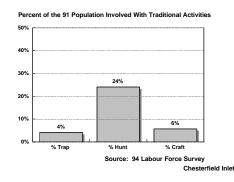
# Commentary

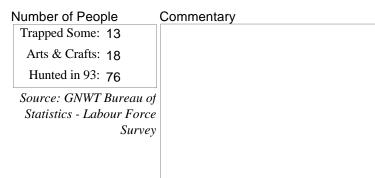
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Igalaaq Hotel accommodates guests in four rooms. The Tangmayk Hotel has seven rooms.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

### HOUSING AND HOME OWNERSHIP

Commentary

The number of occupied private dwellings increased 35.2% between 1986 and 1991. As of 1994, the Housing Corporation owned 63 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 17 new homes in the Hamlet.

Detached: 55

Apartment: 0

Row House: 10

Source: 1991 Census Data

Trailer: 0

# **COMMUNITY SERVICES**

### Education

Victor Sammurtok School instructs grades K-9. Eight teachers and one language specialist are on staff. The Adult Education Centre has a permanent adult educator on staff. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

### Health

The health centre (874 m2), built in 1990, houses one medical bed, one bassinet, and one crib. A resident nurse and community health representative are on staff.

### Fire

Fire protection consists of a twelve-person volunteer fire brigade. Equipment includes a 1984 International model Superior (625 g/min. capacity) triple combination pumper and a telephone/alarm system. The two-bay firehall (142 m2) was built in 1995.

### **Recreation Services**

Chesterfield Inlet has an Active Recreation Committee. The community's gym/office was built in 1986 and the arena was built in 1992/93. Chesterfield has both a playground and playfield.

# Police, Mail, Electrical and Other Services

Police services are available from the Rankin Inlet detachment of the RCMP. The Community Social Services Office staffs one field officer. The Grey Nuns run the St. Theresa Centre for the Mentally and Physically Handicapped. There are two churches in the community: the Roman Catholic Mission, and the Church of Glad Tidings.

Mail is delivered twice per week. NorthwesTel local and long distance telephone service, CBC radio and community radio are available via the Anik satellite system. NWTPC supplies 780 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a six-office hamlet office, a two-bay maintenance garage (200 m2), a three-bay parking garage (157 m2), and four-bay parking garage (332 m2).

### DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

# Water Supply

The main source of water for Chesterfield Inlet is Fish Lake (also known as First Lake), located 4 km south-west of the community. Prior to 1991, the Hamlet trucks drew water directly from this lake year-round except when snowdrifting on the lakes access road caused frequent interruptions to water supply service. Then, Police Lake, located within the community, was used as a source for ice blocks. The winter of 1978/79 was especially severe when access was blocked up to a week at a time, several times during the winter.

Mission Lake, also within the community, had also been used as a supply source. In past years, water from the lake was stored in a 9100 L storage tank for the greater part of the year to be used by the health centre, school, and hostel. In summer, the residents used buckets to draw water from Mission Lake or from several small streams which flow to the harbour from the Lake. In winter, ice and snow were melted for domestic drinking water. Mission Lake was used extensively for the community's water supply source until two accidents involving petrochemical spills rendered the water undrinkable.

Construction of a new water supply system for Chesterfield Inlet was completed in 1991. The system consists of an intake pumphouse on Fish Lake, a summer fill line, a rock blast storage reservoir and a truckfill pumphouse. The intake pumphouse is a pre-engineered building on skids. Water is drawn into the pumphouse through a floating intake and flexible hose, then pumped to the reservoir through a 200 mm diameter uninsulated HDPE pipeline, 3.2 km long. The pipeline is composed of a series of flanged sections, coupled together only at the time of pumping. The pipeline route is located beside the access road to Fish Lake so both pumphouse and pipeline are accessible by road during the summer.

# Water Storage

The Hamlet's water supply is stored in a blast-rock reservoir located about 1 km west of the centre of the community. The reservoir is  $100 \text{ m} \times 30 \text{ m} \times 15 \text{ m}$  deep, having a storage capacity of 33,000,000 L. This is a much larger volume than the Hamlet's present consumption of about 7,000,000 L per year. The oversized reservoir was jointly designed by Municipal and Community Affairs and the Department of Transportation to meet a growing need for granular material in the community. Much of the material blasted during its construction was subsequently crushed and is used for building roads and housing pads. The reservoir is enclosed by a chain link safety fence.

A submersible pump located near the bottom of the reservoir inside an intake casing pumps water through a 45 mm polyethylene intake line to the truckfill station. The intake line is protected inside a 300 mm diameter PE pipe insulated with 88 mm thick polyurethane foam and encased in a 500 m diameter x 2.0 mm thick galvanized corrugated metal pipe casing. The 50 m long casing was supposed to have been supported by an inclined rock ramp blasted out of the side of the reservoir. However, during blasting the ramp was damaged. Sections of the intake casing are now supported on a constructed ramp of rubble rock.

# Water Treatment

One room of the truckfill station contains a hypochlorinator. Whenever the truck is being filled, chlorine is automatically injected into the pipe.

# Water Quality

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# **COMMUNITY WASTE**

### Solid Waste

Solid waste is collected three times per week by a 1994 Ford model F-350 compactor. The unfenced solid waste disposal site is located in a 3200 m2 natural depression 3.3 km west of the community. Bulky wastes and used oil are stored separately from the domestic wastes; bulky wastes are taken to a separate 6600 m2 site, while oil wastes are stored in drums alongside the dumpsite. Twice a week the solid wastes are burned at the disposal site. Since there is a shortage of granular material, wastes are covered only when absolutely necessary and not compacted.

# Sewage Disposal

Most buildings have pumpout sewage tanks. The Hamlet's 8172 L pumpout truck is used to transport the sewage to the disposal point, 3.1 km west of the Hamlet. The sewage is treated using the natural wetlands method. The sewage initially flows to a small pond and then through two other ponds and intervening areas until it reaches Finger Bay, an arm of Hudson Bay. Total length of the flowpath is about 900 m. The upper part of the wetlands has black organic soils up to 15 cm deep which support an abundant growth of sedges and milfoil. Farther along the flowpath is a fen/blockfield with thin soils supporting growths of sedges, lichens and moss. The wetlands, including the three ponds, have a total area of about 16.5 ha. During the winter months, sewage freezes to become an ice mound in the upper reaches of the wetlands.

Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment.

A 1995 study concluded that the Chesterfield Inlet wetlands treatment of sewage is very effective, with greater than 98% removal of BOD5, fecal coliform, and ammonia. The quality of the effluent entering Finger Bay was well within Water Board criteria and the Canadian Water Quality Guidelines for Freshwater Aquatic Life. Only two or three homes remain with bagged sewage service. Sewage bags are collected and disposed of with the solid waste.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# vde River

What the name means: Beautiful Cove

Alternate Name: Kangiqlugaapik

### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Tommy Enuaraq

Member of Parliment: Jack Anawak

Mayor: James Qillaq

Senior Administration Officer: Johnathan Palluq GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Baffin Central

Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

### **LOCATION** *Longitude:* 68.36; *Latitude:* 70.28

Clyde River is located on Patricia Bay on the east coast of Baffin Island, 740 air km north of Iqaluit and 2,153 air km north-east of Yellowknife. Its geographical coordinates are 70'276 N latitude and 68'336 W longitude.

# **CLIMATE**

The average annual precipitation is 4.6 cm of rainfall and 168.9 cm of snowfall. Mean annual precipitation totals 20.6 cm. July mean high and low temperatures are 7.8 C and 0.4 C. January mean high and low temperatures are -22.5 C and -30.3 C. Winds are generally north-west and annually average 14.4 km/h.

# 1981 Air Photo



# **TRANSPORTATION**

The Hamlet of Clyde River and the GNWT jointly operate a 1067 m x 30 m certified Arctic C gravel runway. Facilities and equipment include a terminal building, navigational aids, and weather/communications equipment. Scheduled flight service is available with First Air via Iqaluit. There is unlicensed float plane access in summer but no services are available.

Marine transportation is available from Eastern Arctic Sealift and Transport Canada Montreal. Facilities include a beach landing for dry cargo and an offshore anchorage for bulk fuel tankers. Marine traffic operates through a July to October window. There is no road access to Clyde River. The community has a total of 6.4 km of gravel surface roads. Calcium chloride is applied annually to 2.5 km of road to act as a dust suppressant and surface stabilizing agent.

# **GEOLOGY**

The Community is situated on a south-facing slope which gradually rises to 152 m above sea level. The townsite occupies a shallow gravel ridge 3 - 9 m above high tide. The bedrock is Precambrian crystalline shield, mantled by a thin layer of glacial till. In the past, the land was submerged to a depth of 50 - 60 m. As a result, lacustrine deposits of unconsolidated sands and gravels can be found in the area. Permafrost found at shallow depths contributes to some drainage problems.

### **VEGETATION**

Mosses, lichens and small shrubs are common during the short growing season.

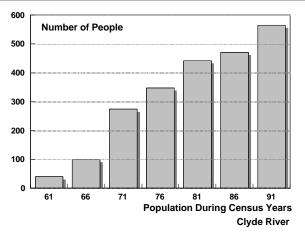
### **HISTORY**

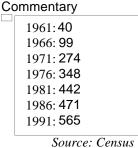
Clyde River became organized in 1922 when the Hudson Bay Company constructed a trading post across the bay from the current settlement. Many Inuit families relocated to take advantage of local fur resources and the valuable trade goods provided by the Company. This relocation coincided with the closing of once prosperous whaling stations at Pond Inlet and Cumberland Sound.

The settlement began to concentrate on the east side of Patricia Bay when sealskin prices fell in the late 1950's. At the same time, the school was built, drawing people to the settlement from surrounding hunting grounds. The key to expansion was the building of the Cape Christian Weather and Navigational Aid Station in 1953.

The Cape Christian station closed in 1975, effectively putting an end to most private sector activity. Carving, silk-screening, and tourism are now great contributors to the economy. The Community still thrives on its wealth of marine mammals and game including whales, seals, and polar bear. A wildlife preserve has been proposed for the protection of the endangered bowhead whale, a staple of traditional Inuit life. Clyde River gained Hamlet status on July 1, 1978. A traditional name for the Community is Kangiqtugaapik, meaning beautiful cove.

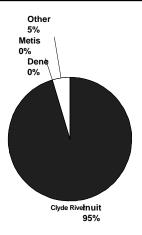
# **POPULATION**

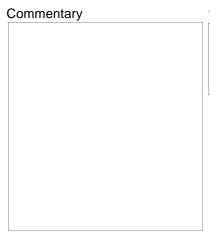




Population Statistics

# **ETHNICITY**



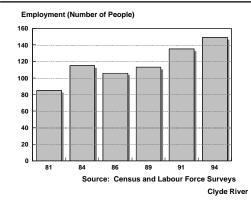


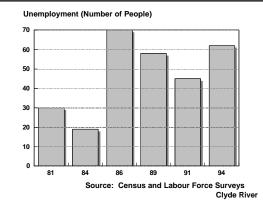
Inuit: 539
Dene: 0
Metis: 0

Other: 26

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





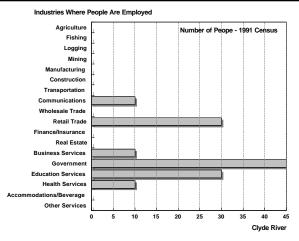
Source: 1994 Labour Force Survey, Bureau of Statistics

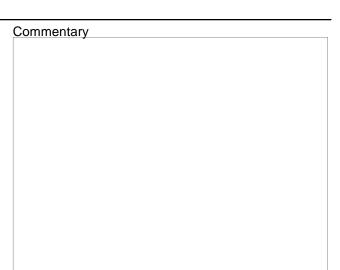
# **Employment Statistics 1994**

Over 15 Pop: 357 Abor. Employed: 145
Labour Force: 209 Unemployed: 60
Employed: 149 Ab. Unemployed: 60

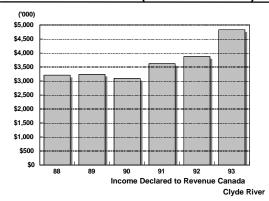
# Commentary

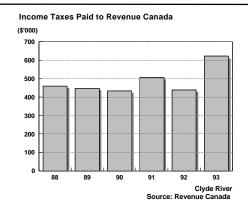
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





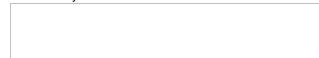
Average Incomes

People Paying Inc.Tax

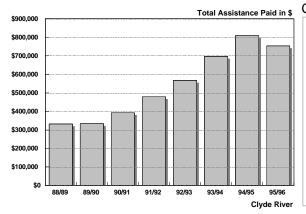
1993: \$17,239 1992: \$16,817 1991: \$15,735 1993: 280 1992: 280 1991: 230

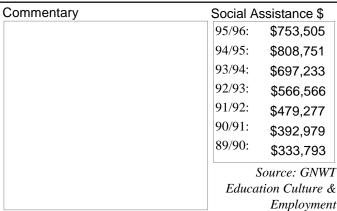
Source: Revenue Canada - Community Data

# Commentary

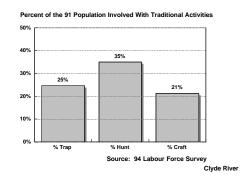


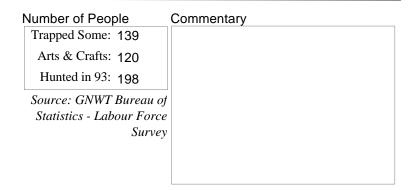
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Quammaq Hotel in Clyde River accommodates six people.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

### HOUSING AND HOME OWNERSHIP

Commentary

Ownership/Type of Housing
The number of occupied private dwellings increased 17% between 1986 and 1991.

As of 1994, the Northwest Territories Housing Corporation owned 99 housing units.

Owned: 5

As of 1994, the Northwest Territories Housing Corporation owned 99 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 19 homes in the community.

Rented: 95
Band Owned: 0

Detached: 95

Apartment: 5 Row House: 0 Trailer: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

### Education

The Quiuaq School teaches grades K-11. Twelve teachers and two language specialists are on staff. The Adult Education Centre employs a resident adult educator. Continuing education opportunities are available through the Arctic College Extension Program.

### Health

The health station (117 m2), built in 1983, is in a mobile home. The facility houses three medical beds, one bassinet and one crib, while employing a medical staff of six.

### Fire

Protection consists of a fourteen-person volunteer fire brigade using a 1984 4546 L pumper truck to fight fires. A telephone and siren alarm system is in place for quickened response. The community has a firehall (119 m2).

# **Recreation Services**

The gymnasium, located within the school, was built in 1986. The large community hall was built in 1992/93. Additional facilities include an outdoor rink, a playground, a playfield, a developed trail, a pool hall, an arcade, a movie theatre, and the community library. Clyde River has an Active Recreation Committee.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office, employing one part-time worker, is actively involved with the Alcohol Education Committee.

Mail is delivered to the community twice per week. NorthwesTel telephone service, CBC radio and CBC Television are available via the Anik satellite system. The community also has a local radio station. NWTPC provides 1,080 kW of diesel power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the community office (401 m2), two three-bay parking garages (226 m2 and 135 m2), and a two-bay maintenance garage (155 m2).

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

### **COMMUNITY WATER**

# Water Supply

Water is obtained from a small lake approximately 3 km west of the community. A hose placed on the lake bottom is used for drawing water directly into the water truck. The water is chlorinated by the addition of bleach directly to the tank (18 mL/1000 L) of water).

### Water Storage

The storage capacity of Water Source Lake is 120,000,000 L.

# Water Treatment

Clyde River's water source is of excellent chemical quality for potable use. The water is clear, very soft and low in dissolved salts. Microbiological analysis of the water supply indicates the presence of corrosion-causing and corrosion-intensifying bacteria. However, analysis of treated water reveals lower bacteria numbers and no heterotrophic iron reducers.

# Water Quality

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# **COMMUNITY WASTE**

### Solid Waste

Garbage is collected twice per week with a stake truck and taken 1.5 km to the solid waste site (90,000 m2). Metal waste is segregated from the garbage. Periodically, the wastes are burned, covered, and compacted.

## Sewage Disposal

Sewage is collected by two pumpout trucks, a 1989 model and a 1993 model, each with storage capacities of 4546 L. The sewage is treated in the 6000 m2 single-cell sewage lagoon. Bagged sewage is collected in a four-wheel drive stake truck equipped with two 204 L drums in which the honeybags are placed. One percent of the community has bagged sewage, but this system is expected to be phased out. The municipal honeybag disposal site is 200 m2 in area.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Colville Lake

What the name means: Ptarmigan Net Alternate Name: K'ahbamitue

### **POLITICAL**

Located in the future territory of: Western Arctic

RWED Administrative Region: Sahtu

Member of the NWT Legislature: Stephen Kakfwi

Member of Parliment: Ethel Blondin

Mayor: Richard Kochon

Senior Administration Officer: Joseph Kochon GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Sahtu Languages Spoken: North Slavey

Land Claim Area: Sahtu

# LOCATION Longitude: 126.07; Latitude: 67.02

Colville Lake is located within the Inuvik Region at 67'026N latitude, 126'076W longitude, 745 air km north-west of Yellowknife. Located on the south-eastern shore of Colville Lake, the community sits 274 m above sea level.

# **CLIMATE**

Colville Lake receives an average of 14.7 cm of rainfall and 115.1 cm of snowfall annually. Mean annual precipitation totals 26.2 cm. July mean high and low temperatures are 22.9 C and 7.6 C. January mean high and low temperatures are -25.6 C and -34.4 C.

# **TRANSPORTATION**

The GNWT operates a 823 m X 49 m unlicensed gravel runway. Facilities are limited to airfield maintenance through the Colville Lake Lodge. Scheduled service is available through North Wright Air Ltd. via Norman Wells. There is unlicensed float plane access with no services and limited winter maintenance.

# **GEOLOGY**

Colville Lake is in an area of continuous permafrost. Surficial materials in the area generally consist of pleistocene sediments such as sand, gravels, clays, and tills.

The community is near the edge of the tree line. Black spruce tend to be small and sparse. Other vegetation includes mosses, lichens, grasses, and alders.

# **HISTORY**

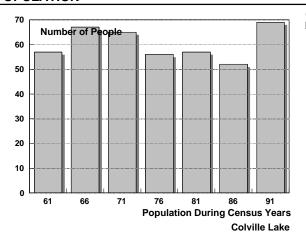
Located within the traditional homeland of the North Slavey Dene tribe, Colville Lake is a completely traditional community in every sense. Although Father Petitot brought Christianity to the area in 1864, organization of the community did not occur until 1962 when the Roman Catholic Mission was established.

The economy is based almost exclusively on game hunting, fishing, and trapping. Tourism has played a secondary role; a lodge brings tourists up for the summer months. Noted painter Bern Will Brown makes Colville Lake his home. A traditional name for the community is "Kahbamitue", meaning ptarmigan net. Colville Lake gained Settlement Corporation status on December 1, 1995.

### 1981 Air Photo



# **POPULATION**



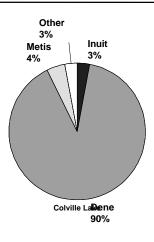
# Commentary

1961:57 1966:67 1971:65 1976: 56 1981:57 1986: 52 1991:69

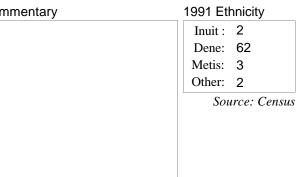
Source: Census

**Population Statistics** 

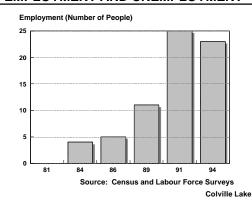
# **ETHNICITY**



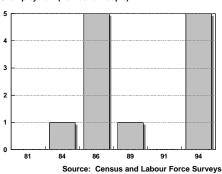
# Commentary



# **EMPLOYMENT AND UNEMPLOYMENT**



# **Unemployment (Number of People)**



Source: 1994 Labour Force Survey, Bureau of Statistics

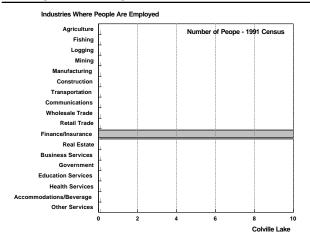
Colville Lake

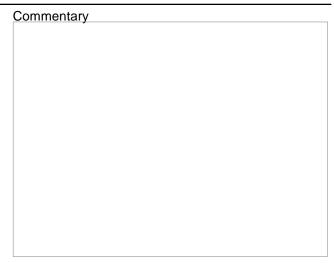
# **Employment Statistics 1994**

Over 15 Pop:	48	Abor. Employed: 5
Labour Force:	28	Unemployed:
Employed:	23	Ab. Unemployed:

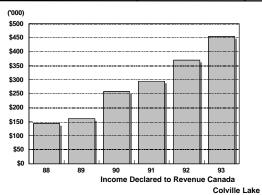
# Commentary

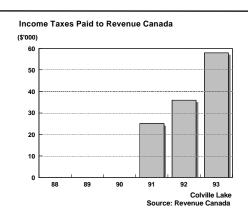
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





# Average Incomes People Paying Inc.Tax

 1993: \$15,133
 1993: 30

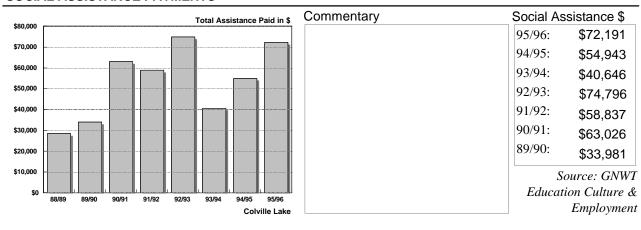
 1992: \$12,333
 1992: 30

 1991: \$16,940
 1991: 40

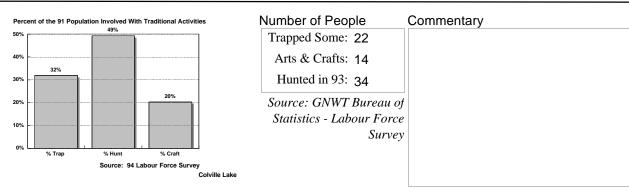
Source: Revenue Canada - Community Data

Commentary

# **SOCIAL ASSISTANCE PAYMENTS**



# TRADITIONAL ACTIVITIES



# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Colville Lake Lodge accommodates twelve and has a dining room.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Colville Lake Page 5

### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing
Housing Assistance Plan houses account for five homes in the community. All	Units
buildings are log-built.	Owned: 15
	Rented: 0
	Band Owned: 0
	Detached: 20
	Apartment: 0
	Row House: 0
	Trailer: 0
	Source: 1991 Census Data

### **COMMUNITY SERVICES**

Education	Health
The Territorial School has one teacher who instructs grades K-9.	A medical staff of a general practitioner and a nurse visits occasionally.
Fire	Recreation Services

# Police, Mail, Electrical and Other Services

RCMP and postal services are available from Fort Good Hope. The only telephone service is via HF radio. NorthwesTel has planned to install full local and long distance service beginning in 1996. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. There are no facilities for power in the community. Colville Lake has a community office.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

# Water Supply

Water is hauled in buckets from Colville Lake in the summer months. In summer, water may also be obtained from a holding tank located inside the school. The tank is filled using a plastic pipeline, with the intake located at the end of the dock. In winter, ice is broken into blocks and melted in home storage tanks. Water is not treated save for those individual households who choose to boil and/or chlorinate their water.

# Water Storage

The school's holding tank and those tanks in individual homes are the only forms of water storage.

### Water Treatment

Water is not treated save for those individual households who choose to boil and/or chlorinate their water. A raw water sample was taken at the community nursing station October 26, 1994. The sample can be characterized as moderately hard, well buffered, slightly alkaline, and low in dissolved solids. If this sample is representative of the community's raw water then its supply is of good chemical quality. Metals of major concern such as aluminum, arsenic, cadmium, chromium, lead, manganese and mercury were "below the analysis detection limit" or well below the maximum allowable limits stipulated in the Guidelines for Canadian Drinking Water Quality.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Colville Lake Page 6

#### Water Quality

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# **COMMUNITY WASTE**

# Solid Waste

Garbage disposal is the responsibility of the individual.

# Sewage Disposal

Honeybag pickup is the method of sewage collection.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

1981 Air Photo

# Coral Harbour

What the name means: Islands in the South

POLITICAL

Located in the future territory of: Nunavut RWED Administrative Region: Keewatin

Member of the NWT Legislature: Manitok Thompson

Member of Parliment: Jack Anawak

Mayor: Johnny Ningeongan

Senior Administration Officer: Louis Primeau GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Keewatin

NWT Legislature Riding: Alvilik Languages Spoken: Inuktitut Land Claim Area: TFN - Keewatin

**LOCATION** *Longitude: 83.10; Latitude: 64.08* 

Coral Harbour is located at South Bay, in the Boothia-Foxe Lowland Ecoregion, on the southern end of Southampton Island. Located at 64'086 N and 83'106 W, it is 720 km west of Iqaluit and 1,560 km north-east of Yellowknife.

# **CLIMATE**

Coral Harbour receives an average of 14.1 cm of rainfall and 131.9 cm of snowfall per year. Mean annual precipitation totals 27 cm. July mean high and low temperatures are 13.1 C and 4.2 C. January mean high and low temperatures are -25.5 C and -33.8 C. Winds are generally north-west and annually average 20.2 km/h.

# CORAL HARBOUR

N.A.P.L. NO A25027-13 28/7/78

Alternate Name: Salliq

# **TRANSPORTATION**

The GNWT and the Hamlet jointly operate the 1,524 m x 31 m certified Arctic C gravel runway. Other facilities and services include the air terminal building, weather/communications equipment, and navigational aids. Scheduled flight service is available from Calm Air Ltd. via Rankin Inlet and First Air via Iqaluit. An unlicensed water aerodrome provides float plane access. Break-up is in July and freeze-up in October.

Marine transportation is provided by NTCL barge from Churchill. Facilities include a beach landing for shallow draft only and a pushout at Snafu Beach, five km west of the community. There is no direct road access to Coral Harbour. Within the community there are approximately 20.9 km of roads. Calcium chloride is applied annually to 4.6 km of road to act as a dust suppressant and surface stabilizing agent.

# **GEOLOGY**

Linear bedrock ridges run in an approximate north-south direction, spaced about 400 m apart. Palaeozoic marine limestone constitutes virtually all of the bedrock in the area. The seasonal effects of frost shattering and surface water runoff have resulted in a blanket of irregular, angular gravel and the flushing of fine material from ridges. The subsequent deposition of fines has occurred in low-lying areas. Where the rock is not exposed at the surface, the ground is usually covered with a thin layer of brown, fibrous peat. True soil development is limited to marshy areas.

The active layer of permafrost is up to 2 m below the surface during the late summer months. Weakly-developed polygonal patterned ground is evident in virtually all the areas devoid of vegetation.

#### **VEGETATION**

Mosses and lichens are common throughout the region. Flowering plants fare better in low-lying wetland, while lichens characterize drier areas. Graminoids, brown mosses, and willows up to 30 cm in height are found in the wetter areas.

#### **HISTORY**

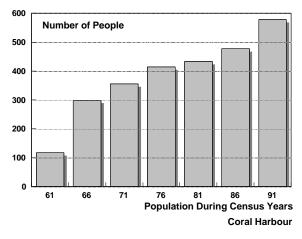
The Coral Harbour area was first inhabited by the Sallirmiut Inuit, descendants of the Thule. These people made stone, whale, and turf homes, wore bearskin clothes and used flint-headed weapons. These characteristics are atypical of other coastal Inuit groups. On his 1612 voyage, Sir Thomas Buttons expedition became the first Europeans to reach Southampton Island. The area began economically in the 1860's as a whaling base, continuing until 1920. All but five of the Sallirmiut perished from disease brought over by the whalers; the tribe is now extinct.

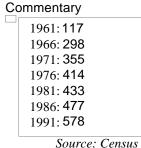
The settlement was established by the Hudson Bay Company, which opened a post in 1925. An Inuk started the Anglican Mission at the same time, and a Roman Catholic Mission opened in 1927. During the Second World War, an airfield was opened by the R.C.A.F. and the U.S.A.F. 15 km from the present community. The site served as a refueling stop and hospital staging area. At this time the community was divided into north and south camps. In 1948, the MOT took over the airfield, and the DEW-Line operation saw an increase in its use. A school was built in 1950. The federal administrator arrived in 1959 and the first nursing station was built in 1963.

Today the economy is based on marine mammal and polar bear resources. Some residents are employed at the airfield or the weather station, while others work in private enterprise. Tourism opportunities consist of sport fishing, arts and crafts sales, and the carving of walrus ivory. Private business is associated mainly with the tourism industry.

Coral Harbour gained Hamlet status on April 1, 1972. A traditional name for the Hamlet is "Salliq", meaning islands in the south.

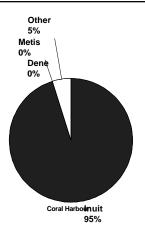
#### **POPULATION**





Population Statistics

# **ETHNICITY**





1991 Ethnicity

Inuit: 550

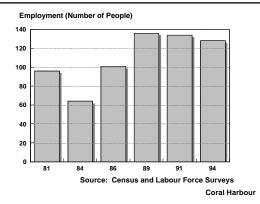
Dene: 0

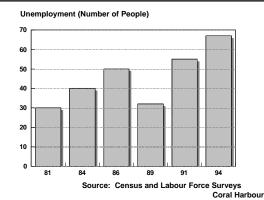
Metis: 0

Other: 28

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





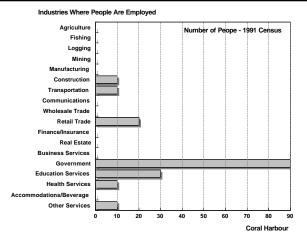
Source: 1994 Labour Force Survey, Bureau of Statistics

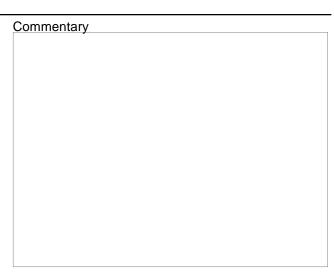
# **Employment Statistics 1994**

Over 15 Pop: 348 Abor. Employed: 105
Labour Force: 196 Unemployed: 68
Employed: 128 Ab. Unemployed: 68

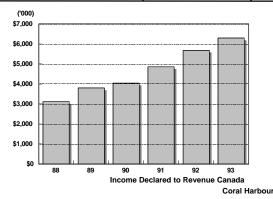
# Commentary

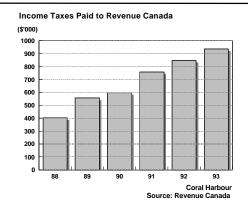
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

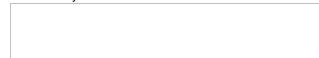
1993: \$22,486 1992: \$21,041

1991: \$20,250

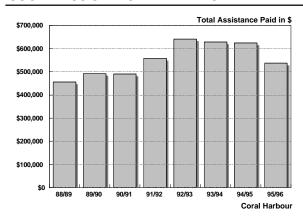
1993: 280 1992: 280 1991: 240

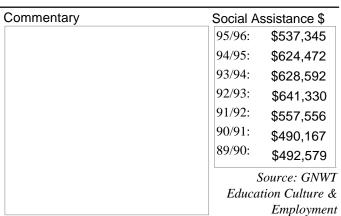
Source: Revenue Canada - Community Data

# Commentary

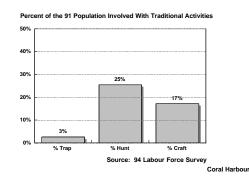


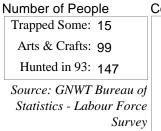
# **SOCIAL ASSISTANCE PAYMENTS**

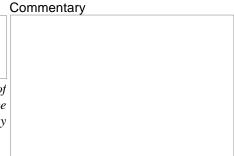




# TRADITIONAL ACTIVITIES







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#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Esungaek Motel accommodates six and LeonieÆs Place accommodates four guests.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type	of Housing
The number of occupied private dwellings increased 36.5% between 1986 and 1991. As of 1994, the Housing Corporation owned 100 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 39 new homes in the community.	Owned: Rented: Band Owned:	105
	Detached:	
	Apartment: Row House:	-
	Trailer:	

Source: 1991 Census Data

# **COMMUNITY SERVICES**

Education	Health
Atausiunsuarnia School teaches grades K-12 Sixteen	The

Atausiunsuarniq School teaches grades K-12. Sixteen teachers and three language specialists are on staff.

The health centre (983 m2), built in 1986, houses six medical beds, two bassinets and one crib. Two nurses, one therapist, and one community health representative are employed.

# Fire Recreation Services

A ten-person volunteer fire brigade uses a 1980 International Superior triple combination pumper (625 g/min capacity) to fight fires. The community has a firehall (149 m2).

The school gymnasium was built in 1977. The community hall, built in 1989, includes a curling rink and arena. There are also two playgrounds and a playfield. Coral Harbour has an Active Recreation Committee.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs one officer. The Community Social Services Office, with a staff of two, overlooks the Youth Justice Committee.

Mail is delivered twice per week. NorthwesTel local and long distance telephone service, CBC Radio, and CBC Television are available through the Anik satellite system. There is also a community radio station. The Rankin Inlet NWTPC area office provides 1,290 kW of diesel-generated power.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a community office (315 m2), a two-bay maintenance garage (228 m2), and two three-bay parking garages (143 m2 and 140 m2).

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

# Water Supply

Kigulik Lake, located 2.9 km west of the community, was the former winter source for water. Weather-related access closures and the seasonal deterioration of its water quality forced the community to search for a more reliable source.

The source chosen was the Post River. This fast-flowing river contained adequate capacity for the Hamlet. The water is of good to excellent chemical quality for domestic use. Based on chemical analysis the water is very clear, soft, weakly buffered, and low in dissolved solids.

However, concerns for winter reliability remained. To resolve this concern a reservoir and truckfill system were constructed near the river. Now a permanent supply line from the river is used to fill the reservoir each summer. Water is pumped from the river at a point 2 km north-west of the community. The pumphouse is a wood frame building equipped with a skid-mounted portable diesel pump system. The water is drawn from a point 20 m from shore and pumped 1500 m to the reservoir.

# Water Storage

Water for domestic use is stored in a rock-blast reservoir, located approximately 1 km north-west of the community. The reservoir, completed in 1980, has a usable storage capacity of 25,200,000 L. As the community's annual consumption is already at 20,000,000 L, the reservoir will soon require expansion.

Water is pumped from the reservoir by submersible pumps located inside twin 100 mm diameter HDPE intake lines. The intake lines are heat-traced and are carried inside 250 mm diameter HDPE pipes which are themselves protected by 75 mm of polyurethane insulation and a 400 mm HDPE outer casing. The casings are supported by an 80 m long inclined rock slope which has been blasted out of the side of the reservoir. The upper ends of the casings enter the truckfill pumphouse at floor level.

The truckfill pumphouse, a 3.5 m x 4.7 m pre-engineered building, houses the hypochlorinator. A steel pipe carries the water from the intake lines through the pumphouse and into the truckfill arm. A similar small pre-engineered building located beside the pumphouse houses an emergency generator.

# Water Treatment

For treatment, water is drawn from the reservoir and chlorinated in the pumphouse by a hypochlorinator. The pipe which carries the water from the pumphouse to the truckfill arm has chlorine injected into it when the trucks are being filled.

Comparison of the chemical analysis for raw and treated water samples to the Guidelines for Canadian Drinking Water Quality shows the parameters tested to be below the recommended limits. Microbiological analysis of treated water shows that batch chlorination eliminates or greatly reduces the number of bacterial species present in raw water samples.

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#### **COMMUNITY WASTE**

#### Solid Waste

Garbage is collected four days per week by a crew of two using a 1991 Ford model F-350 compactor. In early July of each year the community participates in a spring clean-up. The solid waste management site, 1500 m x 1500 m, is located 3.2 km north-west of the community on the east side of a gravel ridge. The site is presently unfenced but fencing is planned. The wastes at the disposal site are burned every day and covered and compacted each summer. There is a bulky waste area immediately south of the solid waste site. Used oil is disposed of at a separate site 1 km north of the airport in 205 L drums.

# Sewage Disposal

The Hamlet provides sewage tank pumpout service for the community. An 8172 L capacity sewage truck (1994) pumps out tanks five days per week with each house receiving service two or three times per week.

Liquid pumpout sewage is treated in a natural wetland site 3.4 km north-west of the community. The total area of the wetlands is about 7 ha; 3.5 ha consists of four shallow ponds. The remaining 3.5 ha is covered by soils from 2 - 15 mm in thickness. Cotton grasses and sedges are the major vegetation species which grow in the soils. The highly treated water is discharged to Hudson Bay. During the winter months, sewage is stored in the upper reaches of the wetlands in the form of an ice mound.

Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment.

A 1995 study determined that Coral Harbour wetlands treatment is very effective with substantial removal of BOD5, fecal coliform, and ammonia. The quality of the effluent entering the receiving pond was well within Water Board criteria and the Canadian Water Quality Guidelines for Freshwater Aquatic Life.

Nine houses in Coral Harbour are still on the bagged sewage system (1996). They are generally equipped with 50 L outdoor sewage containers which are emptied once or twice per week. The Ford model F-250 truck is used to transport the bags to the solid waste disposal area, 3.2 km west of the Hamlet. The bags are disposed of with the solid waste since there is no separate bagged sewage disposal area.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Deline

What the name means: Moving or Flowing Water

Alternate Name: Fort Frankin

#### **POLITICAL**

Located in the future territory of: Western Arctic

RWED Administrative Region: Sahtu

Member of the NWT Legislature: Stephen Kakfwi

Member of Parliment: Ethel Blondin

Mayor: John Tetso

Senior Administration Officer: Yehia Gayed GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Sahtu Languages Spoken: North Slavey

Land Claim Area: Sahtu

#### **LOCATION** *Longitude: 123.25; Latitude: 65.10*

Located at 65'10'N and 123'25'W, Deline lies on the north shore of Keith Arm, on Great Bear Lake. The only major community on the Lake, it is 544 km north-west of Yellowknife.

#### **CLIMATE**

Deline receives an average of 19.2 cm of rainfall and 136.4 cm of snowfall annually. Mean annual precipitation totals 29.4 cm. July mean high and low temperatures are 21.8 C and 10.1 C. January mean high and low temperatures are -24.0C and -32.2C. Winds are generally south-east and annually average 22.6 km/h.

# **TRANSPORTATION**

A 762 m x 24 m airstrip is run by the Charter Community of Deline (GNWT). Facilities include navaid, landing lights and windsock. There is no passenger shelter. Limited airfield maintenance is available. A private, licensed water aerodrome with anchorage operates from May to October. Winter road access to Tulita is available.

# **GEOLOGY**

Although rock outcrops are present in the area, none are near the immediate settlement. It is known, however, that sedimentary rocks of the cretaceous period exist beneath the recent and deep glacial and lacustrine deposits. The settlement is situated on a relatively level area of unconsolidated material consisting of lake deposits of silt, sand, and clay as well as offshore bar deposits. Extensive sand and gravel ridges surround the settlement.

Surface materials of mosses and organic matter (150 mm - 600 mm thick) are underlain by course sand or gravels. Permafrost may be found from 400 - 700 mm beneath the ground surface, depending on local surface materials and drainage.

Drainage in the community is generally poor. The ground slopes toward the lake throughout the length of the community from a swampy area to the north. Water travels on the surface or through the surface humus on top of the frozen subsurface to the lake. As a result, the ground in the area is generally wet throughout the summer months. Drainage ditches have been partially successful in resolving the problem.

#### **VEGETATION**

Deline lies just south of the tree line. A mixture of black spruce and tamarack, with alder as undergrowth, spots the landscape. Open areas are covered by bunch grasses, mosses and lichens. Willow scrubs are common in poorlydrained areas.

# 1981 Air Photo



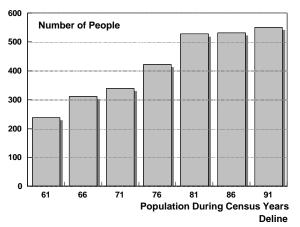
Thursday, July 20, 1995

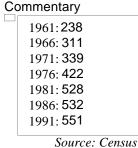
Deline became a Charter Community April 1, 1993, and officially changed its name from Fort Franklin June 1, 1993. Deline is a traditional name meaning moving or flowing water.

Fort Franklin was named for Sir John Franklin, who used the area as his base for exploration during the mid-1820's. At that time, the Hudson Bay Company re-opened their store to supply his expeditions. The settlement did not begin to form until the 1920's when pitchblende was discovered at Port Radium and oil at Norman Wells. Great Bear Lake and Great Bear River became important trade routes. The establishment of a Roman Catholic Mission, Federal Day School, and a Hudson Bay Company post in 1949-1950 began a period of building construction and semi-permanent settlement.

Deline is now a year-round settlement committed to preserving traditional values and lifestyles. The economy is based primarily on trapping, hunting, and fishing, while tourism and oil and gas services provide wage employment. Arts and crafts are important to tourism sales. A summer lodge boasts world-class Lake Trout fishing and scenic wilderness. Local business includes general retail, food, hotels, restaurants, outfitters, and air transport services.

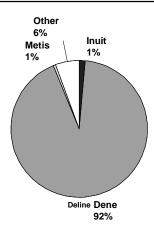
#### **POPULATION**

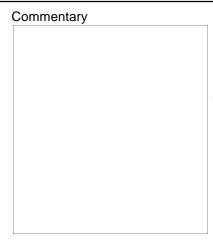




Population Statistics

# **ETHNICITY**



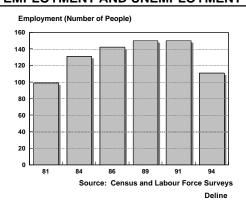


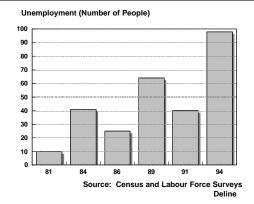
1991 Ethnicity Inuit: 8 Dene: 509 Metis: 3

Other:

31 Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





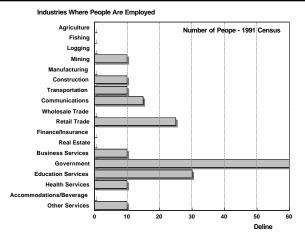
Source: 1994 Labour Force Survey, Bureau of Statistics

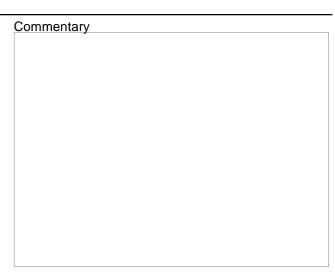
# **Employment Statistics 1994**

Over 15 Pop: 367 Abor. Employed: 111
Labour Force: 208 Unemployed: 97
Employed: 111 Ab. Unemployed: 97

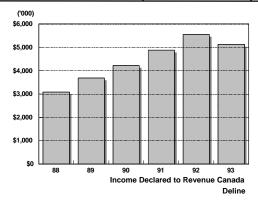
# Commentary

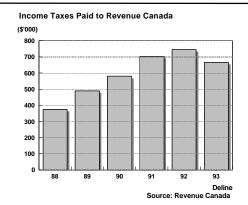
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





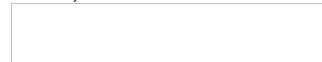
Average Incomes

People Paying Inc.Tax

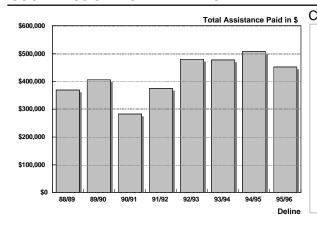
1993: \$18,967 1992: \$19,836 1991: \$18,044 1993: 270 1992: 270 1991: 270

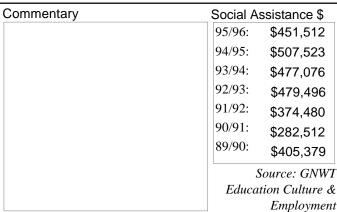
Source: Revenue Canada - Community Data

# Commentary

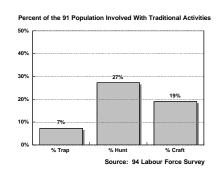


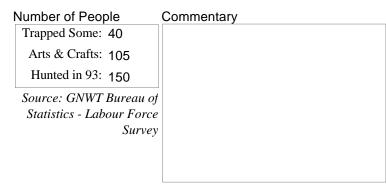
# SOCIAL ASSISTANCE PAYMENTS





# TRADITIONAL ACTIVITIES





# TOURISM

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Great Bear Lake Motel accommodates twelve in four rooms. Facilities include private bath, a dining room, and a coffee shop.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	_Ownersnip/ i ype	of Housing
Occupied private dwellings increased 25% between 1986 and 1991. As of 1994,		Units
there were 110 public housing units. The Housing Assistance Program, the	Owned:	40
Alternative Housing Program, and the Government Lease-to-Own Program have	Rented:	90
accounted for 50 new homes in the community.	Band Owned:	0
	Detached:	110
	Apartment:	0
	Row House:	20

Trailer: 5

Source: 1991 Census Data

Ournarabin/Tuna of Hausing

# **COMMUNITY SERVICES**

#### Education

Commontary

Great Grandfather Ayha School teaches grades K-9. Six teachers and three classroom assistants are on staff. The Deline Education Committee is the local education advisory group. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

#### Health

The Community Health Centre, built in 1989, has three beds, one bassinet and one crib. A medical staff of five includes three nurses.

# Fire

A small volunteer fire brigade uses a triple combination pumper truck to fight fires. NorthwesTel's Westcom alarm system is used to notify of emergency. A new firehall was built in 1990.

# **Recreation Services**

An arena/hall was completed in 1990. Drum dances and gatherings are organized by the Community Hall Club and the Recreation Committee. The gymnasium, located within the school, was completed in 1985. The Community has an outdoor rink, a park and playground, a sports field, and ski trails.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office has a staff of one. The Basic Awareness Program deals with drug and alcohol abuse. The Roman Catholic Mission provides church services. NorthwesTel local and long distance telephone service and CBC Television are available via the Anik satellite system. CBC Radio is available via LPRT. Mail is delivered three times per week. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides 1280 kW capacity diesel power to the community.

Other infrastructure funded by Municipal and Community Affairs programs includes the firehall, the charter community office, the parking garage, and the maintenance garage.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

# Water Supply

Great Bear Lake is the source of domestic water for the Community. In the past, water for home use was drawn directly from the Lake by bucket. Problems with water contamination and general inconvenience led to the construction of improved supply facilities in 1970. A short intake line extending into Great Bear Lake was connected to a wetwell located at the dock. The water was pumped to a storage tank from where it was later distributed.

The system could not operate year-round due to freezing of the intake and wetwell. Accordingly, construction of a new intake, wetwell, and pumping facilities was completed in 1979-80. Extending from the dock is a 168 mm diameter, 229 m Series 100 polyethylene intake line.

Reinforced concrete ballast blocks are placed at 1.5 m intervals on the underwater portion of the pipe (140 m). The intake structure consists of a welded continuous slot construction stainless steel screen, manufactured by Johnson. It is positioned approximately 6 m below the low water level of Great Bear Lake. The underground position of the intake line (89 m) has 25 mm of urethane insulation with yellow jacket covering. A trace heat carrier pipe with heat trace cable is located within the pipe (Chemelex "Auto Trace" - 13 watts/m).

The intake is connected to a wetwell located at the pumphouse. The wetwell (1800 mm x 2520 mm deep) has 250 mm reinforced concrete walls and 150 mm styrofoam on the outside walls.

# Water Storage

Water is pumped to the storage tank through a 25 mm diameter heat traced supply line which is enclosed in a 75 mm insulated polyethylene return line. The supply line is (186 m) extends from the pumphouse to the water storage building. The water storage building houses a 68,000 L galvanized water storage tank, a heat exchanger, a boiler, and a unit heater to heat the water in the storage tank as well as the building.

An economic analysis of water supply alternatives was completed in 1979. This report indicated that a fully trucked water supply was the most cost-effective alternative for Deline. Thus, the piped system used in the past was discontinued when in need of repairs. Since the 1979/80 improvements, water enters a wetwell through an incline shaft which extends out into the lake. A pumphouse/truckfill is located directly over the top of the wetwell and water is pumped directly from the well into the trucks. There is no storage facility.

#### Water Treatment

Due to the excellent quality of water available from the lake, chlorination is the only form of treatment required. Equipment consists of two Wallace and Tiernan Model 745 hypochlorinators, each capable of meeting maximum demand requirements.

# Water Quality

Great Bear Lake is the source of domestic water for the Community. In the past, water for home use was drawn directly from the Lake by bucket. Problems with water contamination and general inconvenience led to the construction of improved supply facilities in 1970. A short intake line extending into Great Bear Lake was connected to a wetwell located at the dock. The water was pumped to a storage tank from where it was later distributed.

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#### **COMMUNITY WASTE**

Thursday, July 20, 1995

#### Solid Waste

Garbage is collected three times per week from 205 L drums placed in front of peoples homes. Heavy lids on the drums prevent ravens from scattering the garbage. Solid waste is collected in a Ford one-ton side loading truck.

In the past, solid waste was stored in a  $23 \text{ m} \times 10 \text{ m} \times 2.5 \text{ m}$  trench, located 1.5 km north-east of the community. Once per week, wastes at the disposal site are burned. A separate site  $35 \text{ m} \times 30 \text{ m}$  was used for bulky wastes such as old vehicles and metal scrap.

In 1995, a new fenced 40 m x 40 m solid waste management site was constructed along with a waste wood area, a bulky waste site, and a honeybag pit. The bulky waste was hauled from an area closer to town and stored at the new site. An area was also set aside for a future hazardous waste area. Gravel and clay are readily available for compaction and covering.

# Sewage Disposal

Sewage collection is either from sewage pumpout tanks or by bagged sewage pickup. Most buildings have holding tanks. Pumpout sewage is trucked to the sewage lagoons, located approximately 1.5 km by road north-west of the community. The original lagoon was constructed in 1977, and a secondary cell was constructed in 1987. The requirement of a second cell in addition to the original lagoon provided an opportunity for a two-stage treatment process. Effluent quality is further enhanced by an over land flow process prior to discharge to the Great Bear Lake.

The original cell (55 m x 50 m) has a capacity of 7,160,000 L. The secondary cell (90 m x 60 m x 3 m) has a capacity of 25,100,000 L. Very few housing units rely on bagged sewage pickup service. Using the same vehicle as for solid waste collection but kept separated, bagged sewage is collected twice per week and taken to a site north-west of the solid waste site.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# **Enterprise**

What the name means:

Alternate Name:

#### POLITICAL

Located in the future territory of: Western Arctic RWED Administrative Region: South Slave Member of the NWT Legislature: Jane Groenewegen

Member of Parliment: Ethel Blondin

Mayor: Glenn Roberts

Senior Administration Officer: Bonnie Kimble GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Smith

NWT Legislature Riding: Hay River

Languages Spoken: Land Claim Area: Treaty 8

**LOCATION** *Longitude: 116.08; Latitude: 60.33* 

Enterprise is located at the junction of the Mackenzie Highway and the highway to Yellowknife, 43 km south of Hay River. The Hay River Canyon is immediately east of the community.

#### **CLIMATE**

Enterprise receives an average of  $18.3~\rm cm$  of rainfall and  $165~\rm cm$  of snowfall each year. Mean annual precipitation totals  $36.2~\rm cm$ . July mean high and low temperatures are  $22.1~\rm C$  and  $11.0~\rm C$ . January mean high and low temperatures are  $-23.4~\rm C$  and  $-33.8~\rm C$ .

# **TRANSPORTATION**

Enterprise is located at a critical juncture in the centre of the Mackenzie Highway at the turnoff for the Town of Hay River. The economy of Enterprise is entirely dependent on those who travel the highway in the form of the fuel, food, and services purchased. Bus connections are available to both Yellowknife and points southward. Long-haul trucking services are also available.

# **GEOLOGY**

The terrain is flat at the settlement but generally slopes down towards the Hay River from the north to the east. Course, sandy material dominates the top 1.5 m of soil, which is underlain by fractured Devonian limestone.

The water table is quite high in this area. Enterprise is in the discontinuous permafrost zone, but no permafrost conditions encountered at the site have adversely affected development.

Surficial materials are generally less than 2 m of sand with minor gravel overlaying lacustrine clay or the basal clay till. Till thickness averages 3 m. The bedrock underlying the lacustrine and basal deposits consist of Upper Devonian interbedded shale and limestone of the Hay River Formation. The formation is in excess of 150 m thick, underlain by Middle Devonian limestone and dolomite. The bedrock stratum is well exposed along the banks of the Hay River below Enterprise.

# **VEGETATION**

The forest surrounding the Community is characterized by its stunted appearance. Black spruce, jackpine, poplar, hardy brush, mosses, and grasses mature at a slower rate than their southern counterparts.

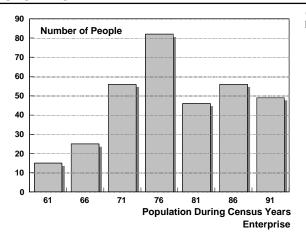
# **HISTORY**

Two service stations were initially built at this location to take advantage of the highway trade. A subdivision was surveyed in 1963 in anticipation of the development of the site as a cargo transfer point and overnight stop. CN Railways did construct railway siding and loading facilities to the west of the settlement soon after. However, most of the freight for northern points is still handled at Hay River. The projected development at Enterprise did not occur. The economy is based on the community being a service centre link on the Mackenzie Highway System. Enterprise gained Settlement Corporation status on July 1, 1988.

# 1981 Air Photo



# **POPULATION**



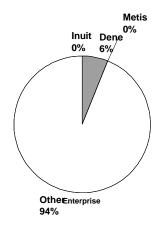
# Commentary

1961:15 1966: 25 1971:56 1976: 82 1981:46 1986: 56 1991:49

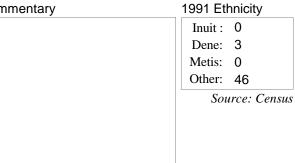
Source: Census

**Population Statistics** 

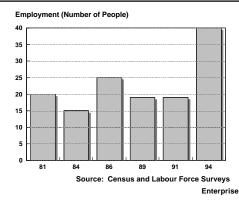
# **ETHNICITY**



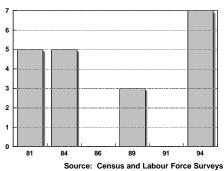
# Commentary



# **EMPLOYMENT AND UNEMPLOYMENT**



# **Unemployment (Number of People)**



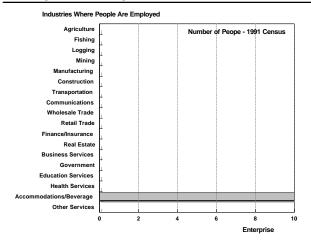
Source: 1994 Labour Force Survey, Bureau of Statistics

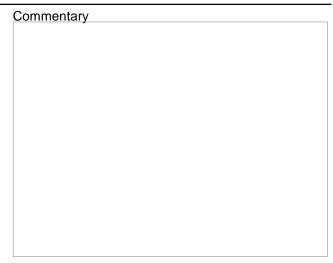
# **Employment Statistics 1994**

Over 15 Pop:	54	Abor. Employed: 0
Labour Force:	47	Unemployed: 7
Employed:	40	Ab. Unemployed: 0

# Commentary

# **EMPLOYMENT PROFILE**



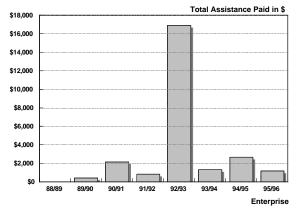


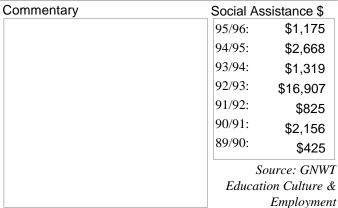
# **INCOME AND TAXES (Revenue Canada)**

Average Incomes	People Paying Inc.Tax	
1993:	1993:	
1992:	1992:	
1991:	1991:	
Source: Revenue Canada - Community Data		



# SOCIAL ASSISTANCE PAYMENTS





# **TRADITIONAL ACTIVITIES**

Number of People	Commentary
Trapped Some: 0	
Arts & Crafts: 0	
Hunted in 93: 0	
Source: GNWT Bureau of	
Statistics - Labour Force	
Survey	

# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	There is no commercial accommodation in Enterprise.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

# HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing
The majority of housing is privately owned.	Units
	Owned: 15
	Rented: 0
	Band Owned: 0
	Detached: 20
	Apartment: 0
	Row House: 0
	Trailer: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

Education	Health
Education is provided by the Hay River School System.	Health services are available in Hay River.

#### Fire

Enterprise fire staff utilize a 1967 pumper with 750 gallon capacity and 550 g/min. pump. In addition, there is a 3/4 ton pick-up truck with a 350 lb. dry chemical unit. The Enterprise firehall, built in 1989, has a 1200 gallon water reservoir. Telephones and siren alarm systems are the advanced warning for fire fighters.

# Recreation Services

Enterprise recreation facilities include a community hall, an outdoor rink, a playground, multi-court facilities, and a picnic area. Council organized events are common and the community has an Active Recreation Committee.

# Police, Mail, Electrical and Other Services

NorthwesTel telephone service, local and long distance, and CBC Radio are available through the microwave system. CBC Television is broadcast via the Anik satellite system. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. Postal service and power is provided from Hay River. Other infrastructure funded by Municipal and Community Affairs programs includes the settlement corporation office.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

# Water Supply

In the past, most of the buildings had private wells, averaging 12 - 24 m. Most of the water appeared to be present in the top 15 m of the shale or limestone formation. Severe taste and odour problems, a result of H2S (hydrogen sulfide), caused the wells to be completely abandoned. Water is now trucked from the Hay River water supply.

# Water Storage

There is no water storage in the community.

# Water Treatment

In the past, most of the buildings had private wells, averaging 12 - 24 m. Most of the water appeared to be present in the top 15 m of the shale or limestone formation. Severe taste and odour problems, a result of H2S (hydrogen sulfide), caused the wells to be completely abandoned. Water is now trucked from the Hay River water supply.

# Water Quality

In the past, most of the buildings had private wells, averaging 12 - 24 m. Most of the water appeared to be present in the top 15 m of the shale or limestone formation. Severe taste and odour problems, a result of H2S (hydrogen sulfide), caused the wells to be completely abandoned. Water is now trucked from the Hay River water supply.

# **COMMUNITY WASTE**

#### Solid Waste

The solid waste management site is located 7.7 km north of Enterprise on the road to Hay River. Construction of the 10 cell modified solid waste management site (20,000 m3) was completed in 1987. The garbage is compacted and covered every two weeks in the summer and backfilled when full. A separate area nearby (20 m2) is reserved for bulky waste storage. Once per week solid waste is collected in a pick-up truck and hauled to the management site. Burning wastes in oil drums is not practiced at the home. Each year the community organizes a spring clean-up.

# Sewage Disposal

All buildings have sewage pumpout systems. Sewage pumpout is treated in a 12,000 m3 lagoon just north of the solid waste disposal site. Honeybags are not used.

#### NOTES AND COMMENTS

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# Fort Good Hope

Alternate Name: Radevilikoe What the name means: Rapids

#### **POLITICAL**

Located in the future territory of: Western Arctic

RWED Administrative Region: Sahtu

Member of the NWT Legislature: Stephen Kakfwi

Member of Parliment: Ethel Blondin

Mayor: John T'Seleie

Senior Administration Officer: Barney Masuzumi GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Sahtu Languages Spoken: North Slavey

Land Claim Area: Sahtu

**LOCATION** *Longitude: 128.38; Latitude: 66.15* 

Fort Good Hope lies on a peninsula between Jackfish Creek and the east bank of the Mackenzie River where the two meet. The Community is 805 air km north-west of Yellowknife and 145 north-west of Norman Wells at 66'15'N latitude and 128'38'W longitude.

# **CLIMATE**

Fort Good Hope receives an average of 15.0 cm of rainfall and 131.6 cm of snowfall per year. Mean annual precipitation totals 28.2 cm. July mean high and low temperatures are 22.6 C and 9.9 C. January mean high and low temperatures are -27.5 C and -35.0 C. The winds are generally east and annually average 9.5 km/h.

# **TRANSPORTATION**

In 1995, a new airstrip was opened about 5 km from the community. Scheduled services are based from Inuvik and Norman Wells. Freight service by barge is available from Hay River between June and August. From December to April a winter road connects Fort Good Hope to the Mackenzie Highway system. Roads within the community are gravel surfaced. Drainage is not usually a problem due to relatively permeable surface conditions and gentle grades toward the Mackenzie River.

# **GEOLOGY**

The Community is located on a gravel bar which reaches 18 m above the river at the junction of the Mackenzie and Jackfish Creek. At the north end of the settlement, the sand bar is up to 30 m in height. Fort Good Hope lies within the continuous permafrost zone. In summer, permafrost lies 0.5 - 1.2 m below the ground surface. The area is underlain by glacial and fluvial deposits which cover Devonian shale and limestone.

# **VEGETATION**

The terrain consists of tree-covered areas, muskeg, and swamp. In well-drained areas a mixture of spruce, pine, and poplar often grow to 12 m in height. Poorly drained areas are covered by stunted black spruce and 0.3 - 0.6 m of mossy organic material.

# 1981 Air Photo



#### **HISTORY**

The Settlement has the distinction of being the oldest in the lower Mackenzie River Valley. Although established in 1805 by the Northwest Company, Fort Good Hope was moved and rebuilt several times until 1839, when the present location was chosen.

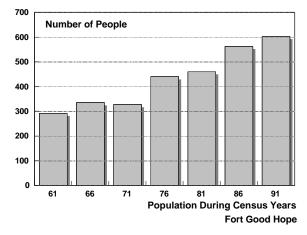
When uncontrolled gaming led to mass starvation in 1844, the community began a program of food conservation. By 1859, when Father Grollier opened the first Roman Catholic Mission, the numbers of game had returned to normal.

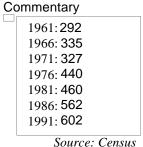
Father Emile Petitot, the noted missionary and explorer, was stationed at the Fort in 1865 after he succeeded in forging a perpetual peace between the Loucheux Indians and the Inuit in 1860. "Our Lady of Good Hope" was built while Petitot resided there. He then began the unique murals which adorn the interior. In 1931, when the oilfield at Norman Wells opened, employment opportunities improved.

Vocal opposition toward the construction of a Mackenzie Valley Pipeline led to the Berger Inquiry in 1975. Named after Justice Berger who presided over the case, the Berger Inquiry brought Fort Good Hope and other communities on the Mackenzie into the national spotlight over the issue of aboriginal land claim settlement.

The economy of Fort Good Hope is based primarily on hunting and trapping. Norman Wells oil development is an alternate source of employment. Local businesses include building contractors, buses and taxis, building materials, general retail, recreational vehicles, accounting, janitorial services, vehicle rentals, expeditors, hotels, and restaurants. Fort Good Hope achieved Charter Community status on April 1, 1995. A traditional name for the community is "Radeyilikoe", meaning rapids.

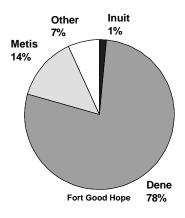
# **POPULATION**





Population Statistics

# **ETHNICITY**

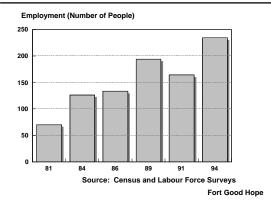


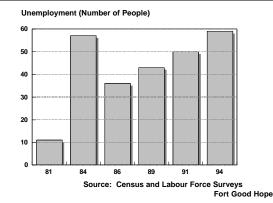


Inuit: 9
Dene: 469
Metis: 83
Other: 41

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





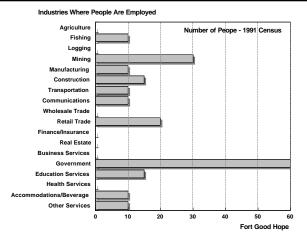
Source: 1994 Labour Force Survey, Bureau of Statistics

# **Employment Statistics 1994**

Over 15 Pop: 438 Abor. Employed: 193 Labour Force: 293 Unemployed: 59 Employed: 234 Ab. Unemployed: 56

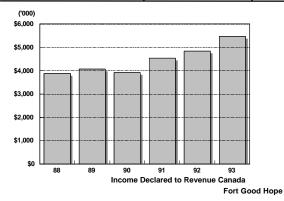
# Commentary

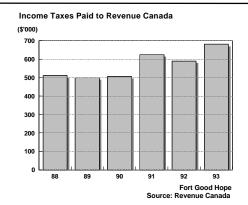
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes 1993: \$17,088

People Paying Inc.Tax 1993: 320

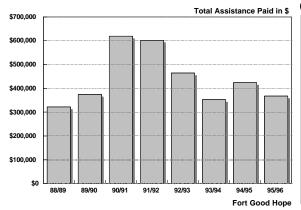
1992: \$17,915 1991: \$16,789 1992: 320 1991: 270

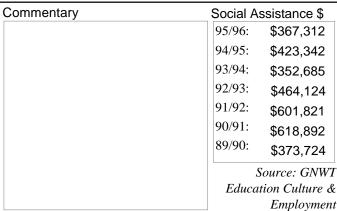
Source: Revenue Canada - Community Data

# Commentary

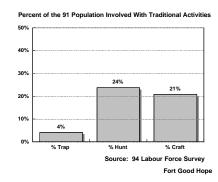


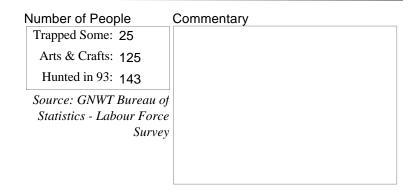
# SOCIAL ASSISTANCE PAYMENTS





# TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	Ramparts Hotel accommodates twelve in four rooms. Services include private bath, restaurant, and dining room.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary

The number of occupied private dwellings increased 22.6% between 1986 and 1991. As of 1994, the Housing Corporation owned 35 housing units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 83 new homes in the community.

Ownership/Type of Housing Units

Owned: 0

Rented: 55

Band Owned: 135

Detached: 10

Apartment: 0

Apartment: 0 Row House: 0 Trailer: 5

Source: 1991 Census Data

# **COMMUNITY SERVICES**

#### Education

Chief T'Selihye School teaches grades K-9. Nine teachers and two classroom assistants are on staff. The Fort Good Hope Education Committee overlooks the local education process. Vocational and continuing education opportunities are available at the adult education centre, which staffs one resident adult educator, and the Arctic College Extension Program. An outreach worker is available in the community.

# Health

The health centre (426 m2), built in 1955, has three beds, one bassinet, and one crib. A medical staff of six are employed.

#### Fire

A small volunteer brigade serves the community. The office/firehall houses a triple combination pumper truck. NorthwesTel's Westcom system is the emergency response system in place. The new community firehall was built in 1993.

# **Recreation Services**

Fort Good Hope has a multi-use arena/curling/hall facility which was built in 1988. The gymnasium, located in the school, was built in 1973. The original hall/meeting place was built in 1981. An above-ground seasonal pool was completed in 1977. Other facilities include cross-country ski trails, a playground, an auditorium, and a Dene Museum/Archival building.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office has one person on staff. A drug and alcohol rehabilitation program is offered by the local Drop-In Centre. Church services are available at the Roman Catholic Church and the Pentecostal Mission.

Mail is delivered three times per week. Local and long distance telephone service is provided by microwave transmission. VHF radio/telephone service is also available. CBC Radio is available by low-power relay transmitter (LPRT) service. CBC Television is broadcast via the Anik satellite system. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. Fort Good Hope also has local community radio. NWTPC provides 810 kW of capacity diesel-generated power.

Other infrastructure funded by Municipal and Community Affairs programs include the firehall and staff housing. The K'asho Got'ine Charter Community office is leased with funds from Community Works programs.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

Fort Good Hope Day Care Society

# **COMMUNITY WATER**

# Water Supply

In 1969, the winter source for water was the Mackenzie River. In early spring when it became impossible to use the River due to ice break-up and high turbidity, a small lake approximately 1.6 km north of the community was used. A contractor would pump water from the river to the pond before high turbidity levels became an issue. The 1.5 ha lake was used from April to July as necessary. Rainwater draining into the pond caused the water to be coloured. From July to November when the lake would be at a reduced level (it would freeze to the bottom in winter), a log cribbed well in a gravel pit near the lake would be used. The well was susceptible to frost and could be used only until November, at which time the River was available once again.

Government-owned buildings had steel storage tanks. Four 4500 L communal tanks were placed in the community for general use. Plans were made for a piped distribution system. In the past, the Mackenzie River had provided good quality water between October and April. Contamination of the well area and lake soon after (c.1973) began a period of less than potable water. The Mackenzie River now provides an excellent source for potable water from mid-October to mid-April when turbidity levels are low.

# Water Storage

Until the early 1970's, only government and commercial buildings had water tanks. Other residents filled buckets from four centrally located 4,500 L tanks. By 1973, all residences were equipped with 1,136 L fibreglass tanks.

In 1979-80, a reservoir was constructed to provide a storage area for year-round suitable water. It is a lined earthen reservoir (93 m2) with a volume of 10,900,000 L and is located 1.4 km north-east of the settlement between the "old airstrip" and the east side of the Mackenzie River. A chain fence around the perimeter protects it from disturbance.

The reservoir has some additional features. There is a sub-drainage system under the reservoir to guard against ballooning of the liner due to a high water table. Perforated corrugated steel pipe wrapped in a layer of filter cloth leads to a gravity drain line of 200 mm diameter Series 100 polyethylene pipe. A Chemelex heat trace cable (12 watts/m) in a 19 mm Series 160 polyethylene raceway is inserted inside the larger pipe. A 1,220 mm (48 inch) diameter manhole along the drain line is made of corrugated steel pipe.

The reservoir sides and bottom are covered with a 91 mm reinforced Hypalon and polyester liner over a 100 mm thick bedding of sand. Above the liner on the inside berm slopes (slope 1:3) 300 mm of gravel covers 150 mm of sand. The liner membrane itself is composed of two layers of Hypalon synthetic rubber laminated with one layer of polyester reinforced fabric.

#### Water Treatment

The insulated pumphouse at the reservoir contains chlorination equipment and an electric heater. A Wallace and Tiernan model 745 hypochlorinator is used. There is room for the later addition of fluoridation and filtration facilities if required. A standby generator to supply auxiliary power to the pumps was installed in 1993.

Fort Good Hope's supply water, for the time and locations sampled, is of good chemical quality for domestic use. The water is hard, well buffered, slightly alkaline, and with a moderate amount of dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

#### Water Quality

Fort Good Hope's supply water, for the time and locations sampled, is of good chemical quality for domestic use. The water is hard, well buffered, slightly alkaline, and with a moderate amount of dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

# **COMMUNITY WASTE**

# Solid Waste

Solid waste is trucked to the same area as the sewage waste (above). The site is operated using the cell disposal method. In this method, cells are excavated in the soil and waste is compacted and covered until the cell is full. Bulky wastes are stored adjacent to the site.

#### Sewage Disposal

Pumpout sewage is trucked to a 240 m x 300 m waste management area located on a flat gravel esker 3.5 km north of the community. Gravel layers up to 12 m thick make it an ideal location for a disposal site.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Fort Liard

What the name means: People From the Land of Giants

Alternate Name: Echaotie Kue

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: Deh Cho Member of the NWT Legislature: James Antoine

Member of Parliment: Ethel Blondin Mayor: Nicole Latour-Theede

Senior Administration Officer: John McKee GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Simpson

NWT Legislature Riding: Nahendeh Languages Spoken: South Slavey Land Claim Area: Treaty 11 - Deh Cho

**LOCATION** *Longitude: 123.28; Latitude: 60.14* 

Located at 60'15N latitude and 123'28W longitude, Fort Liard sits at the confluence of the Petitot and Liard Rivers, approximately 240 km due north of Fort Nelson, B.C. Yellowknife is 544 km to the north-east of the Hamlet.

# **CLIMATE**

Fort Liard receives an average of 13.3 cm of rainfall and 193.8 cm of snowfall per year. The total precipitation in the area is 44.9 cm. July mean high and low temperatures are 22.7 C and 10.8 C. January mean high and low temperatures are -20.2 C and

-29.3 C. The winds are generally south-west and annually average 16.1 km/h.



The Fort Liard Band Council (GNWT) operates a 914 m X 30 m licensed, gravel runway. The airport has a passenger shelter, weather/communication and navigational equipment. Charter service is available. A water/ice aerodrome provides access for float planes. The aerodrome is unlicensed, has no services and is located in a dangerous area with rocky shores, air currents, and sand bars.

The access road to Fort Liard is 5 km in length and extends off NWT Highway No.7. There is also all-weather road access from Fort Nelson B.C. or through the Mackenzie Highway System. Fort Liard has 9 km of gravel surface road within the community. Calcium chloride is applied annually to all 9 km, acting as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

The buildings in Fort Liard are situated on an alluvial river terrace approximately 0.8 km wide. Ground elevation on the terrace is approximately 7.5 - 10.5 m above the normal river level. The townsite is subjected to occasional ice-jam flooding, however, the riverbank is generally stable.

Fort Liard is underlain by alluvial silt, sand, and gravel deposits. These fertile deposits make gardening a favourite pastime in the area. The sand and gravel overlie bedrock to depths of 18 - 24 m in the approximate area of the community.

Although Fort Liard is in the discontinuous permafrost zone, no problems with permafrost have been encountered within the cleared developed site. This is likely due to the insulating effect of the surficial organic layer.

#### **VEGETATION**

The forest surrounding Fort Liard is composed of a dense mixture of spruce and birch trees.

#### 1981 Air Photo



#### **HISTORY**

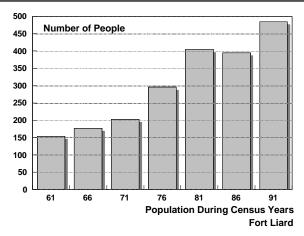
The hospitable area surrounding Fort Liard has been occupied continuously for many generations and by many different tribes. Nearby Fisherman Lake was occupied by the Small Knife cultures for roughly 9000 years until the Slavey Dene tribes arrived. Many other tribes, including the Tingit people of British Columbia, made their way up to the Liard Region to trade.

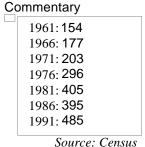
A Northwest Company post had been established at the confluence of the Liard and Petitot Rivers sometime before 1807, the exact date being unknown. The Post, generally referred to as "Riviere aux Liards", merged with the Hudson Bay Company in 1821. George Simpson, after Fort Simpson is named, was the first governor of the combined companies. According to Simpsons report written in May of that year, violence erupting between Indians and the newcomers forced the site to be abandoned. Two years later, the leader of the Goat People, Chief White Eyes, avoided travelling or trading in the area for fear of attack by Slavey and Kaska warriors. Settlement eventually began to stabilize and flourish under relative peace.

As late as 1966, most of the Dene inhabitants spent the winter months on the trapline, away from the settlement. The traditional way of life has changed somewhat with the introduction of business, oil and gas, and tourism developments. However, it is still common for residents to spend a great deal of time on the trapline during the winter months. While parents are away their school-age children often stay in a small hostel provided by the community.

Along with trapping, hunting and fishing, summer fire fighting and highway construction are the major economic activities. Renewable resources such as game, domesticated and wild vegetation, and timber (for local uses) are readily exploited. Local business includes building contractors, air transport, general retail, food sales, building management, hotels, restaurants, vehicle rentals, and janitorial services. Fort Liard gained Hamlet status on April 1, 1987. A traditional name for the community is "Echaotine Kue", meaning people from the land of giants.

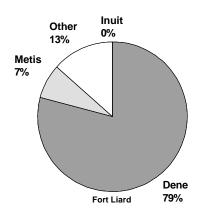
# **POPULATION**





Population Statistics

# **ETHNICITY**

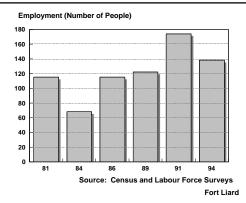


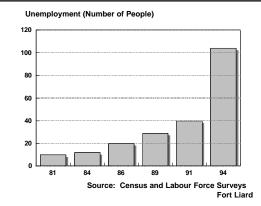


Inuit: 0
Dene: 384
Metis: 36
Other: 65

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





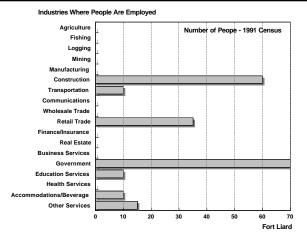
Source: 1994 Labour Force Survey, Bureau of Statistics

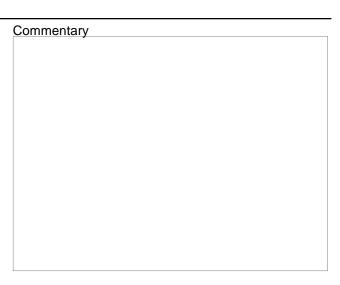
# **Employment Statistics 1994**

Over 15 Pop:	350	Abor. Employed: 99	
Labour Force:	241	Unemployed: 103	
Employed:	138	Ab. Unemployed: 90	

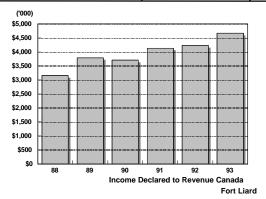
# Commentary

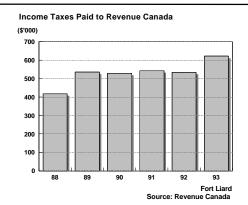
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

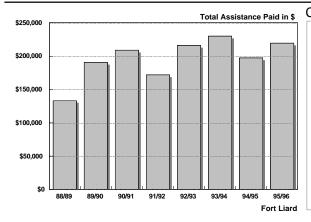
1993: \$21,205 1992: \$18,422 1991: \$17,246 1993: 220 1992: 220 1991: 240

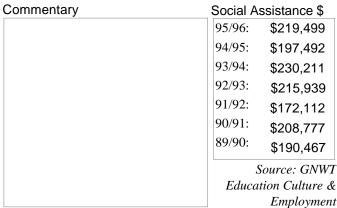
Source: Revenue Canada - Community Data

# Commentary

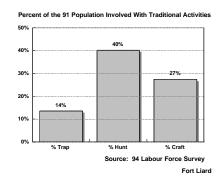


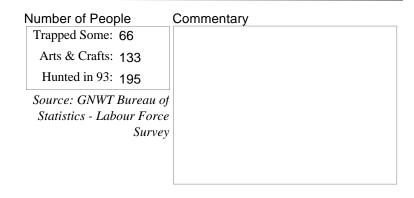
# SOCIAL ASSISTANCE PAYMENTS





# TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
Community Tourism Resources & Markets	Commercial accommodation includes two motels. The Liard Valley General Store and Motel accommodates 12 people, as does the Pointed Mountain Highway Service Ltd.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing
Occupied private dwellings increased 40.6% between 1986 and 1991. As of 1994,	Units
the Housing Corporation owned 75 housing units. The Housing Assistance Program,	Owned: 95
the Alternative Housing Program, and Government Lease to Own units have accounted	Rented: 35
for 18 new homes in the community.	Band Owned: 0

Detached: 105 Apartment: 0 Row House: 0 Trailer: 25

Source: 1991 Census Data

# **COMMUNITY SERVICES**

#### Education

Acho-Dene School teaches grades K-9. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

#### Health

The health station (872 m2), built in 1986, contains two medical beds, one bassinet, and one crib. Two nurses are employed and a doctor visits periodically.

#### Fire

Fire protection consists of an eight-person volunteer fire brigade. Equipment includes a 1978 - 0.84 L/min triple combination pumper, a 1995 - 1.05 L/min mid-ship pumper, a water truck, and a telephone Wescom 931 alarm system. The community has a firehall.

#### Recreation Services

Recreation facilities include the recreation complex/arena (1991), a playground, a playfield, and a gymnasium. Fort Liard has an Active Recreation Committee. A Sports Day is held each August.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs three officers. Social services and facilities include the Youth Group Home and the Alcohol Awareness Program. Church services are available at the Roman Catholic Mission.

Mail is delivered twice per week. Both NorthwesTel's local and long distance telephone service and CBC Radio are available through microwave transmission. CBC Television is broadcast via the Anik satellite system. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides 975 kW capacity diesel-generated power to the Hamlet.

Infrastructure funded by Municipal and Community Affairs programs include a parking garage and a maintenance garage. Staff housing and the community office are leased.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

# Water Supply

The Community of Fort Liard draws water from a common well drilled on the bank of the Liard River. The well consists of two wetwell intake pipes (10 m apart) which provide raw water for 58,000 L of daily average potable water demand, 4,500 L for backwash of a filter unit, and 60,000 L for fire fighting. The wells are on the outside of the treatment/truckfill building.

Fort Liard's supply water, for the time and locations sampled, is of an acceptable chemical quality for domestic use. Based on the chemical analysis the water is very hard, very well buffered, slightly alkaline, and high in dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of the raw water turbidity and the raw and treated water manganese concentrations, as below the recommended maximum limits.

# Water Storage

A reservoir located below the treatment/truckfill building floor slab provides a total storage of 72,650 L. Water delivery is carried out by the Hamlet using two water trucks. Commercial service is available five days per week. Delivery is dependent upon the customerÆs needs.

#### Water Treatment

Water treatment consists of removal of iron, manganese, and sulfides by permanganate injection, manganese greensand filter, and calcium hypochlorite chlorination. Two 190 L chemical mixing tank are equipped with electric agitators and the chemical pumps are capable of providing 19 L/h of chemical to treat water. Finished water is discharged to a storage reservoir.

# Water Quality

Fort Liard's supply water, for the time and locations sampled, is of an acceptable chemical quality for domestic use. Based on the chemical analysis the water is very hard, very well buffered, slightly alkaline, and high in dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of the raw water turbidity and the raw and treated water manganese concentrations, as below the recommended maximum limits.

# **COMMUNITY WASTE**

#### Solid Waste

Solid wastes are collected twice per week using a compactor truck. The solid waste management site (22,750 m2) was commissioned in 1987. Partial fencing has been erected around the site. Collected wastes are dumped into an excavated trench and compacted and covered monthly or when weather permits.

# Sewage Disposal

For those with sewage storage, sewage waste is collected by vacuum truck pumpout service. Some buildings are equipped with septic tanks and leaching beds. Sewage and Solid Wastes are managed in adjacent sites located 14 km south-east of the community on flat land. Sewage is treated in a 900 m2 sewage lagoon (1987). Bagged sewage service is not necessary.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Fort McPherson

What the name means: At the Head of the Waters

Alternate Name: Teetl'it Zheh

#### **POLITICAL**

Located in the future territory of: Western Arctic

RWED Administrative Region: Inuvik

Member of the NWT Legislature: David Krutko

Member of Parliment: Ethel Blondin

Mayor: Philip M. Blake

Senior Administration Officer: Paul Fraser GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Mackenzie Delta

Languages Spoken: Gwich'in Land Claim Area: Gwich'In

#### **LOCATION** *Longitude: 134.53; Latitude: 67.26*

Fort McPherson is located on the east bank of Peel River at 67'26'N latitude and 134'53'W longitude. The community is 121 km south of Inuvik and 1107 km north-west of Yellowknife.

#### **CLIMATE**

Fort McPherson receives an average of 11.0 cm of rainfall and 224.5 cm of snowfall per year. Mean annual precipitation totals 34.4 cm. July mean high and low temperatures are 20.2 C and 9.5 C. January mean high and low temperatures are -26.2 C and -34.7 C. Fort McPherson experiences an average of 257 days with frost per year. The winds are generally north-west and annually average 7.2 km/h.

# **TRANSPORTATION**

A 1067 x 30 m gravel runway is operated by the Hamlet of Fort McPhelson (GNWT). Scheduled airfield maintenance is available as well as CARS, the community airport radio station. An unlicensed water aerodrome, open from June 1st to October 1st, offers no services. The Dempster Highway links the community with Inuvik to the north and Dawson City, Yukon to the south. Barge service from Hay River is available from June to August. Taxi services operate in the Hamlet.

# **GEOLOGY**

Situated on a triangular bluff, the community is separated from the inland higher ground by valleys to the east and south. During severe flooding these valleys become inundated and the community is surrounded by water. There is approximately 80 ha of developed land in the townsite area. The area lies in the continuous permafrost zone and has some massive ice lensing. Permafrost can be found at depths of 0.3 - 1.2 m.

The upper soil stratum is composed of organics and ranges from 0 - 3.5 m in thickness. Underneath is a layer of silt and gray clay classified as low to medium plastic, ranging from a thickness of 1.2 - 3.7 m. The whole area is underlain by a cretaceous shale bedrock of which the upper 0.3 - 1.5 m is fractured and weathered.

A good source of durable shale and sandstone for fill is located  $6.4 \, \text{km}$  north-east of the community on the Dempster Highway. This source is the only major site for granular material between Fort McPherson and Tsiigehtchic, having an estimated size of  $1.9 \, \text{x} \, 106 \, \text{m}$ .

#### **VEGETATION**

The region south of the hamlet has birch and conifers of up to 9 m in height. Lower areas have alder and willows, while the better drained land has stands of black spruce and birch.

# 1981 Air Photo

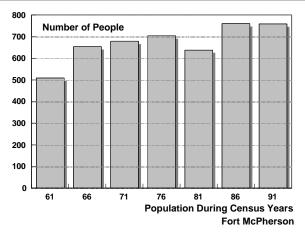


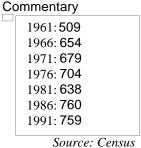
#### **HISTORY**

The Hudson Bay Company established a post at the present location in 1840, and in 1848 the area was named after Murdoch McPherson, chief trader for the company. In 1852, a Loucheux Indian village moved to Fort McPherson. An Anglican Mission was set up in 1860 by Father Grollier, who baptized 65 persons that year. In 1903, an RCMP detachment post was built. One of the regular patrols handled by the RCMP was through the Mackenzie Mountains via the Peel River from Dawson City, Yukon to Fort McPherson. In 1911, Inspector Fitzgerald and three others perished while on patrol there. The Loucheux maintained a traditional hunting lifestyle well into the 1960's.

Fort McPherson is the home of Wally Firth, who became the first northern native Member of Parliament in 1972. The economy is primarily based on hunting, trapping, and oil exploration. The Tetlit Service Co-operative offers retail sales and services. The Fort McPherson Tent and Canvas Company produces canvas packs, bags, and cases. Fort McPherson gained Hamlet status on November 1, 1986. A traditional name for the community is "Teetlit Zheh", meaning at the head of the waters.

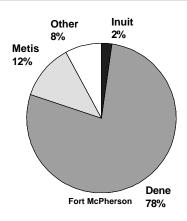
# **POPULATION**

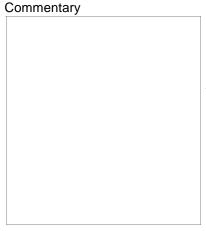




Population Statistics

# **ETHNICITY**

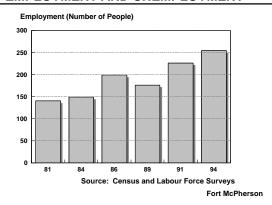


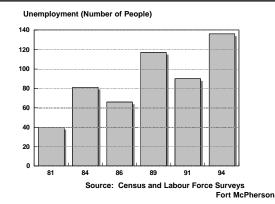


Inuit: 17
Dene: 591
Metis: 91
Other: 60

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





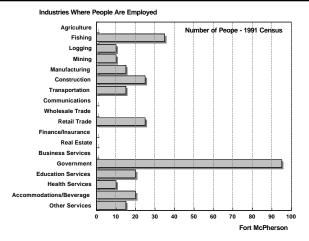
Source: 1994 Labour Force Survey, Bureau of Statistics

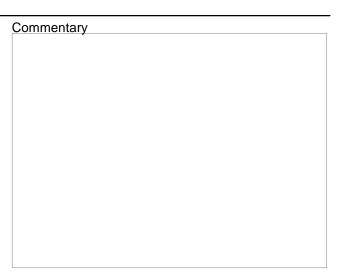
# **Employment Statistics 1994**

Over 15 Pop: 639 Abor. Employed: 208
Labour Force: 388 Unemployed: 134
Employed: 254 Ab. Unemployed: 134

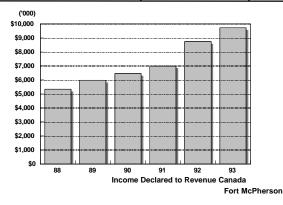
# Commentary

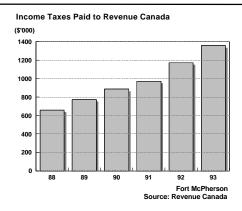
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$19,059 1992: \$18,956

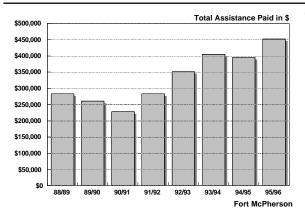
1991: \$15,905

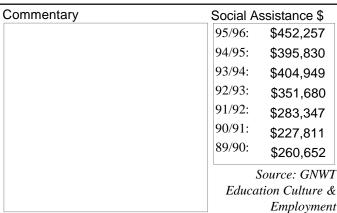
1993: 510 1992: 510 1991: 440

Source: Revenue Canada - Community Data

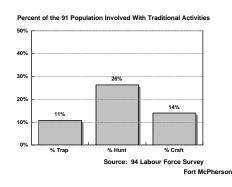
## Commentary

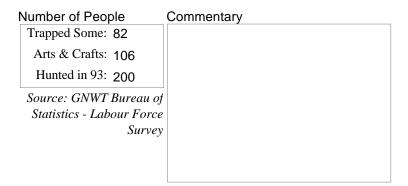
# SOCIAL ASSISTANCE PAYMENTS





# TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	Private bath and meals are available at the Tetli Service Co-op, which can accommodate eighteen.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Occupied private dwellings increased 11% between 1986 and 1991. As of 1994, the Northwest Territories Housing Corporation owned 119 housing units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 74 new homes in the community.

Ownership/Type of Housing
Units
Owned: 80
Rented: 110
Band Owned: 0
Detached: 160
Apartment: 0

Apartment: 0 Row House: 25 Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Chief Julius School teaches grades K-9. Nine teachers and two classroom assistants are on staff. The Fort McPherson Education Committee is the local education authority. Vocational and continuing education opportunities are available through the Adult Education Centre and the Arctic College Extension Program. One resident adult educator is on staff.

#### Health

The Fort McPherson Health Centre, built in 1991, holds four beds, one bassinet and one crib. A medical staff of seven are employed.

# Fire

The ten-person volunteer brigade uses a triple combination pumper to fight fires. NorthwesTel's Westcom alarm system is used to signal emergencies. The hamlet firehall was built in the early-1980's.

#### Recreation Services

The Annie G. Robert Community Centre, built in 1988, is an arena/hall facility in the Hamlet. The school, built in 1973, includes gymnasium facilities. An aboveground seasonal pool was built in 1992/1993. Other facilities include a playground/park, a softball field, and cross-country ski trails.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs six officers. The Community Social Services Office has a staff of two. Community organized services include the Peel River Alcohol Society and the Senior Citizens Home.

Mail is delivered four times per week. NorthwesTel provides local and long distance microwave telephone service. CBC Radio is through the LPRT system and CBC Television is provided via the Anik satellite system. Fort McPherson has community radio. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides 1760 kW capacity diesel-generated power to the hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the hamlet office, the firehall, a parking garage, and a maintenance garage.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

For the last three decades Water Lake has been the water supply. Water is piped 1.8 km from the source through a supply line north to the new water treatment plant, commissioned in 1990, which is located in the centre of the community next to the site of the old treatment plant.

## Water Storage

The main storage tank (455,000 L), located beside the water treatment plant, was constructed in 1975. Although minor repairs are necessary to the lining of the insulated tank, the building should not need replacement until 2005.

Two clearwell cells, each with a capacity of 200,000 L and a wall thickness of 4.5 mm, were built below the treatment plant. The clearwells are used as a pumpwell for the two distribution pumps and the fire pump.

There is both piped and trucked water delivery service. In the winter, steam coils are used to heat the water in the clearwell before it is pumped to the three distribution loops. Excess water is returned to the storage tank.

The piped system services residential and non-residential buildings such as the school, offices, and the nursing station. The circulation pipes have been upgraded to 150 mm diameter supply and 50 mm diameter return Series 100 HDPE with 75 mm thick polyethylene. They are housed with a sewer pipe, in some areas, in a plywood insulated utilidor. During improvements from 1987 to 1990, underground piped service replaced most of the above-ground utilidors, leaving only small utilidettes. New service connections are being added.

#### Water Treatment

The treatment plant, commissioned in 1990, is equipped with a Neptune Microfloc WB 133 Water Boy treatment package. Intake lines have been placed underground around the wood stave storage tank where they enter the plant. An 80 mm diameter steel pipe is used to provide raw water from the supply lines, and with the aid of an effluent water pump a second 80 mm diameter pipe provides the storage tank with treated water. Two 150 mm diameter pipes provide treated water to the clearwell cells below the plant.

A backwash pump and three chemical feeders (for alum, soda ash, and calcium hypochlorite) are available for use. The backwash water is drawn from the storage tank, eventually draining into a 143 m buried insulated backwash sewer 250 mm in diameter. Facilities included, the treatment plant designed for flocculation, settling, filtration, fluoridation, and chlorination of the raw water supply. Due to continued high iron and manganese concentrations, a study was performed by DPWS to find an alternate method of treatment.

Following an investigation, the Water Boy and anthracite filter was replaced in 1996 by a catalytic manganese-greensand filter designed to reduce iron and manganese concentrations. A Powdered Activated Carbon (PAC) System installed helps to remove taste and odour compounds which are common during spring break-up. The relocation of the chlorine injection point from pre-chlorination to post-chlorination has prevented the interaction between organic matter and chlorine. This in turn helps to optimize the coagulation/flocculation process to remove disinfection by-product precursors.

# Water Quality

Following an investigation, the Water Boy and anthracite filter was replaced in 1996 by a catalytic manganese-greensand filter designed to reduce iron and manganese concentrations. A Powdered Activated Carbon (PAC) System installed helps to remove taste and odour compounds which are common during spring break-up. The relocation of the chlorine injection point from pre-chlorination to post-chlorination has prevented the interaction between organic matter and chlorine. This in turn helps to optimize the coagulation/flocculation process to remove disinfection by-product precursors.

#### **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected from barrels stored in front of the buildings using a one-ton flat deck truck. Waste is treated at the shale pit used to drain sewage waste. Covering and compaction is carried out once or twice per month.

Sewage Disposal

Sewage waste is either pumped from holding tanks or gravity fed in the utilidor and underground piped systems. Residence holding tanks are pumped out as required. Sewage is collected using a 4500 L vacuum tank truck, which is owned and maintained by Public Works and Services. The disposal area, an old shale borrow pit, is located 8 km from the settlement along the Dempster Highway toward Tsiigehtchic. The site has steep benches and sideslopes with ample quantities of granular material for cover. Sewage eventually drains into the Peel Channel downstream from the community.

The gravity sewers consist of 100, 150, and 200 mm diameter Series 100 HPDE cement pipes, with 75 mm polyurethane insulation in both the above and below-ground systems. They discharge through an outfall into Sewage Lake. Only buildings with access to the piped system are connected to the gravity sewer system. The sewage outfall discharges into a lake east of the settlement and north of Water Lake. Sewage Lake has a surface area of approximately 101 ha and an average depth of 1.6 m. A small creek leads from this lake to the Peel Channel at a point 2.4 km downstream from the townsite.

Sewage Lake is down stream and separated from Water Lake by the Dempster Highway. Although there was concern in the past regarding contamination of the water supply in the flood season, the highway embankment has reduced the likelihood of that happening. The soils in the embankment are relatively impermeable.

The sewage outfall has been periodically damaged by flooding and ice movement. The last 54 m of the outfall protrudes into the lake and consists of 200 mm pipe insulated with 100 mm of expanded polystyrene insulation inside a corrugated pipe. Parts of the utilidor outfall were replaced with buried piping between 1987 and 1990. A complete underground outfall system is planned for the future.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Fort Providence

Alternate Name: Zhahti Kue What the name means: Mission House

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: Deh Cho Member of the NWT Legislature: Samuel Gargan

Member of Parliment: Ethel Blondin

Mayor: James Thom

Senior Administration Officer: Albert Lafferty GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Smith

NWT Legislature Riding: Deh Cho Languages Spoken: South Slavey Land Claim Area: Treaty 11 - Deh Cho

**LOCATION** *Longitude: 117.39; Latitude: 61.21* 

Fort Providence is located on the north-east bank of the Mackenzie River, 233 air km south-west of Yellowknife at 61'216 N latitude, 117'396 W longitude. The Hamlet is 72.4 air km from the west reaches of Great Slave Lake.

# **CLIMATE**

Fort Providence receives an average of 15.2 cm of rainfall and 122 cm of snowfall per year. Mean annual precipitation totals 28 cm. July mean high and low temperatures are 23.1 C and 9.4 C. January mean high and low temperatures are -22.7 C and -32 C. The winds are generally southeast and annually average 7.5 km/h.

#### **TRANSPORTATION**

Fort Providence is located 5 km from the Mackenzie Highway (Highway 3). Scheduled bus service to Yellowknife and other destinations is three times weekly. Local taxi service is available. The Fort Providence ferry crossing is the main link between Fort Smith Region communities. The service operates free-of-charge from mid-May until December, daily from 06:00 to 24:00. A winter ice-road is constructed to cross the river. During spring break-up, traffic is disrupted for a period of 2 - 3 weeks.

The Hamlet of Fort Providence (GNWT) operates the airport, and all facilities and services. A licensed water aerodrome, run by Air Providence Ltd., provides float plane access with services.

#### **GEOLOGY**

The Hamlet rests 12 m above the Mackenzie River on a flat, sandy level, surrounded by muskeg or swampy areas. Rocky outcrops are sporadic along the rivers edge.

#### **VEGETATION**

Near the Hamlet the banks of the Mackenzie River are dry and flat, supporting a limited number of trees.

# 1981 Air Photo



#### **HISTORY**

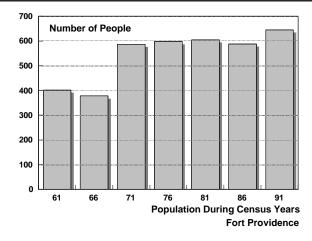
The Yellowknife Chipewyan tribe established the Post following the arrival of Alexander Mackenzie and abandoned it once Franklin had gone to the Coppermine area in the 1820's. Monsignor Grandin opened the Roman Catholic Mission in 1861 and shortly afterward the Hudson Bay Companys post attracted Slavey Dene to the area in numbers sufficient to begin a settlement.

Agriculture was once a staple of life here. Cattle ranching and farming took place until a generation ago. The Mission was instrumental in the introduction of agricultural techniques, french language, and education. The school opened in 1896.

The construction of the Mackenzie Highway and the ferry crossing at Fort Providence changed the economy from a wildlife based hunting economy to one based on transportation. In 1981, a move to outlying camps was a deliberate attempt to lead a more traditional lifestyle.

The local economy is centred upon the Mackenzie Highway system, the ferry crossing of the Mackenzie River, and those services necessary for travel. Tourism plays a major role in Fort Providence. Whether as a destination or as a stopover during travel, the Hamlet greets many visitors each year. Dene handicrafts such as moosehair tuftings, porcupine quill embroidery, and beadwork are popular among tourists. Trapping is a significant source of income in the winter, while firefighting is a seasonal employer in the summer. Fort Providence gained Hamlet status January 1, 1987. A traditional name for the community is "Zhahti Koe", meaning mission house.

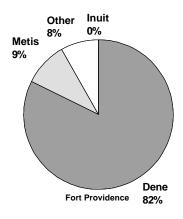
#### **POPULATION**

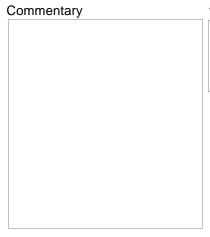




Population Statistics

### **ETHNICITY**



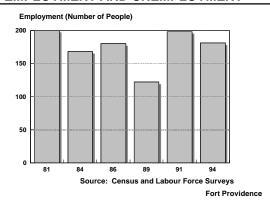


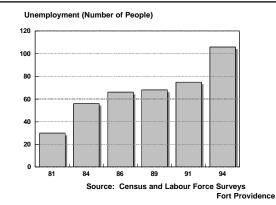
Inuit: 0
Dene: 531
Metis: 61

Other: 53

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





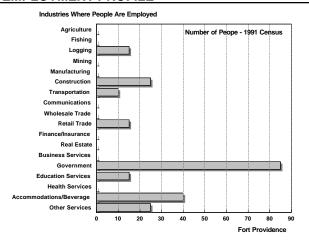
Source: 1994 Labour Force Survey, Bureau of Statistics

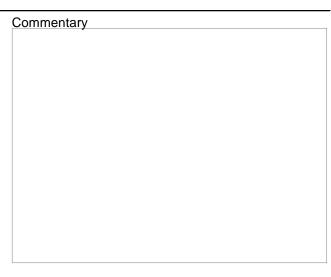
# **Employment Statistics 1994**

Over 15 Pop: 563 Abor. Employed: 138 Labour Force: 288 Unemployed: 107 Employed: 181 Ab. Unemployed: 106

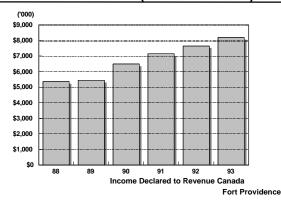
# Commentary

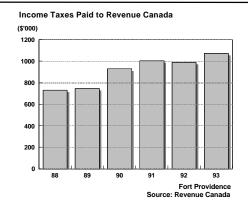
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$18,238 1992: \$17,011

1991: \$17,444

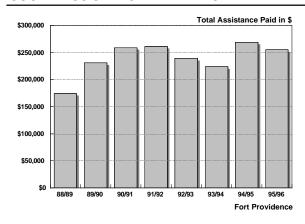
1993: 450 1992: 450 1991: 410

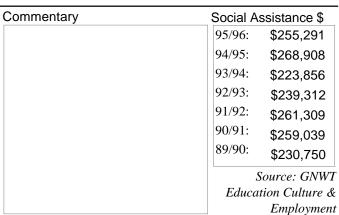
Source: Revenue Canada - Community Data

#### Commentary

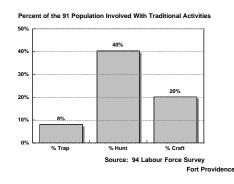


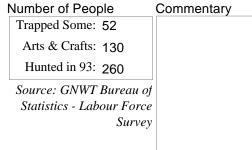
#### **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Snowshoe Inn, which accommodates 63, includes private bath, kitchenettes, a cafe, a licensed dining and cocktail lounge, and banquet and convention facilities. The Big River Motel, which accommodates 22, includes a restaurant and cocktail lounge.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing	
Occupied private dwellings increased by 37.4% between 1986 and 1991. As o 1994, the Housing Corporation owned 105 housing units. The Housing Assistanc Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 57 new homes in the community.	Owned: 60 Rented: 105 Band Owned: 0	
	Detached: 125 Apartment: 0	
	Row House: 40 Trailer: 10	

Source: 1991 Census Data

# **COMMUNITY SERVICES**

#### Education

Fire

Elizabeth Ward School teaches grades K-9. Eight teachers and three classroom assistants are on staff. The Adult Education Centre provides opportunity for vocational and continuing education. One resident adult educator is on staff. The Fort Providence Education Committee is the local education authority.

Fire protection consists of a six-person crew and chief. Equipment includes a triple combination pumper. Call boxes are in place for quickened response to emergency calls. The firehall (one-bay) was built in 1970.

# Health

The health centre (557 m2) was built in 1971. The facility houses five beds, two bassinets, and two cribs, while employing a medical staff of five.

#### **Recreation Services**

A large arena/hall was completed in 1987. The school gymnasium and an above-ground seasonal pool were both built in the 1970's. Other facilities include an outdoor skating rink, a playground, a playfield, and the Friendship Centre. The Hamlet has an Active Recreation Committee.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs three officers. Community social services and facilities include the Dah Gah Go Otie Kue Senior Citizen's Home, the Personal Care Home Program, the Fort Providence Band, the Zhahti Koe Friendship Centre (alcohol and drug program), and the Youth Justice Committee. One social worker is on staff.

Mail is delivered three times weekly. NorthwesTel microwave local and long distance telephone services are available. CBC Radio is transmitted over a low-power relay transmitter and CBC Television is broadcast using the Anik satellite system. VHF radio and telephone services are also available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. Northland Utilities Ltd. provides 1350 kW capacity diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a one-bay parking garage, and a two-bay maintenance garage (1986). The Hamlet office was built in 1990.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

## **COMMUNITY WATER**

#### Water Supply

The water source for the community is the Mackenzie River. Three existing 100 mm diameter intakes, 1.6 km from the community, supply 1700 L/min. of water to the treatment. The pipes are encased in concrete and are screened. The existing wetwell is a small manhole built in the lower terrace of the riverbank. Backwashing with silt and gravel often cannot be accomplished during spring break-up because the wetwell is submerged by several feet of water and ice.

#### The intake includes:

- # Function Model Capacity
- 2 Supply Pumps Stenberg Flygt AB Submersible Pump 8.2 Hp, and pump 560 L/min.

A concrete structure built above the manhole contains two Flygt supply pumps and the associated piping which runs to the water treatment plant. The Snowshoe Inn pumps most of its water from its own well. The well, located near the shore, extends 4.9 m below the Mackenzie River's normal water level. A piped water system is operated by the Snowshoe Inn. It supplies the firehall, GNWT office, one residence, and the Snowshoe Inn buildings, which include a motel, a restaurant, a store, two trailers, and a garage. The 30 mm diameter plastic pipes are shallow buried and non-insulated. Water is circulated to prevent freezing.

#### Water Storage

Water is stored in two 90,000 L concrete tanks in the basement of the water treatment plant. During normal operation, truck filling is controlled by the truckfill control panel located on the outside wall of the plant. The fill pipe extension is lowered into the tank while the truck is parked under the truckfill arm. All water deliveries are metered. The Hamlet Council delivers water using a 7720 L water truck. The 49 houses without pressure water systems typically have 570 L water tanks, and receive water delivery twice per week. Other buildings, such as the school and senior citizens home, have water delivered five days per week. The Snowshoe Inn supplements its well water with water from the community stored in a 45,500 L underground tank.

#### Water Treatment

Turbidity in the MacKenzie River varies significantly from season to season. Commissioned in 1993, raw water is treated and disinfected by a Microfloc Waterboy WB-82 system. Fort Providence's water was found to be of good chemical quality for domestic use. Based on the chemical analysis the water is moderately hard, well-buffered, slightly alkaline, and with a moderate amount of dissolved solids. -Microbiological analysis of the water samples indicates the presence of high concentrations of corrosion-causing and corrosion-intensifying bacteria.

# Water Quality

Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of turbidity, as below the recommended maximum limits.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Fort Providence Page 7

#### **COMMUNITY WASTE**

#### Solid Waste

Solid wastes are collected, once per week during the winter months and twice per week during the summer, by private contractor. Garbage is placed in 205 L drums for collection; burning is not encouraged. Domestic waste is hauled to the solid waste site by a "Haul-All" truck. Commercial wastes from the HBC, RCMP, and nursing station are collected privately. An annual spring clean-up takes place in May.

The solid waste site (100 m x 200 m) is located in an old gravel pit 2 km north-east of the Hamlet. Northern state-of-the-art waste segregation techniques now compliment the technique of modified landfill disposal. Solid waste is sorted into various commodities before being taken to the management site. At the site, segregated wastes are stored in assigned areas for ease of reuse and recycling.

# Sewage Disposal

The sewage pumpout is contracted. All residences in the community are equipped with pumpout tanks and there is no bagged sewage pickup. Pumpout sewage is treated in a series of lagoons located beside the solid waste site, approximately 3 km east of the Hamlet. The sewage lagoon system consists of a series of five cells. The effluent is discharged into a wetland/overland flow area for further treatment.

Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Fort Resolution

Alternate Name: Deni'nu Kue What the name means: Moose Island

**POLITICAL** 

Located in the future territory of: Western Arctic **RWED Administrative Region: South Slave** Member of the NWT Legislature: Don Morin

Member of Parliment: Ethel Blondin

Mayor: Euan Hunter

Senior Administration Officer: Cecil Lafferty GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Smith

NWT Legislature Riding: Tu Nedhe Languages Spoken: Chipweyan Land Claim Area: Treaty 8

**LOCATION** *Longitude: 113.40; Latitude: 61.10* 

Fort Resolution is located south-west of the Slave River Delta on the south shore of Great Slave Lake. The community is built on a peninsula in Resolution Bay, ranging from 158 - 163 m above sea level. It is located at 61'11'N latitude and 113'41'W longitude, 153 air km from Yellowknife.

#### **CLIMATE**

Fort Resolution receives an average of 16.2 cm of rainfall and 74.0 cm of snowfall each year. Mean annual precipitation totals 30.7 cm. July mean high and low temperatures are 20.7 C and 10.5 C. January mean high and low temperatures are -22.4 C and -32.9 C. Winds are generally south-east and annually average 15.3 km/h.

#### **TRANSPORTATION**

The airport is operated by the GNWT (Fort Smith Region). A licensed \( \frac{1265 \text{ m} \times 30 \text{ m} \text{ gravel runway allows for} \) scheduled service from various airlines. Facilities include the taxiway and apron, airfield lights, and NDB Navaid. Unlicensed float plane access is available at the water aerodrome. Break-up occurs in mid-June and freeze-up is the start of November. Fort Resolution is connected to the Mackenzie Highway System via Highway No. 6.

#### **GEOLOGY**

The coast of Resolution Bay is swampy and the water table is high. The settlement is located on flat land which is clear of tree cover. Below the surface layer of organic matter are 1 - 1.5 m of fine sand and silt. Underneath are alluvium and glacial drift deposits up to 37 m thick, underlain by Devonian limestone. Bedrock is exposed at several locations in the area.

Permafrost is found at depths of 0.5 m or greater under tree covered areas. Discontinuous permafrost beneath the community has posed no construction problems. A deposit of rounded stones and gravel suitable for road construction is found 3.5 km from the community.

#### **VEGETATION**

Spruce, birch, poplar, and willow are the common tree varieties in the area. Trees may reach heights of up to 12 m. Ground cover consists of mosses, grasses, and bushes.

#### 1981 Air Photo



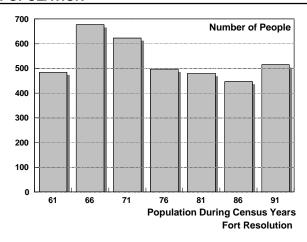
#### **HISTORY**

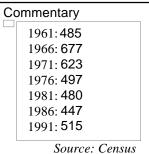
Cuthbert Grant and Laurent Leroux established a Northwest Company trading post on the Slave River delta in 1786. A few years later the Fort was moved to nearby Moose Deer Island. The Fort on Great Slave Lake was rebuilt and named Fort Resolution. The Moose Deer Island settlement was subsequently abandoned.

St. Joseph's Mission House was moved to its present site in 1890. An RCMP detachment was established in 1913. A three-storey, 80-bed frame hospital building was erected in 1938-39 for the express purpose of treating tuberculosis cases. The patients were eventually transferred to Edmonton and the building closed.

The logging/sawmill industry provides a primary source of income to the settlement. Trapping, hunting, and domestic fishing also play a major role in the economy. Fort Resolution gained Settlement Corporation status on April 1, 1988. A traditional name for the community is "Deninue Kue", meaning moose island.

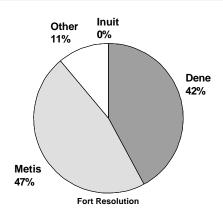
#### **POPULATION**

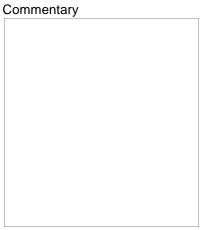




**Population Statistics** 

# **ETHNICITY**

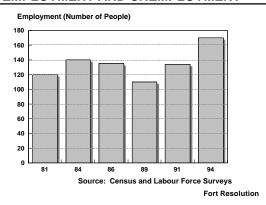


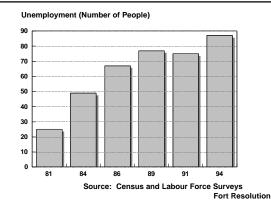


Inuit: 0
Dene: 217
Metis: 241
Other: 57

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





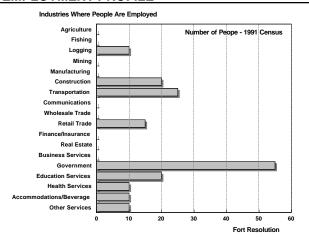
Source: 1994 Labour Force Survey, Bureau of Statistics

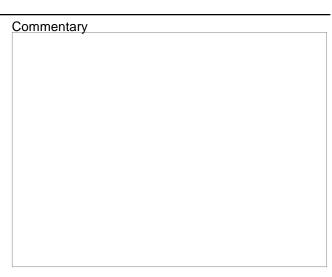
# **Employment Statistics 1994**

Over 15 Pop: 421 Abor. Employed: 132 Labour Force: 255 Unemployed: 85 Employed: 170 Ab. Unemployed: 79

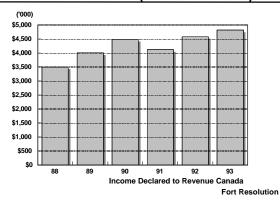
# Commentary

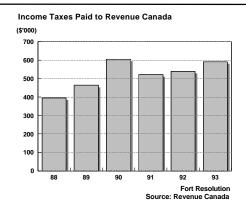
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

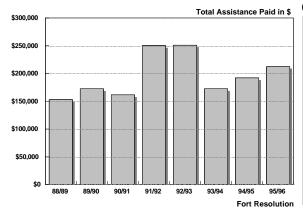
1993: \$16,047 1992: \$16,978 1991: \$15,270 1993: 300 1992: 300 1991: 270

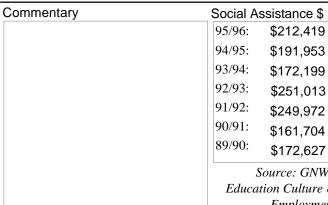
Source: Revenue Canada - Community Data

#### Commentary



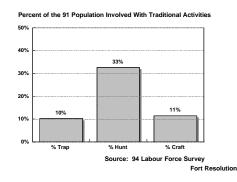
# SOCIAL ASSISTANCE PAYMENTS

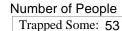




Source: GNWT **Education Culture & Employment** 

# TRADITIONAL ACTIVITIES





Arts & Crafts: 59 Hunted in 93: 168

Source: GNWT Bureau of Statistics - Labour Force Survey

Commentary



#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	Beaulieu's Motel is the sole accommodation in Fort Resolution.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Occupied private dwellings increased 29.8% between 1986 and 1991. As of 1994, the Housing Corporation owned 82 houses in the community. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 65 new homes in the community.

Ownership/Type of Housing Units

Owned: 75

Rented: 75

Band Owned: 5

Detached: 130 Apartment: 15 Row House: 5 Trailer: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

#### Education

Deninoo School instructs grades K-9. Five teachers and one classroom assistant are on staff.

#### Health

The Community Health Centre (557 m2) was built in 1971. The facility holds three beds, one bassinet, and two cribs. Seven medical staff are employed.

#### Fire

Seven volunteer firefighters used trucked water in a triple combination pumper to battle fires. A telephone alarm system is in place to speed response to calls. The firehall (165 m2) was completed in 1993.

#### Recreation Services

Fort Resolution has a traditionally styled community hall where dances and social events are held. The community also has a school gym, a softball field, a summer pool, an outdoor skating rink, a playground, and an arena. A winter carnival is held in March and Deninoo Days celebrations are held in August. The community has an Active Recreation Committee.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs four officers. The Community Social Services Office has a staff of one. Social services include the Drug and Alcohol Program. There is a senior citizens home in the community.

NorthwesTel provides local and long distance microwave-transmitted telephone service. CBC Radio is transmitted via LPRT and CBC Television is available via the Anik satellite system. VHF radio/telephone service is also available. Mail is delivered three times weekly. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories.

NWTPC provides 750 kW of diesel-generated power to the community.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing and the community office.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

Great Slave Lake is the raw water source for the community. During the open water season the lake water is usually coloured and turbid. This can be accounted for by the proximity of the Slave River, which contributes to the turbidity and colour of the Lake. The shallowness of the Lake at the intake point also allows for fine sediments to be disturbed by wind currents, leading to increased turbidity in the water.

#### Water Storage

Two 77,000 L insulated storage tanks are located adjacent to the treatment building. Only one tank is filled during the winter. In summer both tanks are utilized as filling of the swimming pool requires extra water. Chlorinated and filtered water is drawn from a storage tank and delivered through a Neptune trident meter to an outside truckfill arm.

#### Water Treatment

The raw water is processed in a Neptune Waterboy Model WB-82 package water treatment plant, capable of producing 227 L/min. of treated water. Chlorine, alum, soda ash, and a polyelectrolyte are added to the water before it is filtered and delivered to the storage tanks adjacent to the plant.

The water treatment plant was installed in 1974. It includes a mechanical flocculator and a tube settler. From the settler, water passes through a mixed media bed. This filter type is characterized by long running times and resistance to surges. When a difference in back pressure across the filter bed reaches 20.7 - 24.1 kPa, a backwash cycle is initiated automatically.

The end suction pump cleans the filters for 10 minutes and a sump pump sends the backwash water to a large settling tank. In the summer, the settling tank slowly drains to an outdoor fenced retention pit behind the treatment building from which the water exfiltrates down to the lake. To prevent pipe freeze-up in the winter, the contents of the backwash tank are released to the pit all at once.

When the temperature of the water in an outside storage tank falls below a prescribed value, an oil-fired boiler self-starts. Two circulation pumps carry heated water back into the tank.

The intake pumphouse on the shore contains the main supply pump:

Type Capacity Motor

Layne and Bowler Vertical Turbine Model 6 189 L/min @119.4 kPa 1.5 kW @1750 rpm, electric

The treatment building contains the following pumps:

# Function Type Capacity Motor

4 Chemical feed pumps Precision control pump, Model 9701-11 227 L/day @862 kPa

1 Filter pump Crane 818 L/min @45 kPa 3.7 kW, 230 V, 25 amp, 60 Hz, 1750 rpm, Brrok

electric

Backwash pump Crane Deming 1741 L/min @134.3 kPa 3.7 kW @1750 rpm

1 Reclaimable waste pump Crane Deming 1.1 kW @1150 rpm

2 Recirculation pumps; draws water from storage tanks to boiler and back into tanks Taco end suction centrifugal

Model 1700C-7368 75.7 L/min @59.7 kPa

Fort Resolution's supply water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the chemical analysis the water is hard, well buffered, slightly alkaline, and with a moderate amount of dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of the raw water turbidity, as below the recommended maximum limits.

#### Water Quality

Fort Resolution's supply water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the chemical analysis the water is hard, well buffered, slightly alkaline, and with a moderate amount of dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of the raw water turbidity, as below the recommended maximum limits.

#### **COMMUNITY WASTE**

#### Solid Waste

Garbage is collected from 205 L barrels twice per week by a two-person crew using a packer truck. Occasionally the wastes are privately burned to reduce volume and to prevent scattering. Once the ground is dry the community organizes the annual spring clean-up.

The modified landfill has been in operation since 1994. Solid wastes are discharged in a 60 m x 20 m x 1.5 m trench. Wastes are burned, compacted, and periodically covered. A separate 30 m x 20 m area has been maintained for bulky metal wastes and old vehicles.

#### Sewage Disposal

Most of the buildings with pressure water systems have a septic system. Many of these are cribbed pits have no drainage tile and require pumpout approximately once per month. There are five buildings with sealed pumpout tanks, including the triplex apartment units. Other residents use outside privies. The few existing chemical toilet systems have their waste dumped in small pits and backfilled with soil.

Sewage is collected using a 3405 L tank and suction pump mounted on a truck. Sewage bags are not used in the community. The sewage treatment area is located approximately 2.6 km from the community beside the new solid waste site. Sewage is discharged to a percolation pit. There has been no build-up of liquid or sludge but a sump pit is to be constructed to assist in the management of sludge and to ensure percolation.

#### **NOTES AND COMMENTS**

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Fort Simpson

What the name means: Place Where Rivers Come Together

Alternate Name: Liidli Kue'

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: Deh Cho Member of the NWT Legislature: James Antoine

Member of Parliment: Ethel Blondin

Mayor: Normand J. Prevost

Senior Administration Officer: John Crisp GNWT Assigned Level of Development: Level 2

Government of Canada Administrative Region: Fort Simpson

NWT Legislature Riding: Nahendeh Languages Spoken: South Slavey Land Claim Area: Treaty 11 - Deh Cho

**LOCATION** *Longitude: 121.21; Latitude: 61.52* 

Fort Simpson is located 375 km south-west of Yellowknife at 61'51N latitude and 121'22W longitude. It is situated on an island at the confluence of the Mackenzie and Liard Rivers. Expansion has taken place on the mainland as well.

#### **CLIMATE**

Fort Simpson receives an average of 21.7 cm of rainfall and 142.2 cm of snowfall per year. Mean annual precipitation totals 35.1 cm. July mean high and low temperatures are 23.1 C and 10.9 C. January mean high and low temperatures are -23.3 C and -31.7 C. Winds are generally north-west and annually average 11.1 km/h.

#### **TRANSPORTATION**

Arctic Airports operates the 1829 m X 46 m asphalt runway, taxiway, and parking apron. Airport facilities include runway lighting, Navaids, scheduled airfield maintenance, and the air terminal building. A private charter service operates a secondary gravel airstrip on the island, which measures 914 m x 30 m. A privately-licensed water aerodrome allows for float plane access with an anchorage and docks for services. Open water landings are possible from approximately June 15 to October 25.

Marine transportation services are available from Streeper Brothers Marine Transport and Coopers Barging Services Ltd. from Fort Nelson B.C. Fort Simpson is connected via Highway No.1 to the Mackenzie Highway System. Local and long distance trucking, bus, and taxi services are available.

### **GEOLOGY**

Fort Simpson is within the western part of the Great Slave Physiographic Region. The community sits on a series of lowland silt terraces or flats, which gently slope down toward the Mackenzie and Liard River flood channels. The island is in the Mackenzie Lowlands, bounded by the Precambrian Shield to the east and the Mackenzie Mountains of the Cordillera to the west.

The soils consist of a series of stratified silts, fine sands, and organic materials (morainal, glaciofluvial, and glaciolacustrine deposits). Bedrock is predominantly greenish-grey shales and siltstone of the Upper Devonian Simpson Formation. The island is continuously being eroded on its north-eastern flank. Silt deposition is increasing on the remaining shores. With the exception of relatively narrow strips along deeply incised water courses, the glaciolacustrine plain is poorly drained. This inadequate drainage results in high water tables, dense organic covers, and moderate amounts of ground ice. Fort Simpson lies within the discontinuous permafrost zone.

Excess ice may be found in fine-grained soils topped with thicker organic soil layers. The depth of seasonal freezing and thawing varies from 45 - 270 cm, depending upon localized conditions such as the type of material and the thickness of vegetation cover. The point of ice break-up and freeze-up average May 10 and November 15, respectively.



#### **VEGETATION**

In the Upper Mackenzie Valley region, the Boreal forest is restricted to a narrow band that extends along the Inner Mackenzie Valley. Fort Simpson lies within the southernmost reaches of this zone. Vegetation ranges from rich growth on the rivers islands and alluvial flats, to shrubby growth and treeless muskeg on portions of the mainland. The area immediately surrounding the community is densely treed with black and white spruce, tamarack, poplar, birch, willows, alder, and pine. Grasses, flowers, and shrubs also thrive. Ground vegetation is comprised mainly of mosses, lichens, sedges, herbs, and shrubs.

#### **HISTORY**

Fort Simpson is the oldest continuously occupied trading post on the Mackenzie River. The post, originally named "Fort of the Forks", was built in 1804 by the Northwest Company and closed in 1812. In 1822 for Ft. Simpson was built by the Hudson Bay Company. Brigades of sailors that had operated the Hudson Bay York boats up and down the Mackenzie settled there when the company steamboat "Wrigley" reduced the need for the large number of sailors, attributing to the growing population of the settlement.

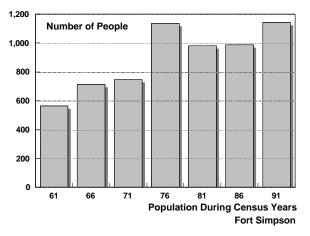
The St. David Anglican Mission started in 1858 with the "little \_\_\_\_ -- check with John Crisp to see if this is the final draft including the Historians work, and find out what that word is -- of a church" built in 1861. The Sacred Heart Roman Catholic Mission followed in 1894. In 1910, the first Indian agency was opened by Gerald Card. The RCMP established a detachment in 1913 and St. Margarets Hospital opened in 1916.

Fort Simpsons rich soils and temperate climate, which allow for the growing vegetables and the raising of livestock, earned it the name "Garden of the Mackenzie". Production reached its height in the early 1960's, providing supplies to the community and Mackenzie River barge traffic. The federal experimental farm was closed in 1968. The gardens declined after the opening of the Mackenzie Highway system. Both the Anglican and Roman Catholic missions grew crops and shipped them to other communities.

The community suffered a record flood in 1963, forcing the moving of houses up to higher ground. In the late-1960's, it became a base for oil exploration activities and an administrative centre for the territorial government. Both renewable and non-renewable resources support the economy of Fort Simpson. The economy is based on government, transportation, tourism, trapping, and logging/sawmill activities. Commodities include fish, game, forest products, agriculture, minerals, and oil and gas.

The tourism industry has benefitted from campgrounds, Mackenzie River cruises, and the sale of native handicrafts. Fort Simpson is the point of departure for trips to Nahanni National Park. Some local businesses include saw milling, publishing, building contracting, air transport, buses, taxis, highway maintenance, wholesale, general retail, food sales, service stations, oil pipeline servicing, hardware, sporting goods, gifts, real estate services, hotels, camps, outfitting, restaurants, bars, and vehicle rentals. Fort Simpson gained Village status January 1, 1973. A traditional name for the community is "Liidli Kue", meaning place where rivers come together.

#### **POPULATION**





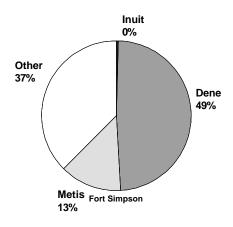
1991: 1,142

Commentary

Source: Census

Population Statistics

# **ETHNICITY**



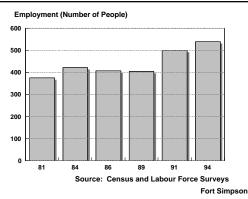


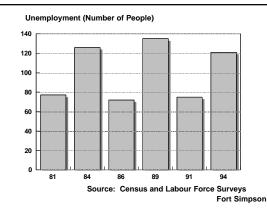
1991 Ethnicity

Inuit: 5
Dene: 556
Metis: 153
Other: 428

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





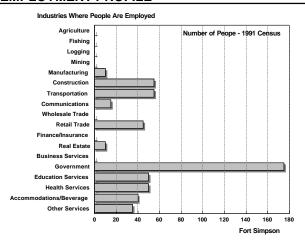
Source: 1994 Labour Force Survey, Bureau of Statistics

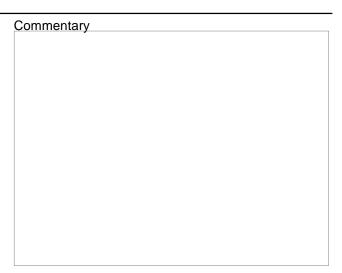
# **Employment Statistics 1994**

Over 15 Pop: 916 Abor. Employed: 244
Labour Force: 656 Unemployed: 117
Employed: 539 Ab. Unemployed: 109

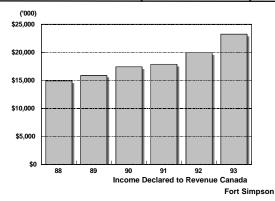
# Commentary

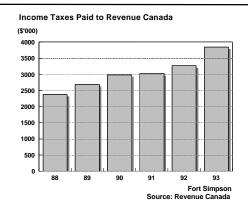
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes 1993: \$29,073

People Paying Inc.Tax 1993: 800

1992: \$28,851 1991: \$27,064

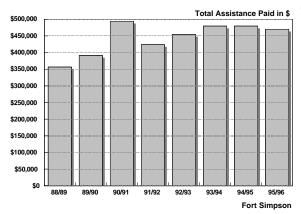
1992: 800 1991: 660

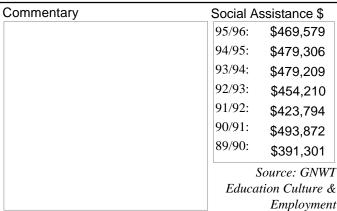
Source: Revenue Canada - Community Data

#### Commentary

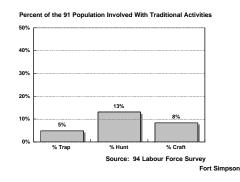


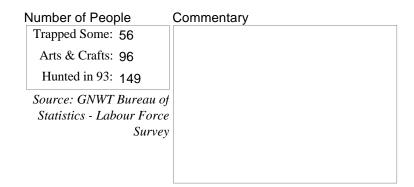
# **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





## **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Lindberg Landing accommodates 14, the Maroda Motel accommodates 32, and the Nahanni Inn accommodates 70.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing	<u> </u>
Occupied private dwellings increased 31.4% between 1986 and 1991. As of 1994, the Housing Corporation owned 91 housing units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 105 new homes in the community.	Owned: 150 Rented: 220 Band Owned: 0	
	Detached: 195 Apartment: 50	

Row House: 80 Trailer: 50

Source: 1991 Census Data

# **COMMUNITY SERVICES**

#### Education

Bompas Elementary School teaches K-6, and Thomas Simpson High School teaches grades 7-12. Sixteen teachers are on staff and there are also hostels. Vocational and continuing education opportunities are available through Aurora College.

#### Fire

There is a thirteen-person volunteer fire brigade in Fort Simpson. Fire equipment includes a hydrant system, and two triple-combination pumpers.

#### Health

The sixteen bed Fort Simpson Hospital, built in 1973, has a staff of ten including a doctor and two ambulances. The Village also has a Dental Clinic, Public Health Office, and a Social Services Office.

# **Recreation Services**

Fort Simpson has an Active Recreation Community. Cultural events include the Beaver Tail Jamboree and Canada Day celebrations. Recreation facilities include an arena/curling rink/gym complex, the community hall, softball diamonds, track, tennis court, the John Tsetso Memorial Library, Visitor Information and Interpretive Centre, a parks/playgrounds, a campground, a seasonal pool, and school gymnasiums.

#### Police, Mail, Electrical and Other Services

The RCMP detachment has a staff of eight. The Community Social Services Office has a staff of five. Social service facilities and services include the senior citizenÆs home, the Deh Cho Society (Friendship Centre), and Fort Simpson Area Counselling (alcohol and drug abuse program). Churches in the community include the Anglican, Pentecostal, Calvary, and Roman Catholic faiths.

Mail is delivered five times per week. NorthwesTel local and long distance telephone service is available via microwave transmission. VHF radio telephone is available via the Anik satellite system. The local newspaper is called the Deh Cho Drum. NWTPC provides 4485 kW of diesel-generated power to the village.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the firehall, the village office, the parking garage, and the maintenance garage.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Melaw Community Day Care

# **COMMUNITY WATER**

## Water Supply

Update the intake paragraph, interesting system which goes across the river for water intake. The water supply system includes a raw water intake and pumphouse, heat transfer system, raw water supply main, treatment plant with pumping facilities, and a piped distribution system. The system serves developed areas on the island portion of the village. Developed areas on the mainland use a trucked system.

#### Water Storage

There are two reservoirs. The first is a concrete reservoir located beneath the water treatment plant - Date - . The second is a new - Size - reservoir constructed in 1996. Water is delivered to the distribution system by two high-lift, electrically driven, vertical turbine pumps. Two additional diesel-driven, vertical turbine pumps cover fire flow demands.

In the 1970's, the distribution network was modified to eliminate certain segments of the grid configuration and to establish a series of major loops. In-line pumps were installed on the loops to ensure minimum flows during the periods of low demand and to preclude freeze-ups during the winter months.

In the 1990's, water bleeding and other practices caused excessive wastage. An extensive analysis of the system led to change in practices and necessary repairs. As a result water use decrease from about 1200L/person/day to less than 600 L/person/day. Efforts continue to reduce water losses in the community.

#### Water Treatment

Potable water is treated using alum, polymer, activated carbon, and chlorine. Water treatment consists of flocculation, sedimentation, chlorination, filtration, and fluoridation.

# Water Quality

Fort Simpson's supply water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the chemical analysis the water is moderately hard, well buffered, slightly alkaline, and with a moderated amount of dissolved solids. The raw water was noted as being high in sediment content, colour, and turbidity. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters, tested, with the exception of turbidity, as below the recommended maximum limits.

## **COMMUNITY WASTE**

#### Solid Waste

Garbage collection service is provided by the municipality to both island and mainland residents and businesses. Collection is done twice a week to residential areas and three times per week to commercial buildings using a compactor truck.

The modified landfill site is located about 4 km from the community along the highway toward Wrigley. The site is roughly 2 ha in size. Garbage is buried usually once per week. Fencing has been erected to minimize the effects of wind. The site is reasonably well drained and there is no evidence of water table problems.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Fort Simpson Page 7

Sewage Disposal

The existing sewage collection and treatment system is comprised of a sanitary sewer network serving developed areas of the island and an outfall line with direct discharge to the Mackenzie River.

The sanitary sewer network is a gravity system generally northward flowing to the lower end of the island. All developed areas of the island are served. Additional infill or redevelopment that may occur in the future can be readily accommodated by the existing system or minor extensions to it. Sewage is treated using a 0.5 mm stainless steel rotating screen. A gravity outfall discharges the treated sewage directly into the Mackenzie River, downstream of the water intake.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Fort Smith

What the name means: Along the Rapids

Alternate Name: Thebacha

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: South Slave

Member of the NWT Legislature: J. Michael Miltenberger

Member of Parliment: Ethel Blondin

Mayor: Dennis Bevington

Senior Administration Officer: Roy Scott GNWT Assigned Level of Development: Level 1

Government of Canada Administrative Region: Fort Smith

NWT Legislature Riding: Thebacha Languages Spoken: Chipweyin/Cree

Land Claim Area: Treaty 8

#### **LOCATION** *Longitude: 111.53; Latitude: 60.00*

Fort Smith is located at 60'00N latitude and 111'53W longitude. The townsite occupies a 3.5 km strip along the Slave River south of the "Rapids of the Drowned" and immediately north of the Northwest Territories/Alberta border. Elevation averages 200 m above sea level. Fort Smith is 322 air km south-west of Yellowknife.

# **CLIMATE**

Fort Smith receives an average of 34.9 cm of rainfall and 145.9 cm of snowfall per year. Mean annual precipitation totals 34.9 cm. July mean high and low temperatures are 22.5 C and 9.5 C. January mean high and low temperatures are -21.7 C and -31.8 C. Winds are generally south-south-east and annually average 12.3 km/h.

# 1981 Air Photo



# **TRANSPORTATION**

GNWT operates a 1829 m x 60 m asphalt runway and a smaller gravel/asphalt runway, each complete with taxiways and apron, lighting, rotating beacon, and lighted windsocks. Air traffic services at the asphalt runway include Navaid, FSS, crash firefighting and rescue services, aircraft parking plugs, fuel, and the terminal building. Scheduled and chartered flights are available. Chartered helicopter service is also available.

A privately-operated, licensed water aerodrome is run by local airlines. The float plane access dock is available to the public. Fort Smith is the gateway to the Mackenzie Highway System (Highway No. 5) and a centre for long distance trucking services. Bus services to and from the Town and taxi services are available.

### **GEOLOGY**

Fort Smith is situated on a plateau 38 m above the Slave River. The ground is level. The initial 9 m - 21 m of soil consists of sand and sandy silt. This glacially deposited layer is horizontally stratified. Below this is a stratum of silty clay till, underlain by granitic deposits of silty sand and gravel. Thin, brown, highly plastic clay layers have been encountered at depths greater than 8 m. Occasional organic layers up to 30 cm thick have been found at 4 - 5 m depth. The sand is saturated below a depth of 6 m and discontinuous permafrost is present.

Bedrock in the area is typically sedimentary, composed chiefly of limestone, dolomite, sandstone, and shale. Further to the east, east of the Slave River, igneous and metamorphic bedrock of the Precambrian Shield can be found. The precipitation of landslides in the past has been primarily due to erosion of riverbanks, river level fluctuations, groundwater fluctuations, and soil strength failure. The landslides of 1968 resulted in the substantial loss of property and one death.

The Slave River has a mean discharge of 3510 m./s. Such velocities easily erode the sand, silt, and clay banks at their bases, creating instability. A rise in the river level results in the development of excess pore water pressures which decrease the sliding resistance of the soil. There are two aquifers in the Fort Smith area, one confined and one unconfined. The lower confined aquifer is at the bedrock. Pore pressures in this aquifer do not contribute significantly to slope instability. The same conclusion cannot be reached with regard to the upper 20 - 24 m thick aquifer of sand and silt. Increased pore pressures reduce the sliding resistance of the soil mass. As well, there is a decrease in soil strength with increasing depth. Since erosion of weak soils in the banks will continue without artificial preventative measures, all development in the landslide zone parallel to the river has been restricted. This area is classified as an Environmental Reserve Zone under the Town of Ft. Smith Zoning By-Law #460.

Earthquakes, although rare, have occurred in the area. During the earthquake of October 1985, sliding and rockfall occurred at two places. More than 20 trees snapped and landslides followed. Ground cracks up to 30 cm appeared and power poles at the water intake slope were moved. Hairline cracks opened in the western part of the landslide zone, and in the soil covering the edge of the liner of a raw water settling pond of the water plant. Major problems with the slope stability have necessitated constant monitoring of water pressure in the slope.

#### **VEGETATION**

The Fort Smith area is thickly wooded with white and black spruce, poplar, jackpine, aspen, birch, and tamarack tree species. Low-lying areas support willows and many varieties of grasses, mosses, lichens, and bushes in the undergrowth.

#### **HISTORY**

The area surrounding Fort Smith was originally occupied by the Slavey Dene. By 1870, the Cree had occupied the Slave River Valley driving the Slavey northward; the Caribou Chipewyan of the South had also moved into the area, signing Treaty No. 8 at Smiths Landing on July 17, 1899. In 1874, a Hudson Bay trading post was established near the portage route bypassing the "Rapids of the Drowned", just north of the present townsite. Fort Smiths strategic location on the Slave River provided an important link for water traffic between southern Canada and the valley of the Mackenzie River. Alexander Mackenzie had travelled the Slave River in his quest for a route to the Western Ocean. The Fort was named for Donald Alexander Smith, later Lord Strathcona, a builder of the CPR, a Hudson Bay Company governor, and a member of the first North-West Territories Council.

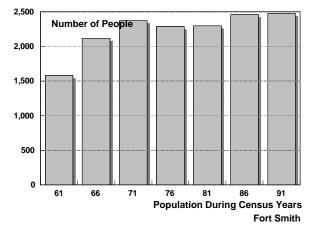
In 1876, the Roman Catholic Mission at Salt River was moved to Fort Smith. It operated a farm and sawmill as a service to the community. In 1880, the Hudson Bay Company built an outpost at the south end of the rapids called Smith's Landing. Police services began in 1915 with the opening of the North-West Mounted Police post. The police renamed the place Fort Fitzgerald, after the inspector who died on the Dawson Patrol from Fort McPherson in 1911. Also in 1911, a Department of Indian Affairs representative and a regional medical superintendent arrived and the Roman Catholic Mission broke land on its nearby St. Bruno farm to supply its produce, meat, and milk. The Mission sawmill produced lumber for the first hospital in 1914 and the first school in 1915. A federal government administration building was constructed in 1921. The first court of justice in the Mackenzie District convened in Fort Smith in 1921. Wood Buffalo National Park, adjacent to the community, was founded in 1922.

By the late 1920's, Fort Smith had begun to boom. The opening of an airport and radio station brought people and income to the new community. In 1934, many came in search of Yellowknifes gold, and Fort Smith became an important stopover on the way. The Anglican Mission house and church were built in 1939 to accommodate the travellers and residents of the community. In 1942, the United States Army began to barge soldiers and equipment down the Slave River, building a tractor road to Hay River en route to the Canol Oil pipeline.

Fort Smith was the single-most important transportation and administration centre for the Mackenzie District until 1967, when the territorial capital was moved to Yellowknife. Achieving Town status in 1966, Fort Smith remains the administrative centre for the Fort Smith Region. Though based heavily on employment in the public sector, the economy is still highly dependent on the revenue from hunting, fishing, and trapping.

Tourism is supported by Pelican Rapids, the site of world-class whitewater kayaking. Wood Buffalo National Park is the largest national park in Canada and contains the last sizeable herd of Wood Bison in the world. Fort Smith gained Town status on October 1, 1966. A traditional name for the community is "Tthebacha", which means beside the rapids.

# **POPULATION**



Commentary

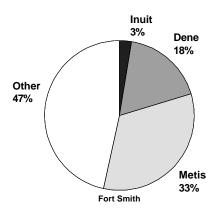
1961: 1,581
1966: 2,120
1971: 2,372
1976: 2,288
1981: 2,298
1986: 2,460
1991: 2,480

Source: Census

**Population Statistics** 

# Thursday, July 20, 1995

**ETHNICITY** 





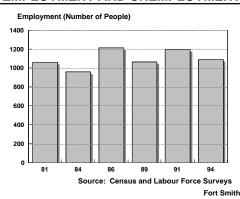
1991 Ethnicity

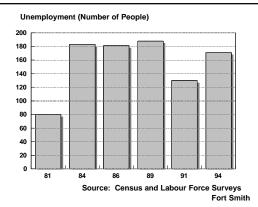
Inuit: 65 Dene: 439 Metis: 821 Other: 1,155

Source: Census

Fort Smith Page 4

# **EMPLOYMENT AND UNEMPLOYMENT**





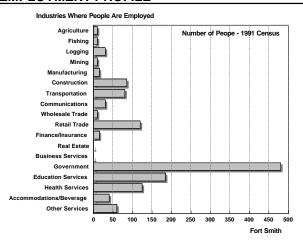
Source: 1994 Labour Force Survey, Bureau of Statistics

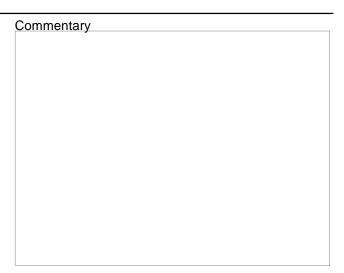
# **Employment Statistics 1994**

Over 15 Pop: 1,798 Abor. Employed: 407 Labour Force: 1,261 Unemployed: 173 Employed: 1,088 Ab. Unemployed: 146

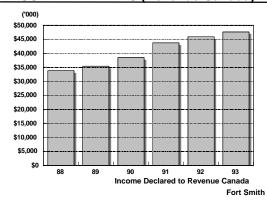
# Commentary

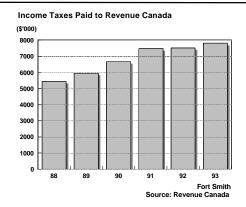
# **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





# Average Incomes

People Paying Inc.Tax

1993: \$29,420 1992: \$29,612

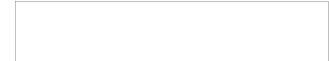
1991: \$29,761

1992: 1,620 1991: 1,470

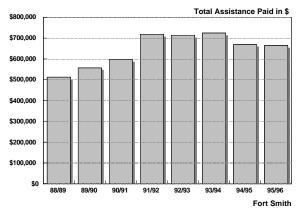
1993: 1,620

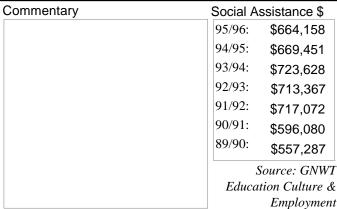
Source: Revenue Canada - Community Data

#### Commentary

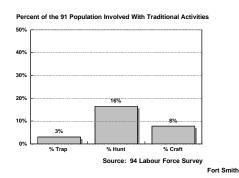


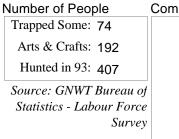
# **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES







#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Pelican Rapids Inn accommodates 130 in 50 rooms. Available services include bath, television, radio, telephone, kitchenettes, and a meeting room. The Pinecrest Motel accommodates 48. Services include telephone, television, a licensed dining room and cocktail lounge, and a coffee shop.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

## HOUSING AND HOME OWNERSHIP

There were 791 occupied private dwellings in Fort Smith in 1991, a 4.9% increase from 1986. As of 1994, the Government owned or leased houses totalled 130. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 92 new homes in the community.

Ownership/Type of Housing
Units
Owned: 365
Rented: 405
Band Owned: 0

Detached: 70 Apartment: 70 Row House: 145 Trailer: 75

Source: 1991 Census Data

# **COMMUNITY SERVICES**

#### Education

J.B. Tyrell Elementary School teaches grades K-7 and P. W. Kaeser includes grades 8-12. The Fort Smith Education Authority oversees the operation of both schools. Other educational institutions include the Thebacha Campus of Aurora College and an adult education centre with one resident adult educator.

#### Fire

Fort Smith has a eighteen-person volunteer firefighting brigade. Equipment includes a hydrant system with two triple combination pumper trucks. A dial-direct phone and pager system is used to speed response to calls.

#### Health

The Fort Smith Health Centre, built in 1979, is a twenty-five bed hospital which includes extended chronic care and in-patient acute care. There is a three-person medical staff.

#### **Recreation Services**

Fort Smith has an Active Recreation Committee. The Metis Association has a meeting hall. Recreational facilities include a curling rink, softball diamonds, a golf course, tennis courts, school gymnasiums, ski trails and chalet, an outdoor rink, park/playgrounds, and a snowmobile oval are some of the recreational facilities available to the Town. Other facilities include an aboveground seasonal pool, the Mary Kaeser Library, Wood Buffalo National Park Interpretation Centre, and the Northern Life Museum.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs nine officers. Other legal and court services are available from Yellowknife. The Community Social Services Office has a staff of nine, including the regional superintendent. The NWT Correctional Centre for Women is in Fort Smith. In addition, there is a secure facility for young offenders. Three children's group homes are in operation, as well as the Child Welfare Centre. Community-based social services and projects include Coordinated Home Care, Uncle Gabe's Friendship Centre, the Cooperative Nursery School, the Fort Smith Community Day Care, and the Senior Citizen's Home. Five Justices of the Peace reside in Fort Smith.

Churches in Fort Smith include the Anglican Mission, Church of Jesus Christ of the Latter Day Saints, Church of the Nazarene, Roman Catholic Mission, and the Pentecostal Church.

Mail is delivered five times per week. Power is supplied by the Talston hydro site 52 kms northeast of Ft. Smith. The installed capacity of this site is 60.1 MW and was constructed to supply power to the Pine Point mines. Back-up power is supplied by a 6,150 kW capacity diesel generator at the NWTPC Fort Smith Area Office. NorthwesTel local and long distance telephone service is available via microwave transmission, CBC Radio is transmitted using LPRT, and CBC Television is available via the Anik satellite system. There is also a VHF radio service. Cable television is also available. The Town also has a weekly media publication, the Slave River Journal. The News/North weekly newspaper, published in Yellowknife, is distributed throughout the Northwest Territories.

Infrastructure funded by Municipal and Community Affairs includes staff housing, the firehall, the community office, a parking garage, and a maintenance garage.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

Fort Smith Education Council (PWK) Fort Smith Community Day Care

#### **COMMUNITY WATER**

# Water Supply

The Town of Fort Smith water system draws water from the Slave River, pumps it to the water treatment plant. The treated water is pumped to the storage reservoirs where it is distributed to the consumers.

The water intake pumphouse(1959), located in the Environmental Reserve Zone, consists of stationary screens, three vertical turbine pumps and associated works. Two of the pumps were replaced in 1987 and the third in 1992.

Ft. Smith maintains two settlement ponds which provide treatment at times when the turbidity in the Slave river is to great for the clarifier in the water treatment facility. Each pond has 2400 m3 storage capacity and site has room for expansion.

# Water Storage

There are two reservoirs. One is an elevated 380 m2 steel tower, which maintains the distribution system pressure between 320 kPa and 400 kPa. When the "High Lift" pumps are on, the pressure in the system is greater than in the water tower, and the water tower begins to fill. When the "High Lift" pumps are off, the water tower feeds the system.

Overflow from the tower is transferred to the second reservoir (1890 m3), located beside the pumphouse. Pumps start automatically when the elevated tower cannot meet the demands of the system.

#### Water Treatment

The water treatment plant (1993), is located at the corner of Primrose Lane and Pelican Street. The plant consists of an upflow clarifier, two mixed media filters, chemical feed facilities, and two fuel oil boilers. Disinfection and fluoridation occur after the mixed media filters. The plant was designed for a third filter which, when installed, will increase the capacity from 133 m3/hr to 200 m3/hr. From the clear well (348m3), water is pumped to the distribution system by two "High Lift" pumps.

#### Water Quality

Fort Smith's water supply is of good chemical quality for domestic use. The water, at the time of season for which it was sampled, was shown to be moderately hard, fairly well buffered, slightly alkaline, and corrosive with respect to CaCO3. Comparison of the chemical analysis of the raw and treated supply water to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

# **COMMUNITY WASTE**

Thursday, July 20, 1995

#### Solid Waste

Solid waste collection is performed under private contract. The modified landfill site (300,000 m2) is located 8 km west of the Town, 1 km north on Highway 5. The site is separated into two areas. The trench area, managed by the contractor, is fenced and has a berm separating it from the public access area where bulky and recycleable materials are stored.

#### Sewage Disposal

Sewage is collected with a conventional gravity system of sanitary mains and five sewage lift stations.

Lift Station Pumps
Main two 2820 L/min Flygt
Towering Pines two 2040 L/min Flygt
Frontier Village two 3400 L/min Flygt
Klondike/Caribou two 648 L/min Flygt
Pelican/Primrose two 624 L/min Flygt

Located 1 km north-west of Town, the sewage treatment system (86,500 m2) consists of two 50 m x 50 m primary anaerobic cells and one 210 m x 210 m facultative retention pond. Each cell is lined with an impermeable membrane to prevent seepage. Treated effluent is discharged to the Slave River.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Gameti

What the name means: Rabbit-net Lake

Alternate Name: Gameti

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: North Slave Member of the NWT Legislature: James Rabesca

Member of Parliment: Ethel Blondin

Mayor: Henry Gon

Senior Administration Officer: Lana Roeland GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Yellowknife

NWT Legislature Riding: North Slave

Languages Spoken: Dogrib Land Claim Area: Dogrib

# LOCATION Longitude: 117.21; Latitude: 64.07

Rae Lakes is located 177 air km north-west of Yellowknife, at 64'09'N latitude and 177'20'W longitude. It is an important link in the chain of lakes which connects Great Slave to Great Bear Lakes.

#### **CLIMATE**

Rae Lakes receives an average of 12.7 cm of rainfall and 111.8 cm of snowfall per year. Mean annual precipitation totals 22.9 cm. July high and low temperatures are 20.8 C and 8.9 C. January high and low temperatures are -23.3 C and -32.2 C. The winds are generally east and annually average  $16 \, \text{km/h}$ .

# **TRANSPORTATION**

A new 1000 m Class C runway allows for air service from Yellowknife A winter access road connects Rae Lakes to Yellowknife. Roads generally consist of trails which have been upgraded through maintenance and surfacing. Overland drainage does not pose serious access problems.

# **GEOLOGY**

The soil is a sandy till with some boulders overlaying Precambrian rock. There are rocky outcrops in the community.

#### **VEGETATION**

Tree cover in the area consists of black spruce, poplar, and willow.

#### HISTORY

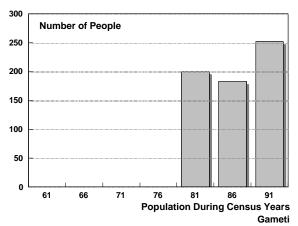
The Dogrib Dene once used the site on the shore of Rae Lakes as a hunting camp. In the early 1970's it became a more permanent settlement with the construction of a community hall, teacherage, store, homes, and an airstrip. The economy is primarily based on domestic fishing, hunting, and trapping. There is high uranium potential in the area but no commitment has been made to further exploration.

Rae Lakes has no legal municipal status. A traditional name for the community is "Games Lake". Game (pronounced Gah-May) was the elder who first camped there.

#### 1981 Air Photo



# **POPULATION**

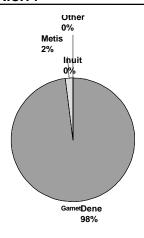


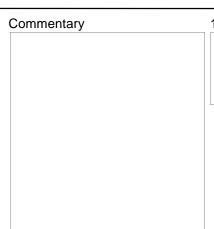
# Commentary 1961: 0 1966: 0 1971: 0 1976: 0 1981: 200 1986: 183 1991: 252

Source: Census

**Population Statistics** 

# **ETHNICITY**



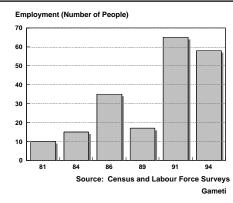


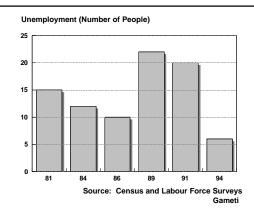
1991 Ethnicity

Inuit: 0
Dene: 247
Metis: 5
Other: 0

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





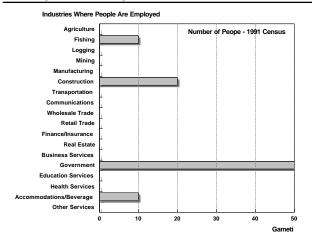
Source: 1994 Labour Force Survey, Bureau of Statistics

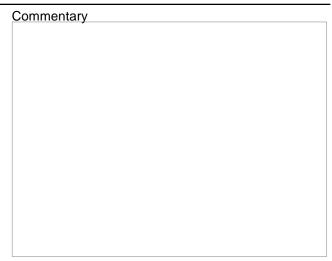
# **Employment Statistics 1994**

Over 15 Pop:	174	Abor. Employed: 45
Labour Force:	65	Unemployed: 7
Employed:	58	Ab. Unemployed: 7

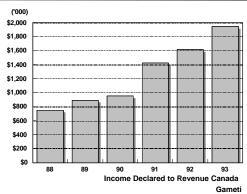
# Commentary

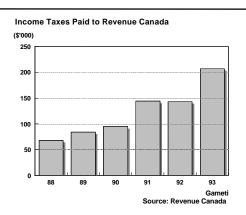
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





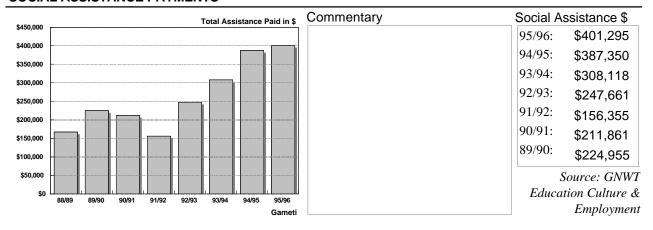
#### Average Incomes People Paying Inc.Tax

1993: \$16,208 1993: 120 1992: \$13,475 1992: 120 1991: 130 1991: \$10,969

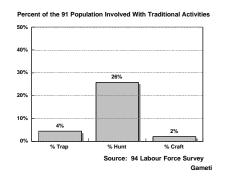
Source: Revenue Canada - Community Data

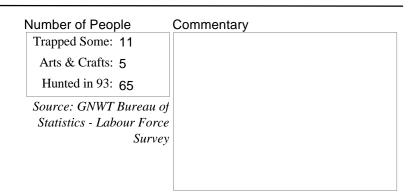
Commentary

#### **SOCIAL ASSISTANCE PAYMENTS**



#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Gameti Hotel was built in 1993. It can accommodate twelve in six rooms.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary

Occupied private dwellings increased by 50% between 1986 and 1991. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 37 new homes in the community.

Detached: 50

Apartment: 0

Row House: 5

Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education Health

Rae Lakes Territorial School teaches grades K-9. Three teachers and one classroom assistant are on staff. The Rae Lakes Education Committee is the local education authority.

A nursing station was built in 1989.

#### Fire Recreation Services

A five-person volunteer force uses a 4540 L, 3400 L/min. pumper (1989) truck and a tanker truck (1987). Trucked water is available for fighting fires.

Rae Lakes has an Active Recreation Committee. Facilities include a multi-purpose hall/gymnasium, an outdoor rink, a playground, and a playfield.

#### Police, Mail, Electrical and Other Services

RCMP services and all social services are available from Rae-Edzo. Mail is delivered twice per week. NorthwesTel local and long distance service as well as mobile radio/phone service, CBC Television, and CBC-FM Radio are available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides 330 kW of diesel power to the community.

The old school, built in 1969, has been partially refurbished and is now the Rae Lakes Community Office (350 m2). A two-bay firehall/ maintenance garage complex was completed in 1988. The parking garage (18 m x 18 m) was built in 1979. It has a concrete floor and contains a workbench and unit heaters. The staff house, built in 1985, is a 9 m x 12 m log building.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

Water was traditionally hauled from Rae Lake by each family independently. In the winter, a hole was cut through the ice 1.5 - 3 m from the end of the dock. Delivered water was taken from various points on the lake, depending upon access and the direction of winds that stir it up. In summer, water was usually taken from a small dock on the bay south of the community near the water intake. When the lake was frozen, water was obtained from deeper parts of the lake.

In 1977, a pumped summer water supply system allowed residents to fill their containers at 11 water stations located throughout the community. The intake consisted of a submersible pump, set in a 205 L drum filled with rocks, about 4.5 m below the lake's surface and 150 m from shore. The pressure tank and pump were removed each fall and the shallow buried pipes blown out with compressed air.

A new pumphouse/truckfill station and intake were completed in 1993. The intake is 50 m in length and is protected by rip-rap insulation. The truckfill has a fill rate of 1,000 L/min. Water is chlorinated before entering the delivery truck. The facility includes a standby generator.

#### Water Storage

The main 50 mm pipe branches off within the settlement to 11 water point stations. Each station is a 0.6 m square log rock-filled box with a 20 mm galvanized pipe and water tap fastened to it for stability.

#### Water Treatment

Water is chlorinated before entering the delivery truck.

#### Water Quality

Rae Lakes supply water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the chemical analysis the water is hard, well buffered, slightly alkaline, and with a moderate amount of dissolved solids. Comparison of the chemical analysis of the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed for those parameters tested, with the exception of the treated water turbidity, as below the recommended maximum limits.

Selected samples showed high concentrations of heterotrophic iron reducing bacteria and moderate concentrations of iron oxidizing bacteria in the water source. Batch chlorination is shown as having greatly reduced or eliminated any bacterial species observed in the raw water sample.

#### **COMMUNITY WASTE**

#### Solid Waste

Solid wastes are collected twice per week by a two-person collection crew using a 1994 garbage compactor truck. Burning of wastes in oil drums at the house is common. The solid waste site was upgraded from an open dump in 1990. The wastes are compacted weekly and regularly covered with gravel. Used oil is stored at the site. Large bulky wastes are stored in an adjacent site (50 m x 30 m).

#### Sewage Disposal

All houses have outdoor privies. The school and the community hall have bagged sewage facilities and leaching pits for greywater. Bagged sewage is collected three times per week by the same vehicle used to collect solid waste and taken to a site (20 m x 20 m x 3 m) east of the solid waste site.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Gjoa Haven

What the name means: Lots of Blubber

Alternate Name: Uqsuqtuq

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Kitikmeot Member of the NWT Legislature: John Ningark

Member of Parliment: Jack Anawak

Mayor: Uriash Puqiqnak

Senior Administration Officer: Greg Morash GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Kitikmeot

NWT Legislature Riding: Natilikmiot

Languages Spoken: Inuktitut Land Claim Area: TFN - Kitikmeot

**LOCATION** *Longitude:* 95.52; *Latitude:* 68.38

Gjoa Haven is located on the south-east coast of King William Island, 68'306 N latitude and 95'536 W longitude. It is 142 air km south-west of Taloyoak and 1,056 air km north-east of Yellowknife.

#### **CLIMATE**

Gjoa Haven receives an average of 5.1 cm of rainfall and 25.4 cm of snowfall per year. Mean annual precipitation totals 8.4 cm. July mean high and low temperatures are 13.9 C and 7.2 C. January mean high and low temperatures are -23.3 C and -39.0 C. The winds are generally light and from the north.

#### 1981 Air Photo



#### **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 1,341 m x 30 m certified Arctic C gravel runway. Facilities and services include a terminal building, weather/communications equipment, and navigational aids. Scheduled flight service is available through First Air Ltd via Yellowknife, Cambridge Bay and Iqaluit. An unlicensed water aerodrome provides float plane access during the summer months, with anchorage available. Marine transportation is provided by the Northern Transportation Company Ltd. barge service from Hay River on one September voyage. There are no facilities

There is no direct road access to Gjoa Haven. Within the community there are approximately 12.8 km of roads. The airport road and the garbage disposal road are gravel-surfaced roads, while sandy trails are around most buildings. Dust suppressant is not applied, however. These roads have been improved with the addition of gravel fill; dust suppressants are not used.

#### **GEOLOGY**

Limestone bedrock, covered with a thin layer of frost-weathered in situ sand and boulders forms the characteristic terrain of the area. Bedrock predominates in the higher hills, which reach 45 m. Lower areas are covered by a thick layer of fine sand and coarse rock. Permafrost conditions are prevalent, and the active layer ranges from 0.9 m - 1.2 m.

#### **VEGETATION**

Lichens grow on rock outcrops, while clusters of Arctic willows, (0.5 - 1.0 m) grow horizontally in well-sheltered areas.

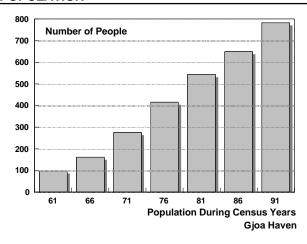
#### **HISTORY**

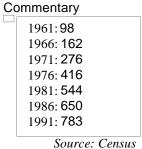
The area was first occupied by the Netsilik Inuit. Hunting in treacherous winter and spring conditions, they are considered to have been expert sealers. Beginning his journey in 1903 and ending in 1906, Roald Amundsen became the first European to navigate the Northwest Passage. He spent a winter at King William Island, naming the harbour Gjoa Haven after his ship the Gjoa. The Hudson Bay Company opened their first post in 1923, moving to the present site in 1927. Both the Anglican and Roman Catholic Churches later became established in the community.

The economy of the area is still dependent on hunting and fishing. Tourism has given a boost to the sale of carvings and other handicrafts. The Hamlet Council has proposed the formation of an economic sub-committee to ensure that the creation of private enterprise continues. A new hotel, a construction company, a fish processing plant and several small firms have been slated for development in the future.

Gjoa Haven gained Hamlet status on April 1, 1981. A traditional name for the Community is "Uqsuqtuq", meaning lots of blubber.

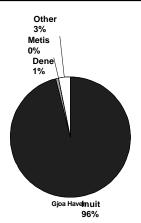
#### **POPULATION**

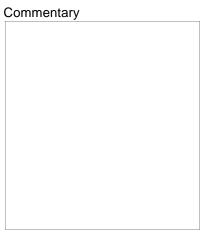




Population Statistics

#### **ETHNICITY**



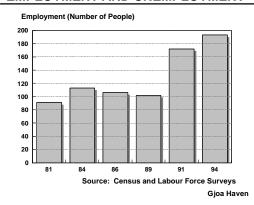


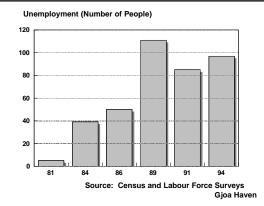
1991 Ethnicity Inuit: 752 Dene: 6

Metis: 0 Other: 25

Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**





Source: 1994 Labour Force Survey, Bureau of Statistics

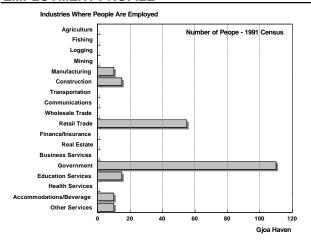
Gjoa Haven Page 3

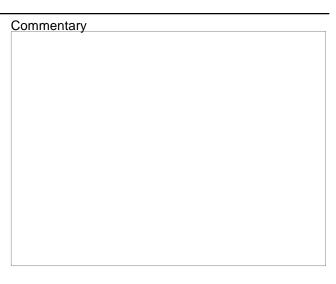
#### **Employment Statistics 1994**

Over 15 Pop: 492 Abor. Employed: 178 Labour Force: 291 Unemployed: 98 Employed: 193 Ab. Unemployed: 98

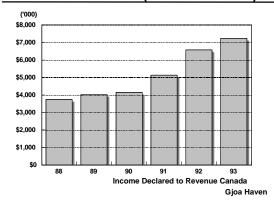
#### Commentary

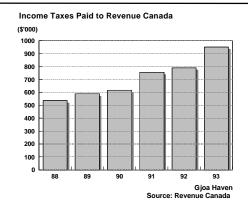
#### **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$19,050 1992: \$17,765

1991: \$15,561

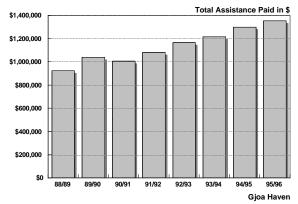
1993: 380 1992: 380 1991: 330

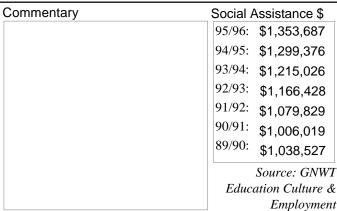
Source: Revenue Canada - Community Data

#### Commentary

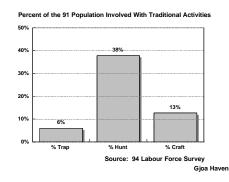


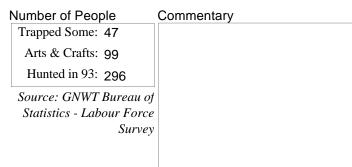
#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Amundsen Hotel accommodates six guests.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary

The number of occupied private dwellings increased 38.1% between 1986 and 1991. As of 1994, the Housing Corporation owned 143 housing units. The Housing Assistance Program, the Alternative Housing Program and Government Lease-to-Own homes have accounted for 33 new homes in the community.

Detached: 125

Apartment: 0

Apartment: 0
Row House: 15
Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

The Quqshuun Ilihakvik Centre teaches grades K-9. Nine teachers and four language specialists are on staff. Vocational and continuing education opportunities are available through the resident adult educator and the Arctic College Extension Program.

#### Fire

A twelve-person volunteer fire brigade uses a 1980 IHC model, 4500 L capacity triple combination pumper to fight fires. A telephone alarm system is in place for quickened response. The community has a firehall (one-bay).

#### Health

The health centre (5023 m2), built in 1970, contains four medical beds, two bassinets and two cribs. Staff includes three nurses, one dental technician and one community health representative.

#### Recreation Services

Gjoa Haven's gymnasium is used by the school in the daytime and by the community in the evenings and on weekends. The Gjoa Haven Recreation Complex, completed in 1993, contains an arena and a curling rink. A community hall was built in 1985. The school has a playground and a community playground is in the process of being completed. There is also a softball diamond and a developed trail system in the community. An aboveground pool is planned for 1996/97. Gjoa Haven has an Active Recreation Committee.

#### Police, Mail, Electrical and Other Services

The RCMP detachment has two officers on staff. The Community Social Services Office has two staff members. Mail is delivered three times per week. NorthwesTel local and long distance telephone service, CBC Radio and CBC Television are available via the Anik satellite system. NWTPC supplies 1,080 kW of diesel power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a Hamlet office, and two three-bay parking garages. A two-bay maintenance garage was built in 1994.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Snowbird Day Care

#### **COMMUNITY WATER**

#### Water Supply

Gjoa Haven's present water supply is Water Lake. A 1 km road links the truckfill station to the community.

#### Water Storage

Water Lake is situated in a small valley between the airport runway to the north and a hill to the south. It drains an area of approximately 28 ha from its western end into Peterson Bay. Water Lake has a total available volume of 45,000,000 L; the effective below ice winter storage volume is 22,500,000 L. By the end of the 1980's, Water Lake was reaching its capacity to supply the Hamlet. The nearest lake which met the Hamlet's water demand was Swan Lake, 4.5 km away. A recently completed engineering planning study concluded that it was more feasible, reliable, and economical to modify the existing water source than to construct a new water supply at Swan Lake.

In 1993, Water Lake's storage capacity and recharge volume was increased. The project included the construction of earthworks and a 4 km overland pipeline to Swan Lake. Water from Swan Lake is now piped to Water Lake each summer. Fluoridation facilities were also constructed, but to date have not been commissioned. Efforts have been made through effective land use planning and management to protect the catchment area of the Water Lake watershed from receiving runoff contaminants. The truckfill incorporates an 11,365 L storage tank. This mild steel tank is located inside the building to prevent water from freezing. Water is pumped from the storage tank to the water trucks through an overhead fill arm.

#### Water Treatment

Facilities to treat and store the water are housed in the truckfill station. Water treatment consists of chlorination, and colour and odour removal. A hypochlorinator complete with a 136 L feed tank is used to chlorinate the water. For colour and odour removal, both activated carbon and multi-media filters are used. The water after treatment is stored in a 11.365 m3 storage tank located inside the building.

#### Water Quality

The water from Water Lake has been chemically tested continuously since 1971, when the conceptual plans for the existing water system were first proposed. It has been found to be of good chemical quality for domestic use. It is hard, well-buffered, slightly alkaline, containing a moderate amount of dissolved solids and slightly undersaturated with respect to calcium carbonate. Comparison to the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as being below the recommended maximum limits.

#### **COMMUNITY WASTE**

#### Solid Waste

Garbage is collected daily by the Hamlet using a 1984 Ford F-350 truck. The burning of waste in barrels is not practiced at the home. Twice per year, special collections are made for snowmobiles, mattresses, and other bulky wastes. The solid waste management site is located 1.7 km south-east of the community in a human-made bermed area measuring 15,000 m2. The site was fenced in 1995. Wastes are burned at the site once a week and an adjacent esker serves as a source for granular cover material.

#### Sewage Disposal

The Hamlet Council provides sewage collection. An 11,500 L truck provides pumpout service to the residences, the school, and the nursing station. Pumpout sewage is treated in a 22,700 m2 single-cell lagoon, located approximately 1.7 km east of the community. The lagoon is discharged annually at the end of the summer into a ditch. The effluent then flows 700 m into the ocean.

The construction of a cut-off wall in the lagoon berm has greatly reduced the lateral movement of both sewage and groundwater. Built in two stages, it consists of a heavy liner that extends vertically through the active layer. This system does not guarantee the complete water tightness of the lagoon, however, the amount of seepage is minimized. Old drums located in front of each house are used for the storage of the bagged sewage prior to pickup. The Hamlet Council collects the bags three times per week, depositing them in a cell adjacent to the sewage lagoon.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Gjoa Haven Page 7

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Grise Fiord

What the name means: Place That Never Melts Alternate Name: Aujuittug

POLITICAL 1981 Air Photo

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Levi Barnabas

Member of Parliment: Jack Anawak

Mayor: Jarloo Kiguktak

Senior Administration Officer: Lizzie Pallituq GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: High Arctic

Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

**LOCATION** *Longitude:* 82.54; *Latitude:* 76.25

Grise Fiord is located on the southern coast of Ellesmere Island at 76'256 N and 83'016 W. It is approximately 380 km north-east of Resolute and 1920 km north-east of Yellowknife.

#### **CLIMATE**

A true arctic desert, Grise Fiord receives an average of 15.2 cm of snowfall each year. There is so little rainfall in the area that the mean annual precipitation totals near 0 cm. July mean high and low temperatures are 10 C and 2.2 C. January mean high and low temperatures are -27.2 C and -35 C. Winds are generally south-east and annually average 18.5 km/h. Global warming is suspected in reducing the size of the glacier situated above the Hamlet. Although threatening, the danger to the community is not yet known.

#### **TRANSPORTATION**

The Hamlet of Grise Fiord and the GNWT jointly operate a 610 m x 23 m unlicensed Arctic D gravel runway. Runway lighting and navaid facilities are available. The runway has a difficult approach as it is surrounded on three sides by mountains; expansion at this location would be difficult. Marine transportation is available from Eastern Arctic Sealift and Transport Canada (Montreal). Facilities include a beach landing and an offshore anchorage for POL tankers. Access into the fiord is possible from July to early-October. Grise Fiord has no direct road access. Within the community there are 3.3 km of gravel surface roads. Calcium chloride is applied annually to the road to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

The Community is situated on a narrow strip of beach near the mouth of Grise Fiord. From the beach, the land slopes back into a series of low benches for about 100 m until it reaches the foot of a steep rock-face. The surficial soils in the area consist of free-draining gravel deposits. A major layer of silty sand with traces of gravel was identified over a large portion of the valley above the settlement. The depth of the permafrost table is approximately 0.6 m.

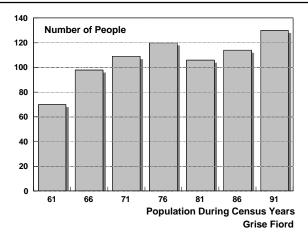
#### **VEGETATION**

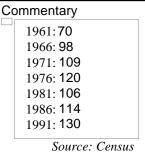
Mosses and lichens grow during the very short growing season.

Grise Fiord is Canada's most northerly community. Permanent settlement began in 1953, when the RCMP relocated Inuit from Port Harrison (Quebec) and Pond Inlet to the area. The relocation continued into the 1960's when the RCMP brought their station from Craig Harbour (5 km east of Clyde River) and that community's residents with them. In 1962, a school was built and in the late 1960's, residents established a cooperative.

Grise Fiord, blessed with game resources, bases its economy on hunting, trapping and fishing. Tourists are drawn to Ellesmere Island National Park and to view local archaeological sites. Near the Hamlet are ruins of the once prosperous Thule people and evidence of European exploration during the late-nineteenth and early-twentieth centuries. Grise is one of the most traditional, rugged, and beautiful communities in the North. Grise Fiord gained Hamlet status on October 7, 1987. The Hamlets traditional name "Aujuittuq", means place that never melts.

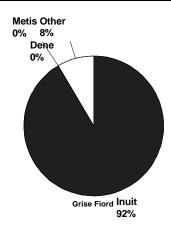
#### **POPULATION**

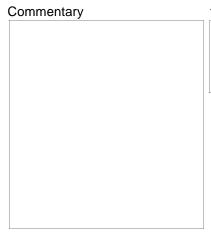




**Population Statistics** 

#### **ETHNICITY**

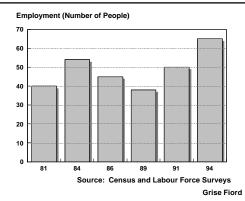


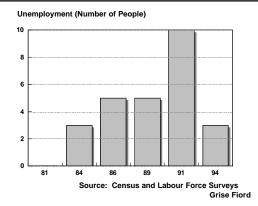


1991 Ethnicity Inuit: 119 Dene: 0 Metis: 0 Other: 11

Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**





Source: 1994 Labour Force Survey, Bureau of Statistics

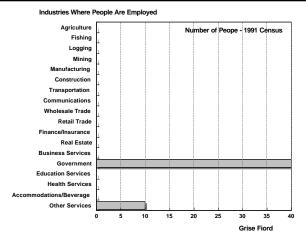
**Grise Fiord Page 3** 

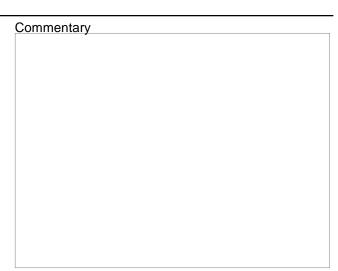
#### **Employment Statistics 1994**

Over 15 Pop:	79	Abor. Employed: 65
Labour Force:	68	Unemployed: 3
Employed:	65	Ab. Unemployed: 3

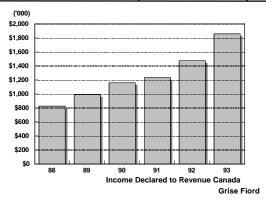
#### Commentary

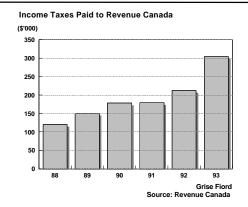
#### **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$31,000 1992: \$24,583

1991: \$24,660

1992: 60 1991: 50

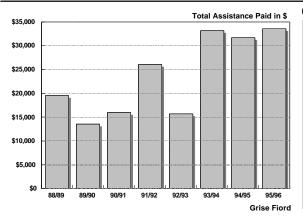
1993: 60

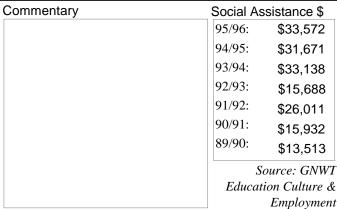
Source: Revenue Canada - Community Data

#### Commentary

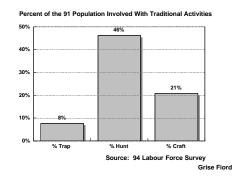
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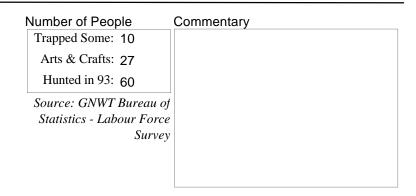
#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Grise Fiord Lodge accommodates nineteen people.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing
The number of occupied private dwellings in Grise Fiord increased 11.1% between 1986 and 1991. As of 1994, the Housing Corporation owned twenty-six housing units.	Units Owned: 0
The Housing Assistance Program, the Alternative Housing Program and Government Lease-to-Own units have accounted for seven new homes in the community.	Rented: 30 Band Owned: 0
	Detached: 30
	Apartment: 5

Row House: 0 Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

–~	ucation	
_ u	ucalion	

The Umimmak school in Grise Fiord teaches grades K-9. Two teachers, including the principal, are on staff.

#### Health

Health services include a three-person medical staff. The health centre (678 m2), built in 1992, contains two medical beds, one bassinet, and one crib.

#### Fire

A five-person volunteer fire brigade uses a 1992 Ford Model F-700 fire truck (4546 L capacity) is used for fighting fires. Telephone and siren alarm systems are in place for quickened response. The Hamlet has a firehall (142 m2).

#### Recreation Services

Grise Fiord's gymnasium (300 m2), built in 1986, is located within the school. Other recreational areas and facilities include a small community hall, a small playground, a playfield, and a developed trail system.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. Social services are available from Iqaluit. Mail is delivered to the community twice per week. NorthwesTel provides local and long distance telephone service via the Anik satellite system. CBC-FM radio, CBC television (east and west channels), and a community radio station are also available. NWTPC provides 470 kW capacity diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes a community office (119 m2), a warehouse (181 m2), a maintenance garage (230 m2), and a parking garage (120 m2).

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

Prior to 1978, ice blocks cut from icebergs frozen into the flow ice were the main source for water for most of the year. The ice blocks would be transported by Bombardier and trailer to residents water tanks and left to melt. A reverse-osmosis plant for the desalinization of sea water was installed in the late 1980's but was decommissioned due to operational problems.

Water is now obtained from a small glacial runoff pond located in the center of the community. The water is of good to excellent chemical quality for domestic use. The water is clear, very soft, poorly buffered, neutral, and low in dissolved solids. Treated water is below the recommended limit with respect to corrosiveness. Batch chlorination has been shown to have eliminated or greatly reduced most corrosion-intensifying bacteria.

#### Water Storage

Numerous steps have been taken to improve the water storage system. In 1978, a 1,393,000 L water tank was erected. The tank was sized for a population of 150 on the erroneous assumption that daily consumption would be 32 L per capita and that only 9 1/2 months storage was required. In 1988, another storage tank of 3,896,000 L capacity was constructed to meet the actual requirements. The total storage capacity of the truckfill point is presently 5,022,750 L.

Each summer the glacial runoff pond is drained by gravity feed into the two storage tanks. It requires 21 days to fill both tanks. The tanks are connected by a heated walkway. Valve pumps, hypochlorination equipment, and a control panel are located in the walkway.

The 1994 (4546 L) water truck is filled through a chain-operated, quick-opening valve. When this valve is opened, a flow-switch is activated automatically starting the booster pump and the hypochlorinator. A 3 m truckfill arm extends from the roof of the building.

Water delivery is provided by the Hamlet five times per week or upon request. Most residential holding tanks have 227 L capacities. All water deliveries are metered.

#### Water Treatment

The truckfill point and treatment facilities are located inside the Hamlet garage. Treatment facilities consist of two chemical solution mixing tanks (each 115 L capacity), a 1/2 hp mixer, and a hypochlorinator.

#### Water Quality

Water is now obtained from a small glacial runoff pond located in the center of the community. The water is of good to excellent chemical quality for domestic use. The water is clear, very soft, poorly buffered, neutral, and low in dissolved solids. Treated water is below the recommended limit with respect to corrosiveness. Batch chlorination has been shown to have eliminated or greatly reduced most corrosion-intensifying bacteria.

#### **COMMUNITY WASTE**

#### Solid Waste

Residents place solid waste outside the home in wooden boxes for collection. The wastes are not burned by the residents. The waste is collected twice per week using a Ford model F-350 pickup truck and hauled to the 125,000 m2 solid waste management site. Wastes are burned twice weekly. An annual spring clean-up is organized by the Community. A separate bulky waste site occupies an area of 7,500 m2. Used oil is stored at this site.

#### Sewage Disposal

Most buildings are equipped with pressurized water systems and sewage holding tanks. The sewage truck is a 1993 Ford F-350 (4546 L). Remaining buildings have honeybucket toilets and discharge their greywater on the ground beside the building.

Honeybags are collected and sewage tanks pumped out regularly. The waste is trucked 1.4 km to the waste management site adjacent to the airstrip, west of the community. The raw sewage is dumped into a 300 m2 solid retention pond for primary treatment and honeybags are placed in a 160 m2 pit. Sewage bags are collected daily using the garbage truck but not combined with the domestic garbage.

A newly-constructed sewage lagoon, near the airstrip, will be commissioned in 1997.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Grise Fiord Page 7

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

## Hall Beach

What the name means: Flat Land Alternate Name: Sanirajak

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Mark Evaloarjuk

Member of Parliment: Jack Anawak

Mayor: Joe Curley

Senior Administration Officer: Marie Kringuk GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Amittuq Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

#### **LOCATION** *Longitude:* 81.13; *Latitude:* 68.46

Hall Beach is located on the east shore of the Melville Peninsula at 68'466 N latitude and 81'126 W longitude. Situated in the Foxe Basin of the Arctic Lowlands, it is 840 air km north-west of Iqaluit and 1650 air km north-east of Yellowknife.

#### **CLIMATE**

Hall Beach receives an average of  $10.0~\rm cm$  of rainfall and  $121~\rm cm$  of snowfall per year. Mean annual precipitation totals  $21.8~\rm cm$ . July mean high and low temperatures are  $8.4~\rm C$  and  $2.3~\rm C$ . January mean high and low temperatures are  $-26.9~\rm C$  and  $-34.8~\rm C$ . Winds are generally northwest and annually average  $21.3~\rm km/h$ .

#### 1981 Air Photo



#### **TRANSPORTATION**

The GNWT operates a 1,646 m x 46 m certified Arctic B gravel runway. Site facilities and services include the terminal building, navigational aids, and weather reading equipment. Scheduled flights are available via Iqaluit. Chartered flight service is also available.

Marine transportation is available from Eastern Arctic Sealift and Transport Canada (Montreal). Facilities include a beach landing, the old DEW-line dock, an offshore anchorage for a bulk fuel tanker, and the POL discharge via floater hose to shore manifold.

There is no land access to Hall Beach. Within the community there are 4.9 km of gravel surface roads. Calcium chloride is applied annually to 3.5 km of roads to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

Due to depressions created during the glacial period, a resultant marine overlap is responsible for the low-relief topography of raised beaches and shallow lakes now found in the area. Marine sands and gravels cover the landscape, with fines in the depressions. The thin surface deposits are underlain by limestone bedrock.

The townsite is situated on a elongated raised beach, oriented to the north-west. The beach is about 100 m wide. It is bordered on the east by the sea, and on the west by an elongated shallow water pond, 45 ha in area. Hall Beach is located within the continuous permafrost zone. Materials located beneath the thin active layer are perennially frozen to a substantial depth.

#### **VEGETATION**

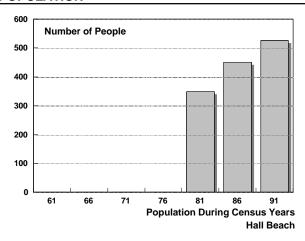
Grasses, mosses, and lichens sit in a thin organic layer, 0.3 m thickness or less.

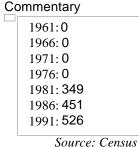
Thursday, July 20, 1995

Hall Beach was named after Captain C.F. Hall, an American explorer who spent a number of years on the Melville Peninsula in the mid-nineteenth century. The Hall Beach area has been inhabited at various times since the thirteenth century. The Iglulik Inuit of the area were found to have lived a much richer and varied life than other Inuit groups. The area supports a large population of walrus and whale, the staples of the Iglulik society. Marine mammal harvesting, hunting, trapping, and fishing still remain the major economic activities. The completion of the Foxe Main DEW-Line site in 1955 brought a wage economy to the area. Inuit from outlying camps migrated to the community to take advantage of steady income. The DEW-Line is now being minimalized. Clean-up of the site will have unknown consequences on the ecology of the area and economy of the Hamlet.

The tourism industry constitutes a significant portion of the economy. Within reach, historical interests and natural sites like the Nunapariavik waterfalls attract tourist interest. The area is known for its char fishing. Building contractors, cartage, general retail, food, hotels, outfitters, and restaurants are some of the goods and services available in the Hamlet. Hall Beach gained Hamlet status on April 1, 1978. The traditional name of the Community is "Sanirajak", meaning flat land.

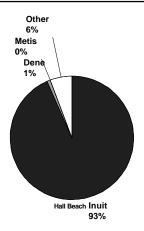
#### **POPULATION**





Population Statistics

#### **ETHNICITY**



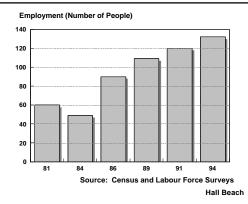


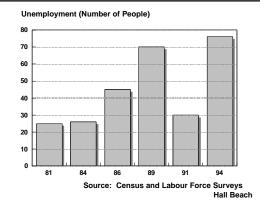
1991 Ethnicity Inuit: 491 Dene: 5 Metis: 0 Other: 30

Source: Census

#### • • • •

#### **EMPLOYMENT AND UNEMPLOYMENT**





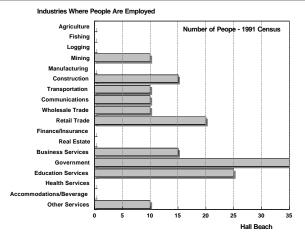
Source: 1994 Labour Force Survey, Bureau of Statistics

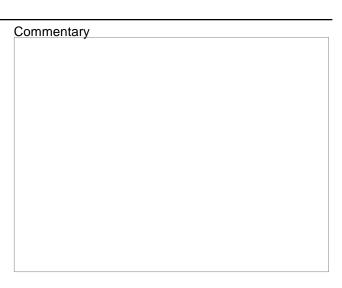
#### **Employment Statistics 1994**

Over 15 Pop: 325 Abor. Employed: 122 Labour Force: 209 Unemployed: 77 Employed: 132 Ab. Unemployed: 75

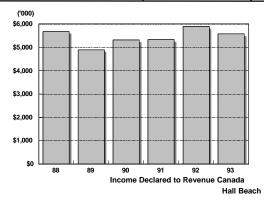
#### Commentary

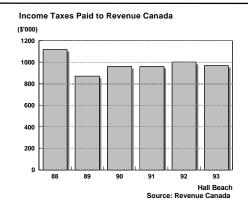
### **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$22,304 1992: \$23,572

1991: \$21,316

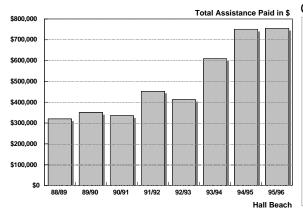
1992: 250 1991: 250

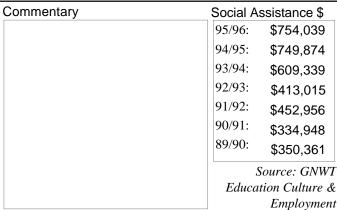
1993: 250

Source: Revenue Canada - Community Data

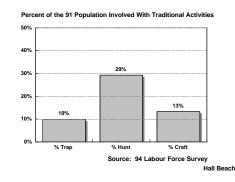
#### Commentary

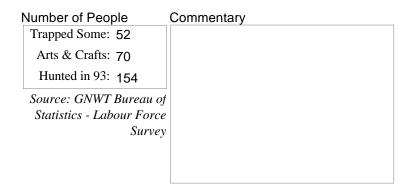
#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Hall Beach Hotel accommodates five.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type	of Housing
The number of occupied private dwellings increased 25.4% between 1986 and 1991. As of 1994, the Housing Corporation owned 86 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-own units have accounted for seven new homes in the community.	Owned: Rented: Band Owned:	80
	Detached:	85
	Apartment:	0
	Row House:	0
	Trailer:	0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Atanaarjuat School teaches grades K-11 with a staff of five teachers and five language specialists. The Adult Education Centre employs one adult educator, while opportunities in vocational and continuing education are available through the Arctic College Extension Program.

#### Health

The health centre (989 m2) includes a garage and three apartments in addition to the clinic itself. The facility, employing a medical staff of four, was built in 1986 and contains three beds, one bassinet, and one crib.

#### Fire

An eight-person volunteer fire brigade fight fires in the Hamlet. A 1983 IHC S-1800 triple combination pumper truck (4546 L capacity tank) is used in conjunction with the telephone warning system.

#### **Recreation Services**

Recreational facilities include the community hall (376 m2) built in 1987. The gymnasium, located in the school, was built in 1990. Other facilities include a playground, playfield and developed trails.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office, employing a staff of one, promotes the Alcohol Awareness Program. The Roman Catholic Mission offers church services.

Mail is delivered to the community twice per week. NorthwesTel local and long distance telephone service, CBC FM Radio, and CBC Television, are available via the Anik satellite system. East and west television channels and community radio are also available. NWTPC provides 715 kW capacity diesel power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a firehall, a community office (272 m2), a three-bay maintenance garage (376 m2), and a two-bay parking garage (380 m2).

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

The water source for the Hamlet and Foxe Main DEW-Line station, Water Supply Lake, was converted to a bermed reservoir in 1956. It is situated 1.6 km west of the station and fed by a diversion from a dam. There is no permanent intake structure. Water is withdrawn by dipping the truck hose into the lake. In the summer, water is drawn from near the shore, while in winter, a hole is cut in the ice.

#### Water Storage

There are no storage or pumping facilities within the community. The DEW-Line reservoir has a storage capacity of 600,000,000 L. Water is transported 4.6 km from the reservoir to the Hamlet by two trucks, a 1993 model (4546 L capacity) and a 1987 model (6819 L capacity). The Hamlet of Hall Beach delivers water five days per week. The operator usually makes ten deliveries per day. Newer homes on pressure water systems have 1135 L storage tanks, while older homes have 227 L tanks. All water deliveries are metered.

#### Water Treatment

Treatment consists of adding bleach to each truck tank prior to delivery.

#### Water Quality

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#### **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected by the Hamlet twice per week using a 1992 Ford model F-350 stake truck. The solid waste management site (200 m2) is situated on flat ground north of the Hamlet. Solid wastes are burned at the disposal site every day. Although gravel is readily available, the wastes are neither covered nor compacted. Bulky wastes are stored at a separate site (7,500 m2).

#### Sewage Disposal

The transient centre, nursing station, and school have been converted to a pumpout system of sewage collection. About 50% of the buildings are on sewage pumpout and the remainder discharge greywater to the ground adjacent to the building.

Sewage is collected by two trucks, a 1987 model (4546 L capacity) and a 1993 model (6819 L capacity). The sewage is trucked 3 km to the primary treatment sewage lagoon (3,600 m2). There is no bagged sewage service in the community.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# <u>Hay River</u>

What the name means: Hay River

Alternate Name: Xatl'odehchee

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: South Slave Member of the NWT Legislature: Jane Groenewegen Member of Parliment: Ethel Blondin

Mellibel of Farinnelli. Eulei Biolid

Mayor: Jack W. Rowe

Senior Administration Officer: Charles Scarborough GNWT Assigned Level of Development: Level 1

Government of Canada Administrative Region: Fort Smith

NWT Legislature Riding: Hay River

Languages Spoken: South Slavey/Chipewyan Land Claim Area: Treaty 11 - Deh Cho

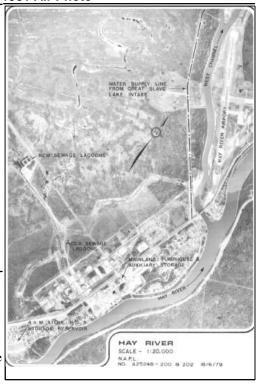
#### LOCATION Longitude: 115.47; Latitude: 60.49

The Town of Hay River sits on the south shore of Great Slave Lake on the mouth of the Hay River, at 60'51N latitude and 115'44W longitude. The Town is 200 km south-west of Yellowknife by air and 134 km from the Alberta border via the Mackenzie Highway.

#### **CLIMATE**

Hay River receives an average of 34.0 cm of precipitation per year, of which 18.4 cm is rainfall and 165 cm is snowfall. July mean high temperature and mean low temperature are 20.7 C and 10.8 C. January mean high and mean low temperatures are -21.0 C and -30.5 C. Winds are generally from the north-west and annually average 12.1 km/h. The point of spring break-up averages June 10th and freeze-up is usually at the beginning of November.

#### 1981 Air Photo



#### **TRANSPORTATION**

Transport Canada operates a 1829 m x 46 m asphalt runway as well as a 1219 m x 46 m gravel runway. Airport facilities include taxiways, lighting, Navaids, and a flight service station. Regularly scheduled flights are available through Canadian North, Air Providence, and Buffalo Airways. Both fixed-wing and helicopter charter services are available. A privately-licensed water aerodrome owned by Carter Air Services Ltd. allows for float plane access.

Hay River is the centre for northern barge service, with a harbour and embarkation point. The Town is also a major component of the Mackenzie Highway System, being connected directly to Highway No. 2. Trucking services and long distance coachlines use this route to the South. Taxi and bus services are available within the Town. The Hay River Reserve is accessible by an 11 km road. Calcium chloride is applied annually to unpaved roads within the Town to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

The Town of Hay River is situated on the estuary of the Hay River drainage system. The average elevation of the town site is 160 m above sea level and the surrounding terrain is flat. Vale Island, upon which the airport and much of the towns developed area exists, is a deltaic structure. The Island averages 3 m or less above the water level and is therefore susceptible to flooding during the spring break-up period. Ancient water courses on the island become active channels during floods.

Underlying bedrock consists of a shale, limestone, and dolomite. The surface material is a result of glaciation, river development, and the shrinking of Great Slave Lake. A hard till can be found at depths of 5.5 - 8.5 m. This is covered by a layer of compact silty-sandy gravel which in turn is overlain by water deposited silts and clays. The surface organic material has a maximum thickness of 0.6 m.

Surface materials found, such as fine gravel, sand and silt, are typical of deltaic environments. Such materials are susceptible to extensive erosion in the absence of protection from root mats or human-made structures. Hay River is within the discontinuous permafrost zone. Permafrost is sporadic and may range from 0 - 9 m in thickness depending on organic cover and location. Although discontinuous permafrost exists, frost action is not a problem on the higher, well-drained land where the new areas of settlement are situated.

#### **VEGETATION**

The surrounding Boreal Forest is heavily treed. Jackpine, poplar, black spruce, tamarack, and willow are common. Muskeg and swamp are indicative of low-lying land.

Historical inhabitation of the area dates back to 7,000 years B.C., when the Long Spear people came from the western plains. The original site of occupation was where the Hay River Reserve, a predominantly Dene village, stands today. The Slavey people lived off the land, taking only what they needed and building nothing of permanence. Hay River appeared on maps as early as 1854, but no permanent structures appeared until 1868 when the Hudson Bay Company Post was constructed. The Roman Catholic Mission was built a year later. Until 1892, the Post had been operating only intermittently at the mouth of the Hay River. Continuous European occupation of the site began after that time, with an Anglican Mission being built in 1894. The Slavey people, who were attracted by the areas excellent fishing, congregated there. A school and nursing station were built soon after by the missionaries.

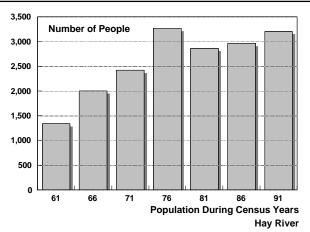
The RCMP opened a detachment at Hay River in 1925 and the community grew to include a hospital. Houses were built on Vale Island beginning in 1939. Entering the 1940's, the community became an educational centre, a fishing village, and a minor trading post. The west channel grew in importance as a distribution point for goods destined for Yellowknife and beyond. As part of the war effort, the United States Corps of Engineers constructed an airstrip on Vale Island in 1942. In 1946-47, the Federal Government constructed a gravel road from Grimshaw, Alberta to Hay River. Ken Gaetz, a Pentecostal missionary, built a church on the island in 1950. A nursing station was built on the island in 1953.

Two serious floods in 1951 and 1962 caused much damage to the community. Both required the evacuation of virtually the entire populous. In response, an alternate residential area on higher ground was called for. The original townsite on Vale Island was virtually abandoned and a new central business district was created on the mainland. For many years even residential development on Vale Island was discouraged and expansion or upgrading of existing residences was not allowed. The causeway spanning West Channel from Vale Island to the mainland built in 1952 worsened flood conditions by preventing the melted lake ice to flow down the back channel toward the Hay River. Despite the construction of a bridge to replace the causeway later flood years were often just as severe.

In 1979 the Governments of Canada and the Northwest Territories began the Flood Damage Reduction Program to define the flood risk zones for several northern communities including Hay River. A report of this program was completed and released for the Hay River area in May, 1984. With guidelines for development within flood fringe areas, the Town of Hay River was able to allow residential development on Vale Island. Hay River experienced substantial economic growth in the 1960's and 1970's, becoming known as the "Hub of the North". With the mine opening in nearby Pine Point and the completion of the Great Slave Railway in 1964, it was hoped that the Mackenzie Valley Pipeline system would develop. By 1975, a lack of commitment to the pipeline project ended development in that area.

Hay River remains the origin of barge traffic to points on Great Slave Lake, the Mackenzie River, and to the Delta. Today the Town depends upon transportation/communication activities, commercial fishing, and government for its livelihood. Commercial logging and market gardening are other enterprises. Tourists are attracted to such sites as Alexandra and Louise Falls. Slavey bead and quill work, and local prints and paintings are common gift items. Hay River achieved town status on June 16, 1963. A traditional name for Hay River is "Katlodeeche". The Hay River Indian Reserve, created in 1974, is the only aboriginal reserve in the Northwest Territories.

#### **POPULATION**



#### Commentary

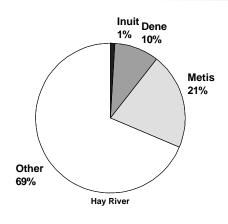
1961:1,338 1966: 2,002 1971: 2,420 1976: 3,268 1981: 2,863 1986: 2,964

1991: 3,206

Source: Census

**Population Statistics** 

#### **ETHNICITY**



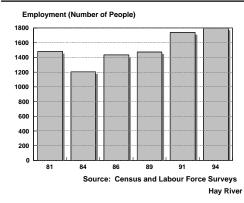
#### Commentary

1991 Ethnicity

Inuit: 30 Dene: 308 Metis: 667 Other: 2,201

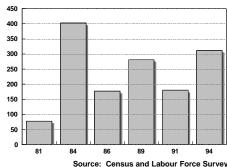
Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**



#### **Unemployment (Number of People)**

Commentary



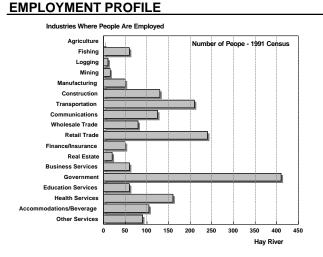
Source: Census and Labour Force Surveys Hay River

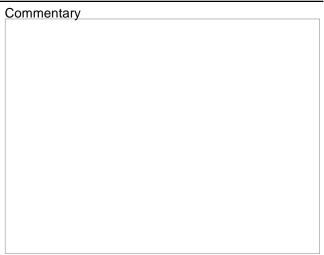
Source: 1994 Labour Force Survey, Bureau of Statistics

#### **Employment Statistics 1994**

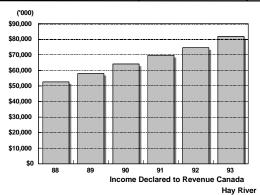
Over 15 Pop: 2,571 Abor. Employed: 489 Labour Force: Unemployed: 304 2,100 Employed: Ab. Unemployed: 131 1,796

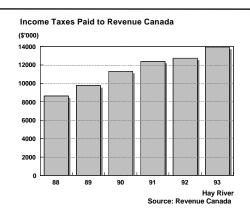
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#### **INCOME AND TAXES (Revenue Canada)**





#### Average Incomes People Paying Inc.Tax

 1993: \$31,481
 1993: 2,600

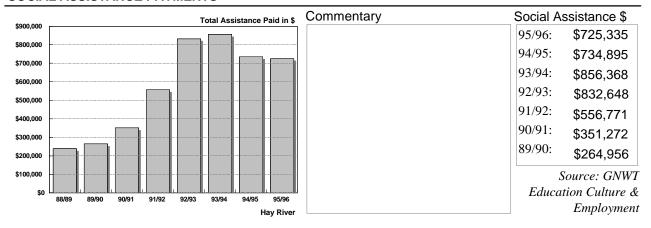
 1992: \$31,329
 1992: 2,600

 1991: \$30,323
 1991: 2,300

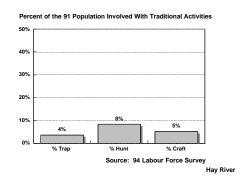
Source: Revenue Canada - Community Data

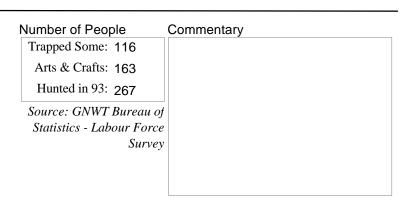
Commentary

#### **SOCIAL ASSISTANCE PAYMENTS**



#### TRADITIONAL ACTIVITIES





#### **TOURISM**

	isitor Center Signings
ribou Motor Inn lates 90, the Migrator ommodates 96, the Inn accommodates 164, ver Hotel accommodates e Cedar Rest Motel has 28 ernative accommodation be Harbour House Bed and	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED
	lates 90, the Migrator ommodates 96, the Inn accommodates 164, ver Hotel accommodates 2 Cedar Rest Motel has 28 ernative accommodation

#### HOUSING AND HOME OWNERSHIP

## Commentary

Occupied private dwellings increased 13.4% between 1986 and 1991. As of 1994, the Housing Corporation owned 152 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 46 new homes in the community.

Ownership/Type of Housing

Owned: 585
Rented: 485
Band Owned: 0

Detached: 855 Apartment: 165 Row House: 45 Trailer: 15

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

There are three schools in Hay River. Princess Alexandra School teaches grades K-3, Camsell St.PaulÆs School teaches grades 4-6, and Diamond Jenness School teaches grades 7-12. Vocational and continuing education opportunities are available through the Adult Education Centre and the Arctic College Extension Program.

#### Health

H.H. Williams Memorial Hospital was built in 1957 and has 58 beds. The community also has a public health unit.

#### Fire

The Hay River Fire Department consists of a thirtyperson volunteer brigade. Three pump trucks, a tanker, a heavy rescue unit, a rescue boat, and two ambulances are available in case of emergency. The town also has a fire training facility with a three story fire tower and training room.

#### Recreation Services

Hay River has an Active Recreation Committee. A number of events are held each year, including the Ookpik Carnival in April, the Fall Fair in September, and Canada Day Celebrations. Facilities include a recreation hall with an arena and curling rink (renovated in 1985/86), an outdoor ball, ski and golf facility (renovated in 1993/94), and the Territorial Track and Field Facility (renovated in 1991). Other facilities include a year-round pool, softball fields, playgrounds, a swimming/boating area with a public boat launch, school gyms, and the NWT Centennial Library. Hay River Territorial Park also has a public beach and camping grounds.

#### Police, Mail, Electrical and Other Services

The RCMP detachment has a staff of eleven. Other legal services include Justices of the Peace, and Mackenzie Court Workers Service from Yellowknife. Social service facilities include the South Mackenzie Correctional Centre, a six-person Community Social Services Office, a group home, a senior citizens home, and a secure facility for young offenders. Social service projects include the Soaring Eagle Friendship Centre, the Home Care Program, the Youth Justice Committee, and the Hay River Alcohol and Drug Society. Churches in the community include Anglican, Bahai, Baptist, Jehovah Witness, Pentecostal, Roman Catholic, and United.

Mail is delivered six times per week. Local and long distance calls are facilitated by NorthwesTel microwave transmission. VHF radio phone is also used. CBC Radio is broadcast using microwave transmission, while CBC Television is broadcast via the Anik satellite system. There are three Cancom television channels available, as well as a community radio station. The Hub is a local community news publication. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. Power is provided by Northland Utilities Ltd. with an 8780 kW capacity diesel generator.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the firehall, the community office, a parking garage, and a maintenance garage.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Hay River Playschool Polly's Place

#### **COMMUNITY WATER**

#### Water Supply

Hay River's source for potable water is Great Slave Lake. The Town has two main systems for the water supply. The mainland system consists of an intake structure at the bank of Great Slave Lake, a pumphouse/treatment building, and a transmission water main to the town. The Vale Island intake and pumping system consists of an intake structure located north of the island in Great Slave Lake and a transmission line to the mainland system.

Water is drawn from Great Slave Lake by means of an intake structure located 6.4 km off the north shore of Vale Island. A gravity intake pipe draws water to the wetwell on shore. The older Vale Island intake and truckfill station has been maintained as a standby facility. The Town used this facility only when water quality at the new mainland intake was of extremely poor quality.

For the mainland system, water is obtained from Great Slave Lake via an intake line. The line lays on the lake bed, except near the shore where it is buried. The intake line then passes by two filters and back to the wetwell, which is 12.8 m deep. There are presently four vertical turbine constant speed pumps connected to this system.

#### Water Storage

The 4,550,000 L concrete covered reservoir is in the south residential area. A 7 km steel transmission line crosses Vale Island from the mainland distribution system. There are 28 water service connections to this pipeline on Vale Island

The older settlement on Vale Island still receives trucked water. Truckfill points are located at the old water intake (Vale Island). All water deliveries are metered at the point of delivery. There is also an additional meter at the truckfill facility.

#### Water Treatment

The new water treatment plant (1990) was installed onto the existing mainland system where the pumphouse is located. The treatment system includes absorption clarifiers, filters, chemical systems, automatic process valves and controls, an air scour system, and an automatic control system.

#### Water Quality

Hay River's supply water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the chemical analysis the water is moderately hard, well buffered, and slightly alkaline. Comparison of the chemical analysis for the raw treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of raw water turbidity, as below the recommended maximum limits. The sand filters used are capable of keeping the turbidity levels in check. The water is undersaturated with respect to CaCO3. With respect to corrosivity, the calcium carbonate based indices indicate the water is moderately aggressive.

#### **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected twice per week by a two-person crew operating a packer truck. Bulky waste disposal is the responsibility of the individual, although some larger items are collected during the annual spring clean-up. The solid waste management site is located about 8 km south-east of the Town on the north side of Highway 5. The 150 m x 40 m x 4 m municipal landfill site is compacted daily when possible. Once per week the wastes are covered with clay material. There is partial fencing around the site and access is controlled. A separate 100 m x 200 m bulky waste storage area is used for the disposal of large items and metal wastes. Two locations in the community use used oil as fuel for heat.

#### Sewage Disposal

There is presently a piped sewage system, connected to a system of lagoons. Five lift stations are used in the Town, which discharge sewage through forcemains directly to the lagoon system for treatment.

There is also a sewage pumpout service for those living on Vale Island. Facilities serviced by trucked service include sewage pumpout tanks, and privies. All residences on the mainland which receive trucked service also have septic fields. There is no need for honeybag pickup service.

The three lift stations discharge sewage into a three-celled anaerobic lagoon system. The effluent flows into a 6.5 km drainage ditch which directs the effluent to a wetlands treatment area, eventually discharging to Great Slave Lake. The combined area of the three lagoons is 1,500,000 m2.

Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment.

The treatment system was constructed in the late 1960's and was studied by Dr. Hartland-Rowe. Published in 1974, his report showed the effluent from the wetland was no different from that of a control site nearby. The Hay River wetland sewage treatment system has become the model for high quality sewage treatment throughout the North.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

What the name means:

Alternate Name:

### POLITICAL 1981 Air Photo

Located in the future territory of: Western Arctic RWED Administrative Region: South Slave Member of the NWT Legislature: Samuel Gargan

Member of Parliment: Ethel Blondin

Mayor: Pat Martel

Senior Administration Officer: Shirley Camsell GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Smith

NWT Legislature Riding: Deh Cho Languages Spoken: South Slavey Land Claim Area: Treaty 11 - Deh Cho

LOCATION Longitude: 115.44; Latitude: 60.51

**CLIMATE** 

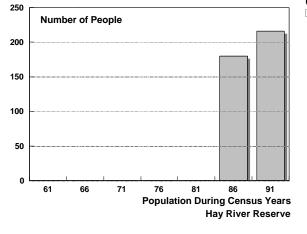
#### **TRANSPORTATION**

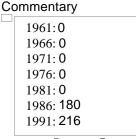
**GEOLOGY** 

#### **VEGETATION**

### **HISTORY**

#### **POPULATION**

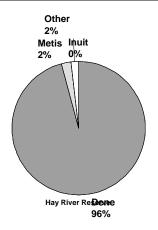




Source: Census

Population Statistics

#### **ETHNICITY**



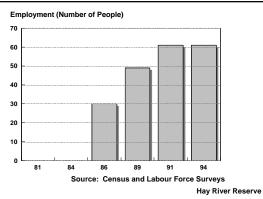


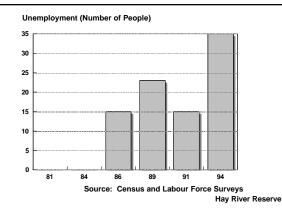
1991 Ethnicity

Inuit: 0
Dene: 207
Metis: 5
Other: 4

Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**





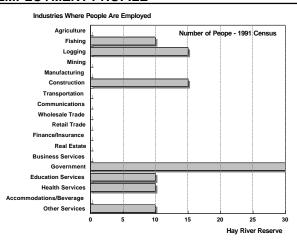
Source: 1994 Labour Force Survey, Bureau of Statistics

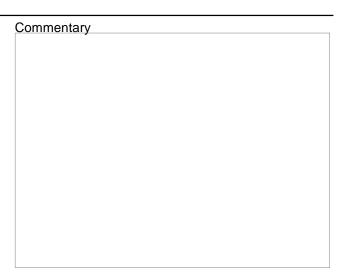
#### **Employment Statistics 1994**

Over 15 Pop:	169	Abor. Employed: 60
Labour Force:	96	Unemployed: 35
Employed:	61	Ab. Unemployed: 35

#### Commentary

#### **EMPLOYMENT PROFILE**

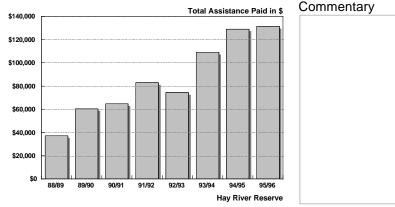


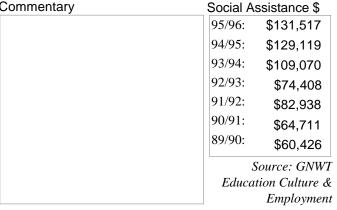


#### **INCOME AND TAXES (Revenue Canada)**

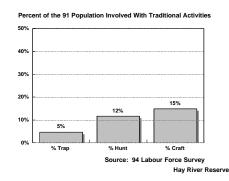
Average Incomes	People Paying Inc.Tax	Commentary
1993:	1993:	
1992:	1992:	
1991:	1991:	
Source: Revenue Can	ada - Community Data	

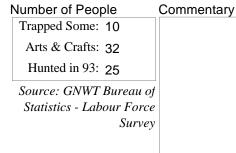
#### **SOCIAL ASSISTANCE PAYMENTS**



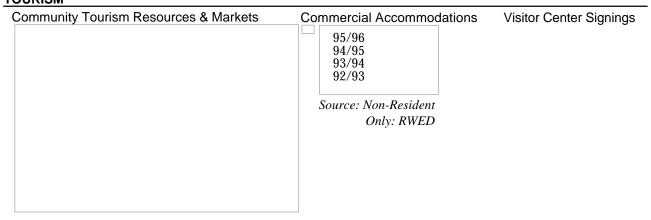


#### TRADITIONAL ACTIVITIES





## TOURISM



Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*Hay River Reserve Page 4

HOUSING AND HOME OWNERSHIP			
Commentary		Ownership/Type	of Housing
			Units
		Owned:	
		Rented:	-
		Band Owned:	50
		Detached:	55
		Apartment:	0
		Row House:	0
		Trailer:	0
		Source: 199	1 Census Data
COMMUNITY SERVICES			
Education	Health		
Fire	Recreation Services		
Police, Mail, Electrical and Other Services			
DAY CARE SERVICES - NONE REGISTERED I	F BLANK		
COMMUNITY WATER			
Water Supply			
Water Storage			
Water Treatment			
Water Quality			
COMMUNITY WASTE			
Solid Waste			

Sewage Disposal

## NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Holman

What the name means: Where There is Copper Alternate Name: Uluqsaqtuuq

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: Kitikmeot Member of the NWT Legislature: Vince Steen Member of Parliment: Ethel Blondin

Mayor: Garry Bristow

Senior Administration Officer: Agnes Egotak GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Nunakput Languages Spoken: Inuinnaqtun Land Claim Area: TFN - Kitikmeot

#### **LOCATION** *Longitude: 117.45; Latitude: 70.44*

Holman is located on the shores of Kings Bay and Queens Bay, on the western side of Victoria Island, at 70'43 N latitude and 117'45 W longitude. It is 925 air km north of Yellowknife, 507 air km north-west of Cambridge Bay, and 322 air km north of Kugluktuk.

#### **CLIMATE**

Holman receives an average of 7.4 cm of rainfall and 91 cm of snowfall per year. Mean annual precipitation totals 17.8 cm. July mean high and low temperatures are 11.4 C and 3.3 C. January mean high and low temperatures are -25.7 C and -32.7 C. The winds are generally east and annually average 18.2 km/h.

## 1981 Air Photo



#### **TRANSPORTATION**

The GNWT and the Hamlet of Holman jointly operate a 1,311 m x 30 nd gravel runway. Facilities and services include a terminal building, weather/communications equipment, and navigational aids. Scheduled flight service is available from NWT Air via Yellowknife/Kugluktuk. There is also an unlicensed water aerodrome for float plane access. Marine transportation provided by the Northern Transportation Company Ltd. barge from Hay River offers one run per year in August. There is no direct road access to Holman. Within the community there are approximately 11.7 km of roads. Because of a general lack of vehicular traffic, conventional roads have not been built. Heavily travelled trails have been covered with a layer of gravel.

#### **GEOLOGY**

Holman lies between two distinct geological areas. To the east lies late-Precambrian shales, sandstones, and limestone, forming massive escarpments. To the west is a flat and sometimes gently sloping glacial moraine belt which covers the underlying limestone, sandstone, and shale. The settlement occupies a series of raised gravel beaches, which tend to be stable and free-draining. The underlying bedrock consists of basalt flows, which are intruded by diabasic gabbro sills and dykes. Escarpments and outcrops of gabbro dominate the terrain.

Although most of the region is covered with boulders from the talus slopes, surficial soils can be found immediately to the west of the community where the land is flat and low-lying. These soils are comprised of fine sand, silt, clay, and gravel. The active layer in this portion of the continuous permafrost zone is 0.6 m thick in dry gravel and 0.9 m deep in other areas.

#### **VEGETATION**

Vegetation varies from lichens and coarse grasses to stunted shrubs.

Thursday, July 20, 1995

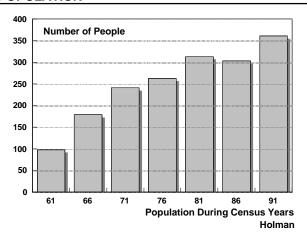
#### **HISTORY**

Holman Island is a traditional home of the Copper Eskimos. The first Europeans to visit the area were the explorers Franklin and Collinson. While on a mission to find the lost Franklin Expedition in 1851, Collinson wintered in Walker Bay off Victoria Island. Whalers rarely penetrated as far east as the Island. In 1911, Steffanson reported seeing two villages. Families hunted on Banks Island in the winter months and summered on Victoria Island to hunt caribou.

The first Hudson Bay Company post opened in 1923, moving several times before settling at Holman in 1940. The establishment of the Catholic Mission in 1940 prompted Inuit settlement around both the Post and the Mission. In 1961, the Holman Eskimo Co-operative was formed to sell arts and crafts. In 1962, the Anglican Mission was built.

Today, economic growth centres around the arts and crafts industry. Printmaking has become a lucrative industry. Trapping, hunting and fishing, and oil and gas exploration are also prominent industries. Business includes contracting, taxi service, general retail, food retail, sporting goods sales, hotels, outfitters and amusement centres. Holman gained Hamlet status on April 1, 1984. The traditional name of the Community, "Uluqsaqtuuq", means where there is copper.

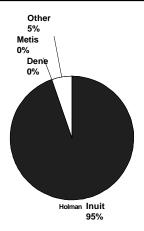
#### **POPULATION**

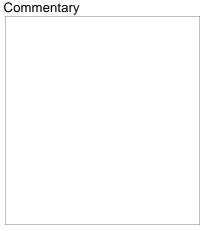




**Population Statistics** 

# **ETHNICITY**

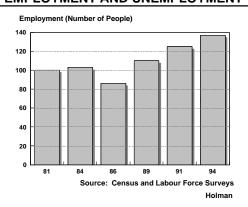


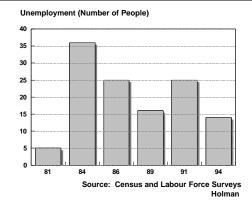


1991 Ethnicity Inuit: 342 Dene: 0 Metis: 0 Other: 19

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





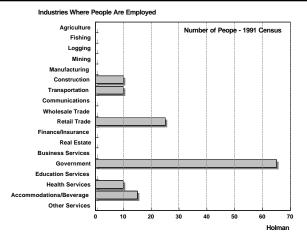
Source: 1994 Labour Force Survey, Bureau of Statistics

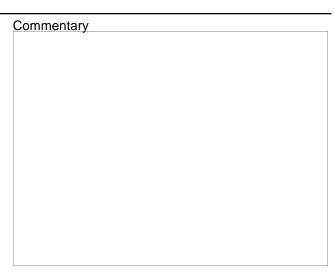
# **Employment Statistics 1994**

Over 15 Pop: 256 Abor. Employed: 122 Labour Force: 150 Unemployed: 13 Employed: 137 Ab. Unemployed: 13

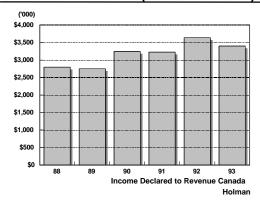
# Commentary

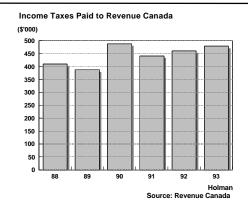
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$16,980 1992: \$18,170

1991: \$16,984

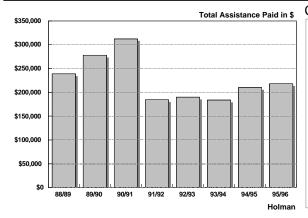
1993: 2001992: 2001991: 190

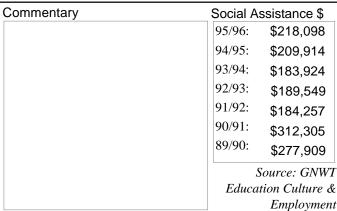
Source: Revenue Canada - Community Data

# Commentary

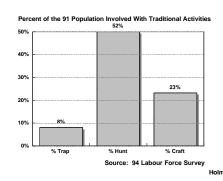


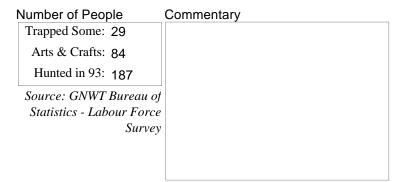
#### **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Arctic Char Inn accommodates sixteen guests.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary

Ownership/Type of Housing

The number of occupied private dwellings increased 43.2% between 1986 and 1991. As of 1994, the Housing Corporation owned 90 housing units. The Housing
Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 23 new homes in the community.

Detached: 90

Apartment: 0

Apartment: 0
Row House: 20
Trailer: 0

Source: 1991 Census Data

**Holman Page 5** 

# **COMMUNITY SERVICES**

#### Education

Helen Kalvak School teaches grades K-9. Four teachers are employed. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

#### Health

The health centre (558 m2), built in 1982, contains three medical beds, one bassinet, and one crib. There are two nurses on staff.

# Fire

An eleven-person volunteer fire brigade uses a triple combination pumper truck to fight fires. A call box system is in place for quickened response. The firehall (two-bay) was built in 1990.

# **Recreation Services**

Holman's recreation complex (1990) which contains an arena and curling rink. It replaces the outdoor rink which was disassembled in 1991. A gymnasium was built as part of the school in 1986. There are two softball diamonds, a playground at the school, two tot-lots, a developed trail system and a well-maintained nine-hole golf course. The community also has a museum and holds a Jamboree Festival. Holman has an Active Recreation Committee.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs one officer. Social services are available from Kugluktuk. Mail is delivered twice per week. NorthwesTel local and long distance telephone service, CBC Radio and CBC Television are available through the Anik satellite system. NWTPC provides 810 kW capacity of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a Hamlet office (1986), a two-bay garage, and a maintenance garage. There are two three-bay parking garages; one is wood-framed and the other, steel-framed.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Holman Day Care

# **COMMUNITY WATER**

#### Water Supply

Holman's water source, Air Force Lake, is located approximately 2 km north-east of the community. A well-constructed, 2.1 km road connects Holman with a deep bay which terminates at the Lake's south-western arm.

In the past, it was a difficult and inefficient process to get water. The water truck had to draw water through a length of suction hose from either Air Force Lake or the alternate source, the Ukpillik River. During the summer, the round trip travel time from the community to RCAF Lake was 15 minutes; hooking up the suction line, filling, and unhooking required another 10 minutes. In the winter, this process was even longer.

In summer, the truck turned around at the top of the hill above RCAF Lake and backed down to the filling pad. The pad had not been made large enough for the truck to turn around. In winter, a filling hole was kept open in the lake ice a few meters offshore, and the truck was able to turn around on the lake. The hole was made and maintained by hand using ice chisels, a laborious and time-consuming task. Now, a permanent intake draws water from a point about 50 m from the shore. Water is piped from the intake to a truck loading pumphouse on the shore of the lake.

#### Water Storage

Air Force Lake occupies a relatively deep valley between the main gabbro sill and the most westerly subsidiary gabbro ridge. It drains from its south-eastern arm and has a depth of 28 m. The level is stable from cycle to cycle and from year to year and provides an excellent location for water storage.

In 1986, construction began on intake, truckfill, and storage (15,911 L) facilities. The intake consists of twin casing pipes. The screen on the intake is stainless steel and the intake is buried in a sand and gravel mixture. The lines are also heat traced. The truckfill station contains dual electric submersible pumps.

The pumphouse and intake facility is designed to provide full pumping capability on demand. Preliminary procedures, such as opening or closing valves, or even entering the building, are now unnecessary. It is self-sustaining, with an automatic standby power source, proper heat and heat tracing, and an alarm system.

Operation and maintenance of the pumphouse is separate from water haul operation. The water truck operator obtains water from the truckfill pipe using a remote control panel to activate the pump.

Access to the pumphouse is via the 1.8 km gravel road. Intermittent clearing of snow with the grader is necessary in the winter months. Discussion with the water-haul operators indicates that no serious problems are encountered in traversing the road. With the prevailing winds from the north-east, the area is sheltered by the escarpment to the east.

Treated water is delivered to the residents from the truckfill station with a 1500 L water truck. The Hamlet provides water delivery three times per week. All water deliveries are metered.

# Water Treatment

Water treatment takes place at the truckfill station. A hypochlorinator kit, consisting of two 114 L tanks with mixers, is used for chlorine injection.

#### Water Quality

Holman's supply water is of good to excellent chemical quality for domestic use. Based on chemical analysis the water is clear, moderately-hard, well-buffered, slightly alkaline and has a moderate amount of dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

#### COMMUNITY WASTE

#### Solid Waste

Domestic garbage is stored in used fuel drums, placed in front of each home prior to collection. A collection crew of two uses a Ford model F-350 Haul-All to collect waste twice per week. Local by-laws do not permit the burning of wastes in oil drums

The present solid waste management site (22,500 m2) is located approximately 1.5 km from the Hamlet, on level ground north of Airport Road. Burning of wastes at the site is practiced once per week and an adjacent hillside provides a granular source for cover material although it is frozen for nine months of the year.

#### Sewage Disposal

About half of the buildings were equipped with pressure plumbing systems and sewage tanks in February, 1984, while the other half remained on honeybag service. In 1991, 89 buildings were upgraded to pumpout service. A 4500 L sewage pumpout truck services homes three times per week.

Sewage and honeybags are taken to a site approximately 4.5 km north-west of the Hamlet. Pumpout waste is treated in a single cell lagoon (17,671 m2), while the honeybags are placed in a separate cell adjacent to the lagoon. Bagged sewage is placed on the ground near the garbage drums prior to collection. Sewage bags are collected twice per week using the same collection vehicle as for solid waste collection but kept separate from the other wastes.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# <u>Igloolik</u>

What the name means: Place of Houses Alternate Name: Iglulik

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Mark Evaloarjuk

Member of Parliment: Jack Anawak

Mayor: Aime Panimera

Senior Administration Officer: Nicole Tessier GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Amittuq Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

#### **LOCATION** *Longitude:* 81.48; *Latitude:* 69.23

Igloolik is located on Igloolik Island, in the Foxe Basin lowlands, at 69'236 N latitude and 81'466 W longitude. It is bounded on the north by the Fury and Hecla Straits and separated from the Melville Peninsula to the south by Hooper Inlet. Igloolik is 362 air km north-east of Repulse Bay and 1641 air km north-east of Yellowknife.

#### CLIMATE

Iglooliks Arctic summer rarely lasts longer than three months. A true arctic desert location, precipitation in snowfall averages 19.1 cm per year. July mean high and low temperatures are 7.8 C and 3.3 C. January mean high and low temperatures are -23.3 C and -32.8 C. The winds are generally north and annually average 21 km/h.

#### **TRANSPORTATION**

The GNWT and the Hamlet of Igloolik jointly operate a 1,158 m x 30 m certified Arctic C gravel runway. Facilities and services include a terminal building (1994), navigational aids and weather reading equipment. Scheduled flight service is available with First Air via Iqaluit. Marine service is provided by Eastern Arctic Sealift and Transport Canada (Montreal). Facilities include a beach landing and a new breakwater system. A new sealift area has been reserved for development at a later date. Marine access is available between late-July and early-October.

There is no direct road access to Igloolik. Within the community there are 8.3 km of roads which are graded and gravel surfaced. Calcium chloride is applied annually to 5.5 km of road to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

The glaciation which shaped the landscape retreated from this region five thousand years ago. The Island is composed of a dolomitic conglomerate, with sandstone, dolostone and siltstone interspersed throughout. Predominant features on the Island are the east and west ridges called "buttes".

Igloolik is very low, heavily-ponded and has extensive tidal foreshore flats. Most surficial deposits make up a thin layer on the Palaeozoic beds, with raised beaches being the most common features. Any drift deposits are subject to extensive frost action. Permafrost is present throughout the active layer, averaging 0.7 m in depth.

#### **VEGETATION**

Mosses, lichens, and grasses are the predominant vegetation species found.

#### 1981 Air Photo



Thursday, July 20, 1995

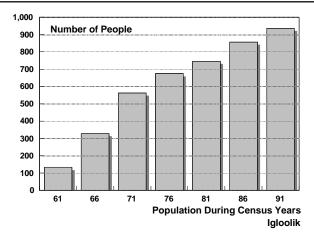
#### **HISTORY**

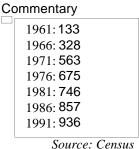
Igloolik is one of the few locations in the Arctic which provides evidence of uninterrupted Inuit habitation. Among the many cultures of Inuit who settled there, the oldest are the Sarqaq (Denbigh) and Dorset peoples. European contact with the Iglulik Eskimo was first made by Thomas Button, a 17th-century explorer. In 1823, Captain W.E. Parry spent the winter at Igloolik. During the second half of the 19th century, whalers occasionally penetrated through the pack ice and into the Foxe Basin. In 1937, the Roman Catholic Mission was established. The Hudson Bay Trading Post followed in 1939. During the 1940's, the addition of a school and a government building led to Igloolik's emergence as a settlement of major status in the Baffin Region. The establishment of the DEW-line station at Hall Beach also impacted the economy of Igloolik.

The community remains very traditional. Marine mammal harvesting, hunting, fishing, and trapping are the major economic activities. The sale of handicrafts has helped to aid the tourism industry. Despite little private sector activity, the community has more Inuit business ownership than elsewhere in the Baffin. Some local businesses include building contractors, taxis, general retailers, food sales, sporting goods, hotels, outfitters, restaurants, and amusement centres. The Science Institute of the Northwest Territories operates a science laboratory in the Community.

Igloolik gained Hamlet status on April 1, 1976. The traditional name of the Community, "Iglulik", means place of houses.

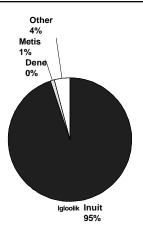
#### **POPULATION**





**Population Statistics** 

# **ETHNICITY**



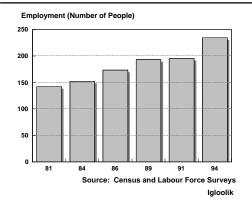


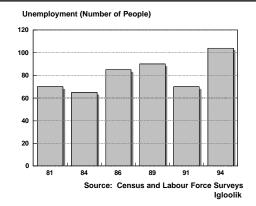
1991 Ethnicity Inuit: 888 Dene: 0 Metis: 10

Other: 38

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





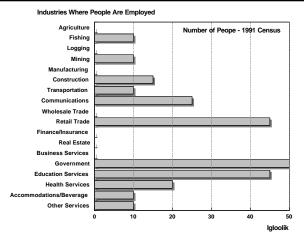
Source: 1994 Labour Force Survey, Bureau of Statistics

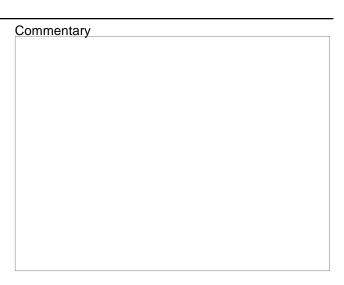
# **Employment Statistics 1994**

Over 15 Pop:	625	Abor. Employed: 209
Labour Force:	336	Unemployed: 102
Employed:	234	Ab. Unemployed: 102

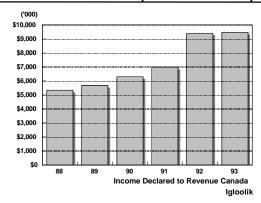
# Commentary

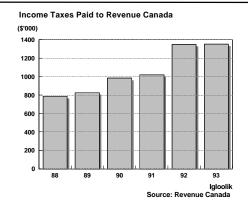
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

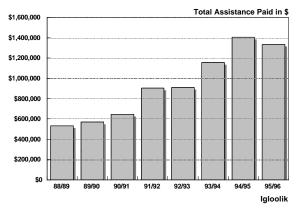
1993: \$20,591 1992: \$20,476 1993: 460 1992: 460 1991: 410

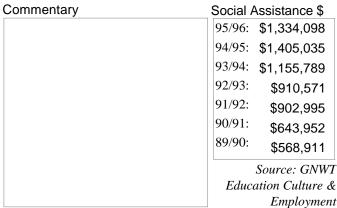
Source: Revenue Canada - Community Data

# Commentary

# 1991: \$17,059 1991: 410

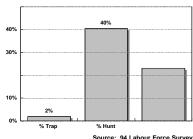
#### **SOCIAL ASSISTANCE PAYMENTS**

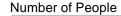




# TRADITIONAL ACTIVITIES

Percent of the 91 Population Involved With Traditional Activities

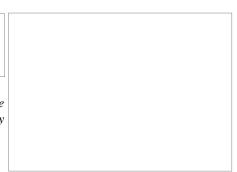




18 Arts & Crafts: 216

Hunted in 93:

Statistics - Labour Force Survey



# **TOURISM**

The Tujormivik Hotel accommodates fifteen with shared bath facilities.

95/96
94/95
93/94
92/93

Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing
The number of occupied private dwellings increased 19.5% between 1986 and 1991. As of 1994, the NWT Housing Corporation owned 175 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-own units have accounted for 39 new homes in the community.	Units 25 Rented: 150 Band Owned: 0
	Detached: Apartment: Row House: Trailer:

# **COMMUNITY SERVICES**

Attagutaluk school teaches grades K-12. Twenty

Continuing education opportunities are available through the Arctic College Extension Program.

#### Fire

A twelve-person volunteer fire brigade uses a 1978 IHC model 1200, 4546 L triple combination pumper to fight

residence, was built in 1983. It contains three medical beds, one bassinet, and two cribs while employing seven medical staff.

# **Recreation Services**

m2) was built prior to 1985. The gymnasium is located

Mail is delivered twice weekly. NorthwesTel local and long distance telephone service and CBC Television are available via the Anik satellite system. NWTPC provides 1,350 kW capacity diesel-generated power to the Hamlet.

(312 m2), a two-bay parking garage (163 m2), two 3-bay parking garages (134 m2 and 253 m2), and a three-bay mainten garage (198 m2).

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

Thursday, July 20, 1995 6

#### **COMMUNITY WATER**

#### Water Supply

Prior to the construction of the new reservoir, three sources were used for potable water, depending upon seasonality: (Airstrip Lake from late May to July following the spring thaw. Its recharge is not sufficient to supply the community year-round. The lake freezes to the bottom in winter); (North Lake was the source from July to September. Its use was limited due to its shallow depth); and (East Lake was used during the winter. It is 3 - 6 m deep, 2.4 km long, and has a large capacity. However, it is only accessible by winter road across Turton Bay).

The present source of water is surface runoff entering South Lake and Airport Lake, at a point about 3.5 km from the community. The intake screen at South Lake is positioned approximately 2 m below the surface of the lake. The system

#### Water Storage

with the water from Airport Lake. Although the watersheds are relatively small, sufficient annual recharge is available to

All water used in Igloolik is supplied by a trucked system. The delivered supply is supplemented to some extent by

Water delivery is provided by the Hamlet using three water trucks, a 1986 model (4546 L), a 1988 model (5683 L) and a 1992 model (6819 L). Homes with pressure systems receive water every other day, while those homes using

# Water Treatment

The truckfill station contains a Wallace and Tiernan Series A-745 hypochlorinator and other equipment. Fluoridation injection equipment was installed in 1990 to provide fluoride solution to the raw water en route to the reservoir.

Water Quality

#### **COMMUNITY WASTE**

# Solid Waste

Garbage is stored in wooden boxes in front of each home prior to collection. At least twice per week a two-person

Two trucks (4546 L and 6810 L) are used to collect pumpout sewage. Bagged sewage, stored in 204 L barrels, is

system (1%) will be converted to the pumpout system. The Research Centre uses humus toilets, allowing for servicing once every eight months rather than multiple times per week.

The sewage treatment site is located 1.6 km north of the Hamlet. The sewage lagoon, first used in 1989, was increased in size substantially in 1991 to 8,000 m2. At the separate 10,000 m2 honeybag pit, materials are buried annually.

#### NOTES AND COMMENTS

Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being

assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Inuvik

Alternate Name: Inuuvik

#### **POLITICAL**

Member of the NWT Legislature: Floyd K. Roland

Member of Parliment: Ethel Blondin

Mayor: Tom Zubko

Senior Administration Officer: Don Howden GNWT Assigned Level of Development: Level 1 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Inuvik

Languages Spoken: Inuvialuktun/Gwich'in

Land Claim Area: Inuvialuit

**LOCATION** *Longitude: 133.43; Latitude: 68.21* 

Inuvik is located on the East Channel of the Mackenzie River Delta at 68'21'N latitude and 133'43'W longitude. The Town is 1086 km northwest of Yellowknife and 1931 km north of Edmonton.

#### **CLIMATE**

Inuvik receives an average of 11.5 cm of rainfall and 177.0 cm of snowfall per year. Mean annual precipitation totals 26.6 cm. July high and low temperatures are 19.4 C and 7.8 C. January mean high and low temperatures are -24.7 C and -34.4 C. Winds are generally east and annually average 10.2 km/h.

# **TRANSPORTATION**

The controlled airport, located 7 km east of the Town, has a 9600 m x 240 m asphalt runway. Facilities include taxiways and apron, airfield lights, VASIS, rotating beacon, lighted wind socks, and NAVAIDS. Airfield service maintenance is available. Scheduled and chartered services are available for fixed-wing and helicopter transport. The road system was improved greatly with the start of a street improvement and surfacing program in 1976. Since then several subgrade designs have been used, including soil cement on Wolverine Road and 100 mm thick rigid styrofoam subgrade insulation on Mackenzie Road. The pavement designs include 75 mm of hot mix surface course over a 100 mm asphalt bound base on major streets. Due to permafrost conditions most roadways are built on imported granular fill, which may be up to 3 m deep in places.

Overland drainage in shallow road ditches generally runs in a south-westerly direction. Ditches are graded toward culverts across Mackenzie Road which drain to the East Channel of the Mackenzie River. Most drainage problems were alleviated in the early 1980's due to the Street Improvement Program. The Dempster Highway links Inuvik to Dawson City, Yukon. There are winter ice roads to Aklavik and Tuktoyaktuk. Barge service from Hay River operates in the summer.

#### **GEOLOGY**

The three major physiographic regions in the Inuvik area are the Mackenzie Delta, the Caribou Hills, and the Anderson Plains. Inuvik is situated on a river terrace in the Delta Region. The land rises gently to the north-east and is characterized by fine-textured, sandy-silty clay which is underlain by a silt-clay with gravel material. Within the continuous permafrost region, ice lensing is common. The active layer varies in thickness from 45 - 75 cm.

The Anderson Plains Region, to the east, is an area of gentle undulations, knolls and hummocky hills which was modified extensively by glaciation. Palaeozoic rocks underlie Quaternary sediment deposits in this area and bedrock cover is generally thin. The Caribou Uplands, north and west of Inuvik, are composed of thin Quaternary sediments,

#### **VEGETATION**

White spruce, birch, alder, and poplar are common on open slopes and hilltops where drainage is good. Black and white spruce occupy gentler slopes and lower areas. In low, poorly-drained areas, lichens, sedges, cotton grass, and sphagnum are found mixed with black spruce.



Thursday, July 20, 1995

#### **HISTORY**

The site of Inuvik was seldom visited until 1954, when the Federal Government decided to move the entire community of Aklavik, which had just undergone severe flood damage. The Inuvik site was selected mainly because of the large, level area, sitting well above possible flood levels, the presence of good gravel materials for construction, its location on a navigable waterway, and the opportunities for modern airport facilities.

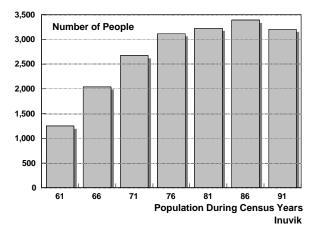
Inuvik's location was chosen quickly by Ottawa in 1954. Jean LeSage, then Minister of Indian and Northern Affairs arrived that summer to view the situation. East Three as it was known was agreed upon as a suitable site. Curt Merrill, an enthusiastic geologist who had served in various positions for DIANA, became the manager of the move from Aklavik to what would soon be Inuvik. Several million board feet of lumber from Alberta were barged up the Mackenzie that summer, effectively cutting a year off construction time and helping to facilitate the move. Most of the construction began the next season (1955). Even with the success of East Three, it was apparent then that Aklavik would remain a strong community.

The government dock was built in 1956, as well as a temporary school. Construction of the airport also began in 1956. Water and sewage systems were developed in 1957, with Hidden Lake then being the summer water supply source. The potable water, which was pristine, was chlorinated anyway due to standard policy. Above-ground utilidors were in use initially for only those who could afford the service. By the 1970's, previously unserviced areas were now able to receive the more modern level of service.

The RCMP detachment and a nursing station were constructed by 1961. The population increased significantly when oil was discovered in the Beaufort Sea.

The Canadian Forces Base officially closed its doors in 1986, dealing a blow to the Towns economy. The building has since become the Aurora Campus of Arctic College. Inuvik has grown from a government centre to a communications hub, as well as a staging platform for oil and gas exploration. It is the major transportation, health, and education centre for the region. Oil and gas exploration, clothing manufacturing, building contracting, air transport, truck transport, wholesale, general retail, fabrics, vehicle dealers, opticians, insurance and real estate, architects/engineers, hotels, outfitting, environmental consultants, restaurants, bars, funeral services, and travel services are some of the businesses which can be found in the Town.

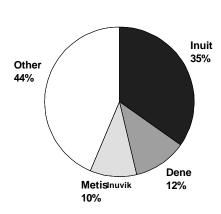
Inuvik gained Town status on January 1, 1979. Inuvik means "place of man" in Inuktitut.



# Commentary

1961: 1,248 1966: 2.040 1971: 2,672 1976: 3,116 1981: 3,225 1986: 3,389 1991: 3,206 Source: Census **Population Statistics** 

# **ETHNICITY**



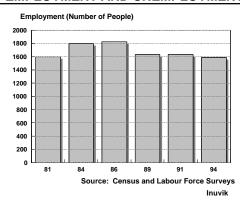


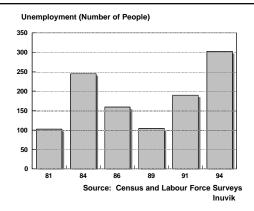
1991 Ethnicity

Inuit: 1,114 Dene: 370 Metis: 324 Other: 1,398

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





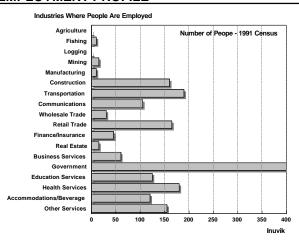
Source: 1994 Labour Force Survey, Bureau of Statistics

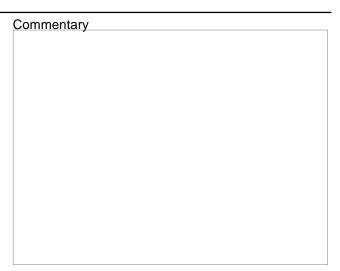
# **Employment Statistics 1994**

Over 15 Pop: 2,303 Abor. Employed: 472 Labour Force: Unemployed: 311 1,897 Employed: Ab. Unemployed: 275 1,586

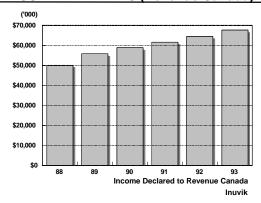
# Commentary

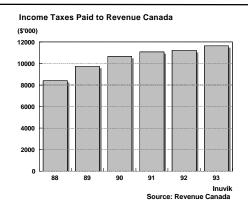
# **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$32,819 1992: \$34,120

1991: \$32,426

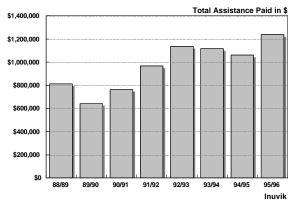
1992: 2,060 1991: 1,900

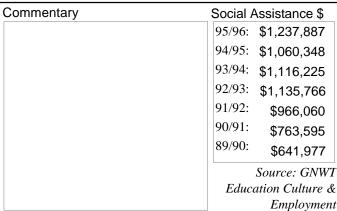
1993: 2,060

Source: Revenue Canada - Community Data

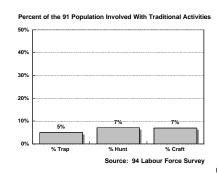
#### Commentary

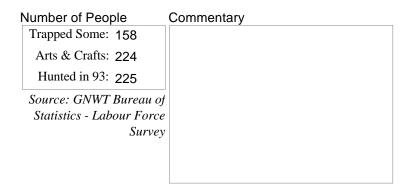
# **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Eskimo Inn accommodates 156 and includes radio, telephone, television, a licensed lounge, a licensed dining room, a coffee shop, and conference/banquet facilities. The Finto Motel accommodates 70 and includes telephone, television, radio, refrigerator, two licensed lounges, a licensed dining lounge, and conference/banquet facilities. The Mackenzie Hotel accommodates 60 and includes a licensed dining room, a banquet room, three licensed lounges, a coffee shop, television, and radio. The Inuvik Inn can accommodate 10 in 5 rooms. Banquet and catering service are available as well as a licensed cafe.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing
Occupied private dwellings increased 6.0% between 1986 and 1991. As of 1994,	Units
the Housing Corporation owned 284 housing units. The Housing Assistance Program,	Owned: 205
the Alternative Housing Program, and the Government Lease-to-Own Program have	Rented: 895
accounted for 68 new homes in the community.	Band Owned: 0
	Detached: 315
	Apartment: 350
	Row House: 360
	Trailer: 80
	Source: 1991 Census Data

# **COMMUNITY SERVICES**

# Education

Sir Alexander Mackenzie school teaches grades K-6 while Samuel Hearne Secondary teaches grades 7-12. Fifty-five teachers and three classroom assistants are employed in total. Vocational and continuing education opportunities are available through the Adult Education Centre, which staffs one adult educator, and the Aurora Campus of Arctic College. The Inuvik Education Society takes an active role in the educational process.

# Health

The Inuvik General Hospital, built in 1963, has 64 beds and 10 bassinets. The hospital employs 75 medical staff. Within the Town there are private medical and dental clinics.

#### Fire

Inuvik's staff of firefighters includes 24 volunteers and a fire chief. Equipment includes a 1970 Thibault pumper (2273 L), a 1976 Seagrave pumper (2273 L), an ambulance, a GMC light rescue van with support unit, a 1975 IHC pumper, and an 11,365 L tanker (19 L/s). The fire chiefÆs truck is equipped with a dry chemical unit. Ground ladders (12 m and 18 m) are at the ready in case of emergency. Fifty-three alarm boxes help to quicken response time to emergency calls.

#### Recreation Services

An above-ground swimming pool was completed in 1991. Other facilities include an arena, a curling rink, a track, mini-golf, school gyms, parks and playgrounds, tennis courts, a swimming pool, softball fields, ski trails, and a beach area. The Inuvik Centennial Library displays local artifacts. The Sunrise Festival, welcoming the return of sunlight, is in January. In March, the International Curling Bonspiel takes place. Scheduled in April are the Top of the World Ski Championships. Canada Day celebrations are held in July and Delta Daze celebrations are in September. Inuvik has an Active Recreation Committee.

#### Police, Mail, Electrical and Other Services

The RCMP detachment has a staff of seventeen. The Community Social Services Office has a staff of ten. Social services facilities and services include the Northern Lights Treatment Centre, a group home, the community social service project, the Inuvik Council for Disabled Persons, Delta House (alcohol and drug program), Youth Drop-In Centre, Canadian Mental Health Association, Ingamo Hall Friendship Centre, Inuvik Day Care Centre, senior citizens home, and the Home Care Program.

Mail is delivered six times weekly. Local and long distance telephone service is provided by NorthwesTel using microwave transmission. VHF radio/telephone service is available. CKEV FM is a local radio station. CBC Radio has a local production centre in Inuvik and is broadcast over the microwave linkup. CBC Television is broadcast via the Anik satellite system. The Drum is a local weekly newspaper and Tusaayaksat is a local monthly. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories.

NWTPC provides 12,250 kW of power to the Town. As the NWTPC Regional Office, Inuvik provides service to Sachs Harbour, Paulatuk, Tsiigehtchic, Fort McPherson, Aklavik, Deline, Fort Good Hope, Fort Norman, Norman Wells, and Tuktoyaktuk. Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the firehall, the town office, a parking garage, and a maintenance garage.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Brighter Starts Family Day Home Inuvik Day Care Centre Inuvik Preschool Midnight Sun Smarts and Smiles Family Day Home

#### **COMMUNITY WATER**

#### Water Supply

During the winter months, water is drawn from the East Channel of the Mackenzie River Delta through a portable intake pumphouse set up on the ice. During the summer, the supply is Lake B (Three Mile Lake). Water is pumped from Lake B to Hidden Lake, a lake near the town which is used as the storage reservoir. Additional storage tanks are used at this elevation which "float" on the distribution system to maintain gravity pressure.

During the winter, treated water originating from the East Channel source is pumped to the storage tanks. Inuvik has access to good supplies of water during winter and summer, however, spring break-up and fall freeze-up produce water which is less than desirable. The Town will need to build an all-season intake in East Channel and a clarification stage on the water plant before the summer supply system becomes outgrown or is uneconomical to maintain.

NWTPC recently rebuilt the intake pumphouse, which pumps raw water to the water treatment plant situated immediately north of Duck Lake. The single pump in the portable pumphouse is a Flygt 20 L/s @ 55 kPa submersible pump. The raw water is pumped through 1585 m of 100 mm diameter pipe in a utilidor to Hidden Lake.

The intake at Lake B consists of a 39 m pipeline and catwalk supported on 15 piles. The pumphouse contains one split case Peerless Model 4AD18.5 Series 5200 single stage double suction horizontal pump, which is used with a standby unit. Its 56 kW, 1800 rpm motor operates at a 15 L/s capacity.

Water is pumped above-ground 4.9 km from Lake B to Hidden Lake through 200 mm and 150 mm diameter insulated unlined steel pipes. A right angle offset of 2.1 m is provided every 122 m. The pipeline delivers 3600 m3 of water per day to Hidden Lake. The screened intake is situated in approximately 1.2 m of water and can be raised out of the water prior to winter each year.

#### Water Storage

Treated water from both intake sources is stored in a 2,220,000 L reservoir on Hidden Lake Hill. A 660 m utilidor connects the storage facilities to the distribution facilities.

#### Water Treatment

The water treatment plant (filter/booster pump stage) located at the winter intake was built in 1980. Its capacity (5230 m3/day) is reported to be adequate to serve a projected population of 8000. It is the filtration stage of the proposed clarification plant.

The plant contains water preheating facilities, gravity filters, chlorination and fluoridation equipment, distribution pumps, and connections to the existing booster stations and to the water distribution system. The treated water is pumped to storage facilities at Hidden Lake prior to being distributed.

The microstrainer plant, located at the high point between Hidden Lake and Inuvik, was used to strain out algae from the raw water. This facility is no longer in use due to increased volume distribution; it was bypassed and dismantled.

Water bypassed from the microstrainer is chlorinated and fluoridated prior to entering a storage tank in the microstrainer building. The Hidden Lake transfer pump moves water from this 400 m3 chlorine contact tank to the 2275 m3 storage tank located at the high point of the system near Hidden Lake. These tanks "float" on the distribution system and provide for peak consumption and fire flow demands.

#### Water Quality

Inuvik's winter supply water is of good chemical quality for domestic use. The water, for the time of season for which it was sampled, was shown to be hard, fairly well buffered, and undersaturated with respect to CaCO3. Comparison of the chemical analysis for the raw and treated water to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

#### **COMMUNITY WASTE**

#### Solid Waste

Collection of both domestic and commercial wastes is contracted out. Garbage is placed in 205 L oil drums or 10 L garbage cans outside the homes and collected twice per week by a crew of one or two. A packer truck is used for added compaction. Bagged sewage, if any, is collected with the domestic garbage.

The 500 m x 350 m solid waste management site is located 1 km south of Inuvik on sloping land. The site is expected to adequately serve the needs of the community for a few more years.

Burning of wastes at the site no longer is practised. Fires are potentially dangerous as the underground peat moss has, in the past, burned uncontrollably for months. The site is covered periodically as required with clay based silty soil and course sand from an adjoining quarry. The wastes are compacted as required.

#### Sewage Disposal

The gravity sewer collection system consists mainly of asbestos/cement pipes (100 mm - 350 mm diameter). An insulated 200 mm diameter above-ground outfall line discharges to a sewage lagoon located beside East Channel, west of Town.

The small sewage station in Block 20 pumps sewage from two buildings through a 40 m force main to a high point in the utilidor. The station in Block 45 pumps sewage from sixteen row-housing units 80 m to gravity main line utilidor. This station is owned and operated by the Federal Government and is not part of the public utility.

Since 1957, Inuvik's domestic sewage has been discharged to a lagoon west of the townsite. The 20 ha lagoon, which has an average depth of 1.2 m, was formed by constructing berms along three sides of a low-lying area. In 1982, the lagoon system was upgraded to comprise two primary cells and one large secondary cell. The inlet end of what was formerly a single cell lagoon has also been separated by dykes, forming two additional cells enclosing old sludge deposits.

Control structures direct inflow to one or another of the primary cells, and allows crossflow between cells. An outlet weir at the north end of the secondary cell discharges through a short natural channel to the west bank of East Channel below the townsite. The Town provides a bagged sewage pick-up service for the units remaining on trucked water service.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# <u> Iqaluit</u>

What the name means: Place of Fish Alternate Name: Frobisher Bay

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Edward Picco

Member of Parliment: Jack Anawak

Mayor: Joe Kunuk

Senior Administration Officer: John Raycroft GNWT Assigned Level of Development: Level 2 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Iqaluit Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

**LOCATION** *Longitude:* 68.31; *Latitude:* 63.45

Iqaluit, the capital of Nunavut, is located at the south end of Baffin Island, on Frobisher Bay, at 64044N latitude and 68031W longitude. It is 2060 km north of Montreal and 2275 km east of Yellowknife.

#### **CLIMATE**

Iqaluit receives an average 19.2 cm of rainfall and 255.0 cm of snowfall per year. Mean annual precipitation totals 43 cm. July mean high and low temperatures are 11.4 C and 3.7 C. January mean high and low temperatures are -21.5 C and -29.7 C. The winds are generally from the north-west and annually average  $16.7 \, \text{km/h}$ .

# **TRANSPORTATION**

A licensed 9000 m x 200 m asphalt runway is operated by the GNWT. The airstrip was designed to land the larger Canadian and American military aircraft. Flight services are available from Canadian North, First Air, and NWT Air. Iqaluit acts as a gateway to all the communities of the Baffin and will be the primary transportation centre for Nunavut. It is also a gateway to Yellowknife, Ottawa, and Montreal. Facilities and equipment include a modern terminal building, navigational aids, and weather reading equipment.

An unlicensed float plane water aerodrome sits at the north end of the town; break-up is in the middle of July and freeze-up is at the beginning of November. Eastern Arctic Sealift is active in the summer months. There are no direct road access to Iqaluit. A network of local roads link the entire town, including the nearby community of Apex. Most of the roads are composed of gravel, which is in abundant supply. A dust problem was partially alleviated in recent years by paving the main roads. Due to the severity of permafrost, paved roads are susceptible to the effects of frost heave and subsequent structural damage.

#### **GEOLOGY**

A rolling terrain surrounds the community. The subsoil is made up of glacial drifts over a predominantly granite Precambrian bedrock. The layer of overburden, silty sand, gravel, and boulders varies from 0 to 18 m thick and has numerous surface depressions. As a result, ponds are prevalent in the summer months. The depth of thaw in the permafrost ranges from 1 m to 1.8 m. The water table is very high and segregated ice lenses may be found.

# **VEGETATION**

Lichens, mosses, hardy flowers, and grasses flourish in the summer months.

# 1981 Air Photo



Thursday, July 20, 1995

#### **HISTORY**

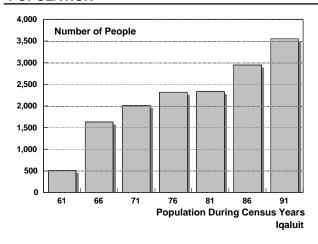
In 1576, Sir Martin Frobisher, in search of the Northwest Passage, sailed into what would later become known as Frobisher Bay. The eighteenth and nineteenth centuries saw the movement of many European whaling vessels throughout Frobisher Bay and Cumberland Sound. In 1861, C.F. Hall proved that the Bay was not the strait to the East which Frobisher had dreamt of.

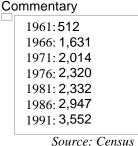
The settlement started by the Hudson Bay Company at Ward Inlet in 1914 had little effect on the outlying camps in the area and the true development of the present community did not begin until a U.S. Air Force base was established in 1942 near the site of a traditional Inuit fishing camp called Iqaluit. The base was turned over to the Royal Canadian Air Force from 1946-1950, and significant growth did not occur in the area until DEW-Line construction began in 1955. Even though the DEW-Line site closed soon after, the beginnings of a modern economy had attracted permanent settlement to the area. By the mid-1960's, infrastructure and development were growing rapidly.

Iqaluit's role in the economy of the Baffin Region has been central. Primarily based on government services and communications, the Town acts as a springboard to all points northward. Fishing, boating, and dogsled charters make up a significant portion of the tourism industry. Although not as primary an industry as in the past, marine-mammal and game harvesting is still a principal source of income in this rapidly growing economy. Local business include: clothing manufacturing, publishing, contracting, buses, taxis, fabrics production, service stations, vehicle repairs, florists, opticians, accounting, architects/engineers, lawyers, consultants, outfitters, photographers, and travel services.

Iqaluit, which means place of fish gained Town status on October 1, 1980 and changed its name from Frobisher Bay on January 1, 1987.

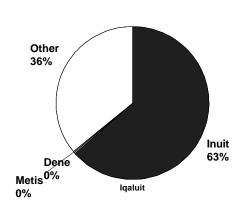
#### **POPULATION**

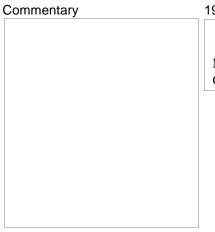




**Population Statistics** 

# **ETHNICITY**

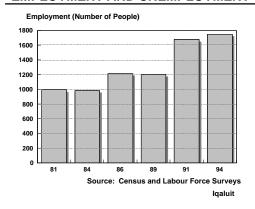


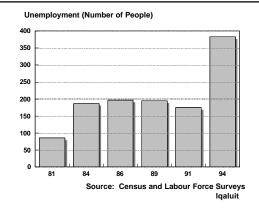


1991 Ethnicity Inuit: 2,255 Dene: 11 9 Metis:

Other: 1,277 Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





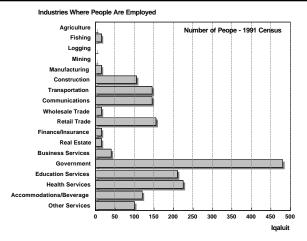
Source: 1994 Labour Force Survey, Bureau of Statistics

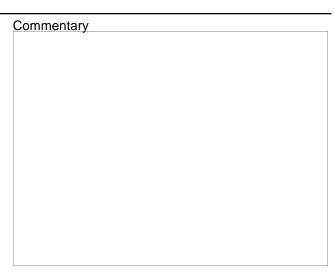
# **Employment Statistics 1994**

Over 15 Pop: 2,697 Abor. Employed: 656 Labour Force: 2,121 Unemployed: 373 Employed: 1,748 Ab. Unemployed: 307

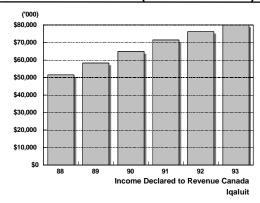
# Commentary

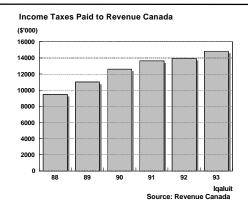
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

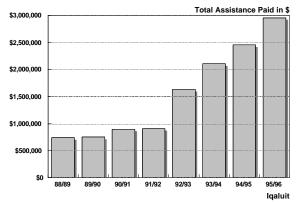
1993: \$35,708 1992: \$35,636 1991: \$34,371 1993: 2,240 1992: 2,240 1991: 2,080

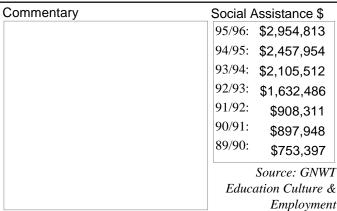
Source: Revenue Canada - Community Data

#### Commentary

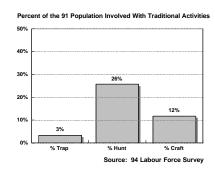
# .

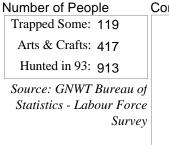
#### **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES







#### **TOURISM**

# Community Tourism Resources & Markets Commercial Accommodations Visitor Center Signings The Frobisher Inn, 95/96 94/95 accommodating 100, has a coffee 93/94 shop, a licensed dining room, and a 92/93lounge. The Discovery Lodge has 49 rooms and a lounge. The Navigator Source: Non-Resident Inn has 35 rooms, complete with Only: RWED dining room, coffee shop, conference and banquet facilities.

#### HOUSING AND HOME OWNERSHIP

Commentary Ownership/Type of Housing Units Between 1986 and 1991 the number of occupied private dwellings increased by

266 units, a 32.2% change. In 1989, the Northwest Territories Housing Corporation owned 308 units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 43 new homes in the community.

Owned: 135 Rented: 935 Band Owned: 0

Detached: 415 Apartment: 250 Row House: 400 Trailer: 5

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Igaluit has three schools; Nakasuk Elementary and Joamie Elementary teach K-6, while the Inuksuk High School (Gordon Robertson Educational Centre) teaches 7-12. Vocational and continuing education opportunities are available through the Adult Education Centre; three adult educators are employed. Aurora College's Nunatta Campus provides a source for continuing education. Ukivik Hostel, located in the Federal Building Service Area, provides food and lodging for students and others.

# Health

The Baffin Regional Hospital, built in 1964, has thirty-four beds and twelve bassinets. The facility acts as a regional station for those medical needs which, while needing more care than the smaller settlement health centres can provide, do not require medical evacuation to points southward.

# Fire

Fire protection consists of thirteen full-time and twentyfive volunteer firefighters. Equipment includes a 1988 1500 L/min. triple combination pumper, a 1980 340 L/min. triple combination pumper, a 1988 4x4 Crestline ambulance, a 1988 handivan/ambulance, and a 1980 ambulance. Hydrants and four municipal trucks supply water. Pagers and automatic alarms are in place for quickened response.

## Recreation Services

The new arena was completed in 1989. The Town has two school gymnasiums, a playground, a playfield, softball diamonds, developed trails, and a curling club. There is also a year-round swimming pool. The building of a community hall has been proposed for 1997. Other facilities include the Centennial Library, the Sunagutangit Museum Society and the Community Services Committee. Toonik Tyme is an annual spring festival sporting dogsled and snowmobile races, and an igloo building competition. July 1st of each year Iqaluit holds Canada Day celebrations. The Town employs a Community Services Committee Recreation Director.

# Police, Mail, Electrical and Other Services

The RCMP detachment has a staff of fifteen. A Social Services staff of eight and four Community Social Service Workers are affiliated with the Group Home for Children and the Drug/Alcohol Treatment and Rehabilitation Centre. Community-based social services and projects include the Tuvvik Alcohol and Drug Advisory Committee, and the Youth Justice Committee. Iqaluit's five churches include the Anglican Mission, the Bahai House, the Roman Catholic Mission, the Pentecostal Mission, and the Baptist Mission.

Iqaluit has both CBC and community radio, cable television, and telex services. NorthwesTel local and long distance telephone service is available via the Anik satellite system. Mail delivery is five times per week. The Town is also served by a bank and taxi services. Power-generating facilities operated by NWTPC reach 9945 kW in capacity.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Aakuluk Day Care First Steps Day Care Inukshuk Infant Day Care Kids on the Beach Paivirik

#### **COMMUNITY WATER**

# Water Supply

Iqaluit's water supply, Lake Geraldine, has a watershed of approximately 385 ha. and a volume of approximately 2,000,000 m3. The reinforced concrete dam maintains the lake's water level. The dam height has again been raised by 1 m. Based on the 1995 population, the lake can now supply a 20-year demand.

#### Water Storage

Iqaluit's infrastructure development has proceeded with an emphasis on piped water and sewer services. Over two-thirds of the Town is serviced by piped water and sewer, the remainder receives trucked service.

Piped water and sewer distribution systems have been constructed using either above-ground utilidors or underground pipelines. Extensions to the systems after 1976 are constructed underground. The extensive use of high density polyethylene pipe (HDPE) began in 1978.

The construction of a reservoir for treated water storage is now underway. Concerns over springtime taste and odour problems have prompted the need for a controlled environment in which to store water. When completed, the reservoir will help meet fire flow demands, peak hour demands, emergency storage demands (in case of treatment plant failure), and filter backwash and treatment process demands.

The single cell reservoir was designed to operate in series with the existing reservoirs. A 300 mm diameter fill line from the treatment plant reservoirs to the new reservoir and two (2) buried 250 mm HDPE lines sized for peak hour/fire convey flow to the system; all buried pipelines are Series 160 HDPE with 50 mm insulation and 50 mm HDPE jacket. Overflow and drainage piping for the new reservoir directs flow to the surface drainage to the south-west of the site.

The new cell is 23.0 m x 23.0 m with a wall height of 4.85 m. Based on a population of 4955 in the year 2006 (not including post-Nunavut estimates), the reservoirs storage requirement would be 2280 m3. Probable increases in population could be handled by adding a second cell to the new reservoir. Piping and concrete design allows for such an addition. A system of below-ground water and sewer piping has replaced most of the above-ground utilidor system.

The water treatment plant is at a sufficient elevation to permit the system to be gravity fed via a two (2) 250 mm buried HDPE trunk mains. There is no heating of the system until Reheat Station Number One.

On the southern side of Apex Road the remaining utilidor is comprised of a galvanized metal box enclosing a 250 mm diameter asbestos cement water main with vermiculite fill insulation, installed in 1969. This pipe runs underneath the Astro Hill Complex and provides water service to the high school, the six-storey high rise, the eight-storey high rise, the Frobisher Inn, the recreation building, and other smaller volume users.

Water take-offs are made directly from this line under the Astro Hill Complex. The utilidor continues from the Astro Hill Complex to Uivvaq Street where it connects to the piped underground distribution system. This utilidor provides service to two schools, the Astro Hill Complex, and the government row-housing.

The underground portion of the system in Lower Iqaluit was installed in seven phases. Phase I and II use ductile iron pipe with polyurethane insulation. Phases III and IV use HDPE with polyurethane insulation and concrete manholes. Phases VI and VII use HDPE with polyurethane insulation and insulated welded steel access vaults.

#### Water Treatment

The water treatment plant was designed in 1962 and constructed in 1963. Provisions for chlorination, flocculation and settling, fluoridation, lime treatment, and ozone treatment were put in place. Treatment at the plant currently consists of a gas chlorine injector system at the plant inlet, the addition of fluoride at the inlet to the two clear water wells, and the addition of lime for pH control and filtration through the rapid sand filters. Water is also tested for coliform, cryptosporidium, and giardia.

After filtration the water passes directly into one of four storage chambers. Two of the four storage chambers are clear water wells, having a combined storage capacity of 518 m3. The other two chambers are backwash water wells, having a combined capacity of 115 m3. An additional 2280 m3 capacity was added to the system in 1996, bringing the total capacity to 2913 m3.

Two 250 mm HDPE buried watermains convey water from the reservoirs to Apex Road and the hospital. Pressure in the distribution system is maintained by the natural head available as water flows by gravity from the treatment plant through the storage facilities. The pressure gradient throughout the Town ranges from 690 to 965 kPa. An exception to this gravity feed is the Expansion Area which, because of its elevation, requires a booster station to obtain required water pressure.

# Water Quality

Igaluit's water quality was found to be of excellent quality for domestic use. The water was soft, poorly buffered, low in dissolved solids, and potentially corrosive to metallic material. Comparing the results found with those figures in the Guidelines for Canadian Drinking Water Quality showed that parameters tested were under the maximum limits.

#### **COMMUNITY WASTE**

#### Solid Waste

In the past, Igaluit had many different sites that were used to dispose all manner of waste. The problem began with the military in the 1950's and 1960's. These sites are no longer in use as disposal areas. Cleanup of thousands of used oil drums in 40 northern military site was a massive undertaking. Canada's Green Plan partially funded the removal of toxic substances such as PCB's and DDT for incineration in the South.

A new solid waste management site was commissioned in 1995. The site maintains separate disposal areas for household garbage, bulky wastes, and recyclable materials. The site has been configured for combustible and noncombustible waste management. Open burning of combustible wastes is practised to reduce volumes and control snow accumulation in the landfill area. Household hazardous wastes are also accommodated at the site. The site is fenced and has controlled access.

#### Sewage Disposal

Iqaluit's sewage collection system consists of a combination of above-ground and below-ground piped sewer service, trucked service, two pumping stations, forcemains, and a lagoon. Less than one-third of Iqaluit's population is on trucked service.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# ean Marie River

What the name means: Water Flowing Over Rocks

Alternate Name: Tthek'ehdeli

### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: Deh Cho Member of the NWT Legislature: James Antoine

Member of Parliment: Ethel Blondin

Mayor: Yvonne Norwegian

Senior Administration Officer: Bill Norris GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Simpson

NWT Legislature Riding: Nahendeh Languages Spoken: South Slavey Land Claim Area: Treaty 11 - Deh Cho

**LOCATION** *Longitude: 120.38; Latitude: 61.31* 

The Community of Jean Marie River is located at the confluence of the Mackenzie River and Jean Marie Rivers. It is 302 air km south-west of Yellowknife at 61'32N latitude and 120'38W longitude.

#### **CLIMATE**

The average annual precipitation is 38.1 cm of rainfall and 155.0 cm of snowfall. Mean annual precipitation totals 53.3 cm. July mean high and low temperatures are 25.6 C and 12.2 C. January mean high and low temperatures are -23.0 C and -32.7 C. The winds are generally north-west and annually average 15 km/h.

# **TRANSPORTATION**

Year-round access is provided by chartered aircraft only, as there are no scheduled flights. An aerodrome with an unlicensed 762 m x 18 m gravel runway is operated by the GNWT. In the summer, the community is accessible by river barge service from Fort Simpson or Hay River. The community is also accessible by scow and canoe on the Mackenzie River from Fort Simpson.

There is a 27 km winter road connecting Jean Marie River to the Mackenzie Highway. There are no constructed roads. A series of trails make up the transportation system. Glacial drift and alluvial deposits covering the bedrock prevent severe drainage problems.

#### **GEOLOGY**

The Community is situated on the bank of the Jean Marie River, 6 m from the water level within a zone of discontinuous permafrost. The underlying strata is composed of till over bedrock. Sandy clays characterize the surface material. The surrounding area is mountainous and hotsprings can be found.

#### **VEGETATION**

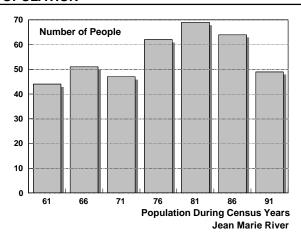
The area is forested with large, hardy trees characteristic of more southern regions.

A local man constructed a log warehouse in 1915 and used it as a trading post for many years. The Hudson Bay Company store opened in 1964-65, competing against the Fort Simpson Trading Post. The sawmill, owned by the Coop, began operation in 1965.

One of the major economic activities in the area is the creation of traditional Slavey crafts. The craftspeople of Jean Marie River are nationally known for the quality and originality of their crafts, most notably porcupine-quill and moose hair tufted articles. The people have continued their traditional hunting, fishing, and trapping lifestyle, still a major portion of the local economy. Still in operation, the sawmill provides timber for fuel and local construction.



# **POPULATION**



# Commentary

1961: 44 1966: **51** 1971: **47** 

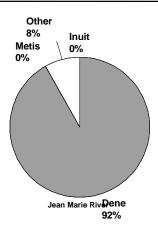
1976: 62 1981: 69 1986: 64

1991:49

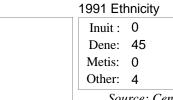
Source: Census

**Population Statistics** 

# **ETHNICITY**

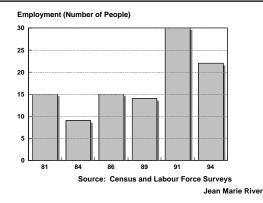




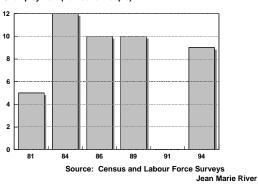


Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**



#### Unemployment (Number of People)



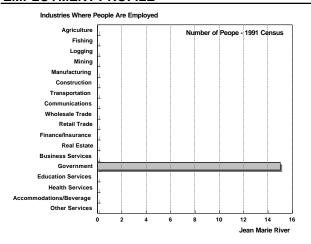
Source: 1994 Labour Force Survey, Bureau of Statistics

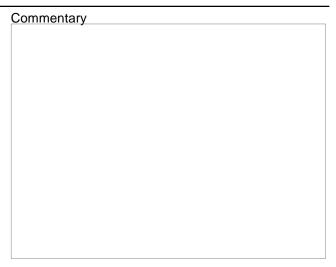
# **Employment Statistics 1994**

Over 15 Pop:	46	Abor. Employed: 9
Labour Force:	_	Unemployed:
Employed:	22	Ab. Unemployed:

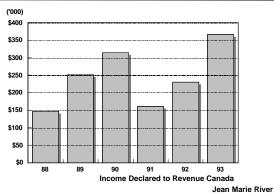
# Commentary

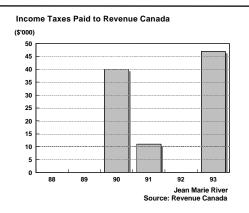
# **EMPLOYMENT PROFILE**





**INCOME AND TAXES (Revenue Canada)** 





Average Incomes People Paying Inc.Tax

 1993: \$12,200
 1993: 30

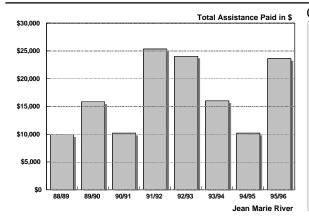
 1992: \$11,500
 1992: 30

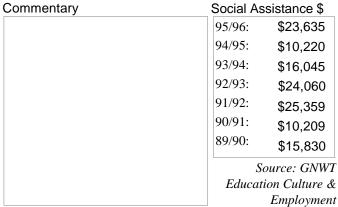
 1991: \$8,050
 1991: 20

Source: Revenue Canada - Community Data

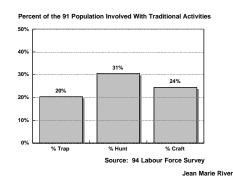
Commentary

# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES



Number of People Commentary

Trapped Some: 10
Arts & Crafts: 12
Hunted in 93: 15

Source: GNWT Bureau of Statistics - Labour Force Survey

# **TOURISM**



#### HOUSING AND HOME OWNERSHIP

#### Commentary

Occupied private dwellings increased 15.4% between 1986 and 1991. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 17 new homes in the community.

# Ownership/Type of Housing

Units

Owned: 15 Rented: 0

Detached: 15
Apartment: 0
Row House: 0
Trailer: 5

Band Owned: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

The Louis Norwegian School teaches grades K-9. One teacher and one part-time classroom assistant are employed. Vocational and continuing education are available through the Arctic College Extension Program.

#### Health

The health centre (81 m2) was built in 1984. It acts as a lay dispenser for visiting doctors and nurses from Fort Simpson.

#### Fire

Fire protection consists of a fire extinguishers and a 3/4 ton truck with a 350 lb. dry chemical unit.

# Recreation Services

The gym/office complex was built in 1986. Other facilities include a community hall, a park, and a playground. The community has a recreation committee.

#### Police, Mail, Electrical and Other Services

RCMP services and social services are available from Fort Simpson. Mail is collected in a courtesy bag in Fort Simpson. NorthwesTel provides mobile radio/telephone service. Full local and long distance telephone service for the community begins in 1996. CBC Radio and Television are both broadcast via the Anik satellite system. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC can provide up to 150 kW of diesel-generated power to the community. Infrastructure funded by Municipal and Community Affairs programs includes staff housing, the community office, and the parking/maintenance garage complex.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

#### Water Supply

The community obtains water from two sources, depending on the time of the year. In the summer and winter the Mackenzie River is used. During the spring and fall the Mackenzie is difficult to access due to break-up and freeze-up, and the Jean Marie River is used. Located approximately 100 m from the community, the water drawing point for the Mackenzie River is more convenient than the 1 km distance encountered when drawing from the Jean Marie River.

#### Water Storage

A pumphouse/truckfill station draws water through a permanent intake at the junction of the Jean Marie and Mackenzie Rivers. The facility consists of an on-site seasonal earthen storage reservoir, a seasonal supply line and skid-mounted pumping facility to fill the reservoir, and a truckfill station which draw water directly from the reservoir, disinfects the water.

The offtake pump draws water from the reservoir into the truckfill station where a throttling valve, flow switch, and thermometer monitor the water. At that point, the water is chlorinated. A chlorine mixer is used to mix the feed tank and a feed pump sends chlorine to the line where it is injected. The water passes through a flow sensor and venturi aerator before entering the truck. Water is delivered using a 2950 L tank mounted on a F-350 truck. All water deliveries are metered.

#### Water Treatment

Water treatment consists of chlorination using a calcium hypochlorite solution. A chlorine feed tank is mixed with a chlorine mixer and drawn by a chlorine feed pump to the injector before the water is sent to the truck.

#### Water Quality

Jean Marie River's supply water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the chemical analysis, the water is clear, hard, well buffered, slightly alkaline, and with a moderate amount of dissolved solids. The water was slightly alkaline (pH 8.2).

Metals of major concern such as mercury, lead, cadmium, aluminum, arsenic, chromium, and manganese are reported as either "below the analysis detection limit" or present in very small quantities. All metal concentrations however, were below the safe limits stipulated in the Guidelines for Canadian Drinking Water Quality.

# **COMMUNITY WASTE**

# Solid Waste

Garbage is placed in 205 L drums by the residents and burned to reduce volume. Garbage is collected once per week. Solid waste is disposed at a 10,000 m2 site west of the community, next to the Jean Marie River.

# Sewage Disposal

The school, teacherage building, and some houses are equipped with a pumpout system. Pumpout sewage is collected using a 2950 L tank mounted on a F-350 truck. The remainder of the community use outdoor privies.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Kakisa

What the name means: Between the Willows

Alternate Name: K'agee

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: South Slave Member of the NWT Legislature: Samuel Gargan

Member of Parliment: Ethel Blondin

Mayor: Lloyd Chicot

Senior Administration Officer: Ruby Landry GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Smith

NWT Legislature Riding: Deh Cho Languages Spoken: South Slavey Land Claim Area: Treaty 11 - Deh Cho

**LOCATION** *Longitude: 117.25; Latitude: 60.56* 

Kakisa is located on the east side of Kakisa Lake at the start of the Kakisa River, 60'57'N latitude and 117'02'W longitude. It is 240 km by air southwest of Yellowknife.

#### **CLIMATE**

Kakisa receives an average of 14.6 cm of rainfall and 113.5 cm of snowfall annually. Mean annual precipitation totals 26.0 cm. July mean high and low temperatures are 24.1 C and 9.2 C. January mean high and low temperatures are -22.0 C and -31.4 C. Winds are generally from the east and annually average 16 km/h.

# **TRANSPORTATION**

A trail follows a circular route through the community. Surface drainage in the community is not a problem since the soil is sandy and drains well. The community is connected by a 13 km all-weather gravel road to the Mackenzie Highway. Float plane access is available on Kakisa Lake. No services are available.

# **GEOLOGY**

Kakisa is situated on a flat woodland area. Bedrock exposures can be seen along the Kakisa River.

The dominant vegetation of the forests is the black spruce. Mosses and scrub grow in wetter areas.

#### **HISTORY**

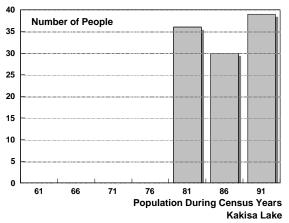
Kakisa was established in 1962, when the Slavey settlement of Tathlina Lake moved to have closer access to the Mackenzie Highway. The economy is based primarily on hunting, trapping and fishing. Tourism plays a secondary role. Nearby Lady Evelyn Falls attracts visitors who are committed to camping and fishing.

Kakisa has no legal municipal status and is considered an unorganized community. A traditional name for the community is "Kagee", meaning between the willows.

# 1981 Air Photo



# **POPULATION**

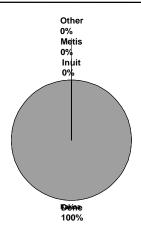


# Commentary 1961: 0 1966: 0 1971: 0 1976: 0 1981: 36 1986: 30 1991: 39

Source: Census

**Population Statistics** 

# **ETHNICITY**



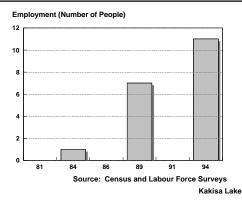


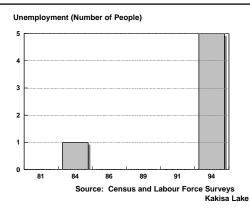
1991 Ethnicity

Inuit: 0
Dene: 39
Metis: 0
Other: 0

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





Commentary

Source: 1994 Labour Force Survey, Bureau of Statistics

# **Employment Statistics 1994**

Over 15 Pop:	34	Abor. Employed: 5
Labour Force:	16	Unemployed:
Employed:	11	Ab. Unemployed:

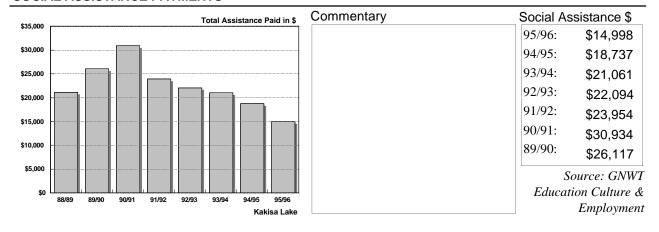
# **EMPLOYMENT PROFILE**

Commentary

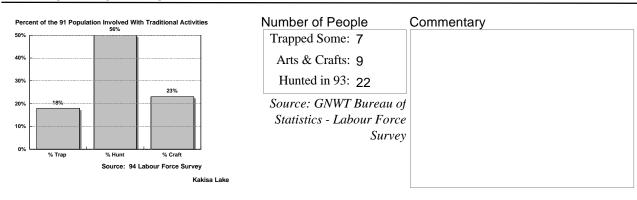
# **INCOME AND TAXES (Revenue Canada)**

Average Incomes	People Paying Inc.Tax	Commentary
1993:	1993:	
1992:	1992:	
1991:	1991:	
Source: Revenue Can	ada - Community Data	_

# **SOCIAL ASSISTANCE PAYMENTS**



# TRADITIONAL ACTIVITIES



# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	There is a public campground 3 km from the community.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

Source: 1991 Census Data

#### HOUSING AND HOME OWNERSHIP

Thursday, July 20, 1995

# Commentary Occupied private dwellings increased 71.4% between 1986 and 1991. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 8 new homes in the community. Units Owned: Rented: Band Owned: Detached: Apartment: Row House: Trailer:

# **COMMUNITY SERVICES**

Education	Health
The nearest schools are located in Fort Providence and Hay River.	Medical services are available from Fort Providence and Hay River.

# Fire Recreation Services

Throughout the community, fire extinguishers are located in buildings which haven been designated as fire stations. Kakisa has a community hall within the community office. There is also a park, a playground, and an outdoor rink.

# Police, Mail, Electrical and Other Services

RCMP service is provided from Fort Providence, while all social services are available from Hay River. Mail is picked up from Fort Providence. CBC Radio and CBC Television are available via the Anik satellite system. NorthwesTel provides mobile radio/phone service from a terminal located just outside the community. Beginning in 1996, NorthwesTel plans to provide local and long distance telephone service to the community. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. A community office is leased using Municipal and Community Affairs program funding. Other facilities are in the planning stages.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

**COMMUNITY WATER** 

# Water Supply

In the past, water was hauled from the Kakisa River individually. In the winter, a hole was cut in the ice to provide access. In 1991, that system was abandoned in favour of a trucked water program from Hay River. Water is now trucked weekly and delivered to residences and public buildings.

## Water Storage

The system was upgraded to include a 1137 L water wagon to provide household delivery. The wagon was unfortunately subject to freezing. In 1991, that system was abandoned in favour of a trucked water program from Hay River. Water is now trucked weekly and delivered to residences and public buildings.

#### Water Treatment

Water tested from the Kakisa River was found to be acceptable in levels of faecal coliform bacteria, except at the point where the existing access point was located. A number of solutions were under consideration. These are no longer necessary due to the trucked water program.

# Water Quality

Water tested from the Kakisa River was found to be acceptable in levels of faecal coliform bacteria, except at the point where the existing access point was located. A number of solutions were under consideration. These are no longer necessary due to the trucked water program.

#### **COMMUNITY WASTE**

Thursday, July 20, 1995

#### Solid Waste

Solid waste collection is carried out by a one-person crew with a 3/4 ton pick-up. The modified landfill site is located 11 km east of the community. The site is fenced. Wastes are landfilled in a 50 m x 50 m x 2 m trench and covered annually with excavated material.

# Sewage Disposal

Pit privies are the main form of sewage disposal. They are relocated as necessary. Greywater is deposited on the ground outside residences. Sewage pumpout waste is collected by a wagon equipped with a plastic tank and treated at a site adjacent to the solid waste site, 11 km east of the community. The sewage treatment site consists of a trench excavated on the west side of the access road.

Concern expressed by Health authorities over groundwater contamination due to the privies has increased the number of pumpout tanks being installed. There are six houses with tanks (1994) and new buildings are being equipped. Some older buildings are being retrofitted with tanks.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# <u>Kugluktuk</u>

What the name means: Place of Rapids Alternate Name: Kugluktuk

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Kitikmeot Member of the NWT Legislature: Kelvin Ng

Member of Parliment: Jack Anawak

Mayor: Donald Havioyak

Senior Administration Officer: Baba Pederson GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Kitikmeot

NWT Legislature Riding: Kitikmeot Languages Spoken: Inuinnaqtun Land Claim Area: TFN - Kitikmeot

**LOCATION** *Longitude: 115.06; Latitude: 67.50* 

Kugluktuk is located immediately west of the mouth of the Coppermine River on Coronation Gulf at 67'50N, 115'15W, 595 air km north of Yellowknife.

#### **CLIMATE**

Kugluktuk receives an average of  $10.3~\rm cm$  of rainfall and  $100.7~\rm cm$  of snowfall per year. Mean annual precipitation totals  $20.2~\rm cm$ . July mean high and low temperatures are  $13.8~\rm C$  and  $5.6~\rm C$ . The January mean high and low temperatures are  $-26.4~\rm C$  and  $-33.8~\rm C$ . The winds are generally south-west and annually average  $16.6~\rm km/h$ .

# 1981 Air Photo



# **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 1,524 m x 30 m certified Arctic B gravel runway. Facilities and equipment include a passenger shelter, weather/communications equipment and navigational aids. Scheduled flight service is available via Yellowknife and Iqaluit. An unlicensed water aerodrome provides float plane access; ice breakup is in July and freeze-up is in September.

Marine transportation is provided by the Northern Transportation Company Ltd. barge service from Hay River. Facilities are limited. There is no direct road access to Kugluktuk. Within the community there are approximately 18.5 km of roads. Calcium chloride is applied annually to 4.5 km of roads to act as a dust suppressant and surface stabilizing agent.

# **GEOLOGY**

The Hamlet extends inland to cover a rocky knoll. The townsite is underlain by Precambrian sedimentary and volcanic rock. Dolomite and shale, interspersed with volcanic rock, form steep outcrops in the vicinity of the settlement. The buildings along the shore are perched on consolidated beach deposits. Directly behind this ridge is a low, marshy area. There are numerous exposed bedrock surfaces in the community.

Surficial deposits in the area include talus and deltaic deposits. The angular talus, derived primarily from the mechanical breakdown of dolerite, ranges in size from silt to boulders but is commonly found as course sand or fine gravel. Kugluktuk is underlain by permafrost. The thickness of the active layer ranges from less than 0.5 m to over 1 m in the sandy waterfront area. Permafrost features such as polygonal ground and thaw-related instability affect the raised delta surfaces and strongly influence their drainage characteristics.

#### **VEGETATION**

Grasses, sedges, heather, mosses, and lichens grow in limited soils. Willow and alder thickets are common in wetland depressions.

#### **HISTORY**

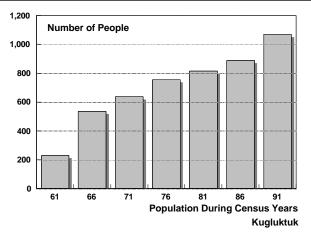
The Kugluktuk area is said to have been inhabited by both marine mammal-harvesting and caribou hunting Inuit. In 1771, Samuel Hearne of the Hudson Bay Company reached the mouth of the river he named Coppermine. His instructions were to report on copper deposits in the vicinity. The Inuit used copper for knives, arrowheads and other implements, becoming known as the Copper Eskimos. The Chipewyan Dene Chief Matonabbee led Hearne to a site 19 km upstream on the River to trade with the Inuit. To Hearne's dismay, the Dene slaughtered the Inuit for no apparent reason. Hearne named the site Bloody Fall. In 1912, Fathers Leroux and Rouviere visited the area and were promptly murdered by the Inuit; Diamond Jenness, an ethnologist working for the Canadian Arctic Expedition, documented the events, culture and lifestyle of the Copper Eskimo beginning in 1913.

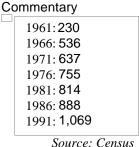
A trapper and trader, Charles Klengenberg set up a trading post at the site of the present community in 1916. The Inuit camped there on a semi-permanent basis to take advantage of the excellent fishing and sealing. In 1928, those few who had survived an epidemic at Bernard Harbour fled to Kugluktuk. The Anglican Mission was built that year, signalling the establishment of a permanent settlement. A hospital was established in 1929 followed by an RCMP detachment in 1932. A nursing station opened in 1948, followed by a school and Co-op store in 1959.

Beginning in the 1970's, oil and gas exploration provided a training and employment opportunity for the aboriginal population. Oil and gas exploration, arts and crafts sales, trapping, sealing, hunting and fishing are the main economic opportunities available. Tourist potential is great in the area. Char fishing, canoeing expeditions, historical sites, and native arts and crafts sales are all burgeoning ventures. Local business includes fur buying, general retail, secretarial services, outfitting, hotels, and photographic services.

Kugluktuk has great opportunity for development. Potential sources of economic growth include hotel expansion, a gravel crushing operation, a local construction and heavy equipment company, IZOK Mines development spin-offs, a proposed business services centre, and the creation of a local campground. Kugluktuk, meaning place of rapids, gained Hamlet status on April 1, 1981. The Hamlet changed its name from Coppermine on January 1, 1996.

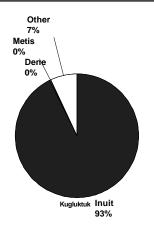
# **POPULATION**

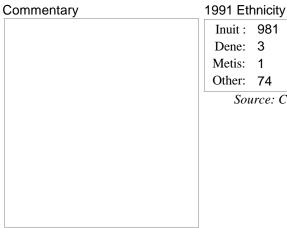




**Population Statistics** 

# **ETHNICITY**



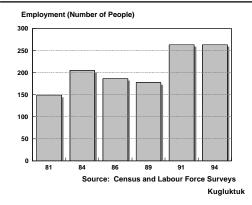


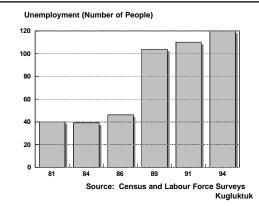
Inuit: 981 Dene: 3

1 Other: 74

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





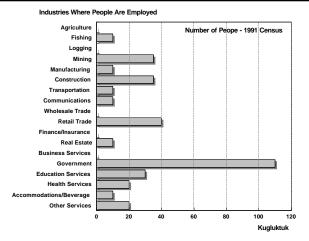
Source: 1994 Labour Force Survey, Bureau of Statistics

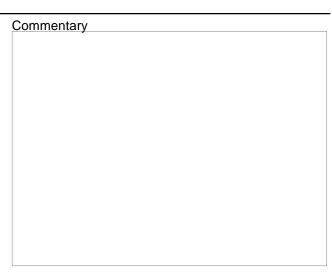
# **Employment Statistics 1994**

Over 15 Pop:	710	Abor. Employed: 186
Labour Force:	383	Unemployed: 120
Employed:	263	Ab. Unemployed: 116

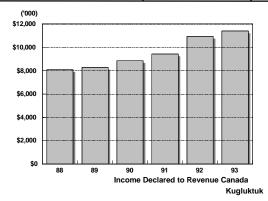
# Commentary

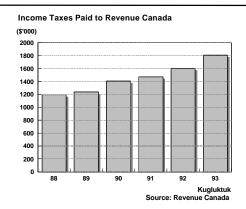
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

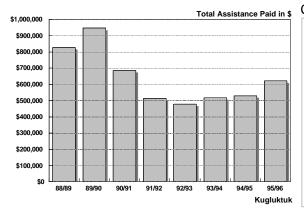
People Paying Inc.Tax

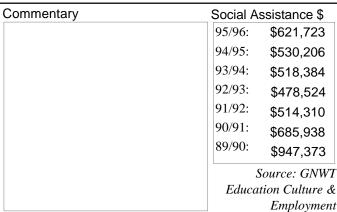
1993: \$21,130 1992: \$20,266 1991: \$17,774 1993: 540 1992: 540 1991: 530

Source: Revenue Canada - Community Data

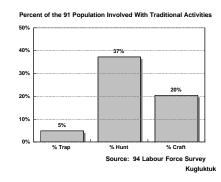
# Commentary

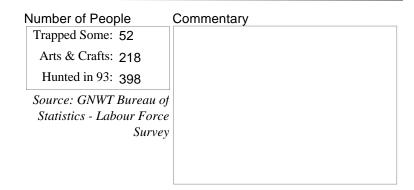
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





# Thursday, July 20, 1995

#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Coppermine Inn accommodates fifteen guests.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary Ownership/Type of Housing The number of occupied private dwellings increased 36% between 1986 and 1991. As of 1994, the Housing Corporation owned 200 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 39 new homes in the community.

Units Owned: 20 Rented: 240 Band Owned: 0

> Detached: 175 Apartment: 0 Row House: 80 Trailer: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

#### Education

Kugluktuk School teaches grades K-6 and the secondary school teaches grades 7-12. Nineteen teachers and two administrators are employed. Continuing education opportunities are available at the Adult Education Centre: a resident adult educator is on staff. The Arctic College Extension Program offers various courses and training.

# Fire

A twenty-person volunteer fire brigade uses a 1984 IHC model 1824 L triple combination pumper to fight fires. A telephone and siren alarm system is in place for quickened response. A new firehall (two-bay) was built in 1994.

#### Health

The health centre (475 m2), built in 1987, houses four medical beds, one bassinet, and two cribs. The staff includes three nurses, one dental technician, and one community health representative. The Community Women's Group acts as the local health committee.

# Recreation Services

The two gymnasiums are located in the high school and the elementary school. The Kugluktuk Recreation Centre, completed in 1983, includes a community hall, an arena, and a curling rink. Activities held in the recreation complex include movies, dances, hockey and broomball. There are also two school playgrounds, a community playground, a playfield for slowpitch (completed in 1990) and a developed trail system. Kugluktuk has a community library. Other activities include the Easter and Christmas Games, the Natik Frolic Carnival (May) and the Community Summer Waterfront Program.

### Police, Mail, Electrical and Other Services

The RCMP detachment has three officers on staff. The Community Social Services Office has a two member staff; facilities and services consist of the Kugluktuk Drug and Alcohol Awareness Program, the Youth Justice Committee, and a multi-purpose group home. There are three churches in the community, the Pentecostal Church, the Roman Catholic Mission, and the Anglican Mission.

Mail is delivered five times per week. NorthwesTel local and long distance telephone service, CBC Radio, and CBC Television are available via the Anik satellite system. There is also a community radio station. NWTPC provides 1,515 kW capacity diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a leased Hamlet office (built in 1986), a maintenance garage (two-bay), and two parking garages (three-bay and four-bay).

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

### Water Supply

Water is taken from the Coppermine River at a point approximately 900 m from the community's centre. The screened intake is located 15 m from the shore.

## Water Storage

The storage tanks, with a total capacity of 400,000 L, are located in the community. These tanks provide settling of some suspended material prior to truck loading. Each tank can be filled in approximately six hours. The high volume users are supplied by a small diameter tank from the reservoir; most homes are equipped with residential storage tanks and receive trucked delivery. Residential tanks are usually 1,135 L capacity. A utilidor supplying water to the school and the nursing station has been abandoned. The portion of the line to the washhouse/laundry is still in operation.

Trucked water delivery service is provided by the Hamlet two to three times per week using four trucks: a 1992 model with an 11,500 L capacity; and three trucks with 4546 L capacities. Water deliveries are metered. Most residences have water pumped to fixtures via a manifold, pressurized by a household pump drawing water from the residence storage tank. All water deliveries are metered.

#### Water Treatment

Chlorination is performed manually at the reservoir during truck loading by adding a sodium hypochlorite solution to each 1000 gallon load of water. Kugluktuk's water supply is of good chemical quality for domestic use. Based on chemical analysis the water is soft, slightly alkaline, weakly buffered, and low in dissolved solids. Comparison of the chemical analysis for raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of turbidity, to be below the recommended maximum limits. By allowing for settling in the storage tanks and more frequent cleaning of those tanks, the turbidity problem can be mitigated.

## Water Quality

Based on chemical analysis the water is soft, slightly alkaline, weakly buffered, and low in dissolved solids. Comparison of the chemical analysis for raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of turbidity, to be below the recommended maximum limits. By allowing for settling in the storage tanks and more frequent cleaning of those tanks, the turbidity problem can be mitigated.

# **COMMUNITY WASTE**

#### Solid Waste

Domestic garbage is placed in 205 L barrels in front of homes for collection but it is not burned. In the winter, honeybags are placed on the snow adjacent to the garbage barrels to avoid the bags freezing to the barrels. All solid wastes are collected by a two-person crew twice per week using a 1985 Ford model F-350 truck. Solid waste is collected separately from bagged sewage.

A new landfill site, 4.5 km west of the community, began operation in 1989. The 30,000 m2 fenced site has been designed for a twenty year life-span. A local sand pit is a source of cover material. Burning of wastes at the site is practiced once per week.

Sewage Disposal

The single cell sewage lagoon and adjacent honeybag pit (17,000 m2 total) are located at a site between the airstrip and Coronation Gulf, approximately 5 km from the community. Sewage pumpout service is provided by the Hamlet. An 11,500 L truck and three 4546 L trucks are used. A small trailer-mounted pumpout unit owned by NWTPC provides pumpout services for the NWTPC residences.

The school and nursing station have septic tanks which partially settle their sewage prior to being discharged to the holding tanks, 45,460 L and 6820 L in size. Approximately 12 houses (1996) use bagged sewage collection service. Bags are placed at the roadside in halved 205 L barrels. The waste is picked up daily using a stake truck.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Lake Harbour

What the name means: Looks Like a Heel Alternate Name: Kimmirut

POLITICAL 1981 Air Photo

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Goo Arlooktoo

Member of Parliment: Jack Anawak

Mayor: Kowisa Arlooktoo

Senior Administration Officer: Raymond Kaslak GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Baffin South

Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

**LOCATION** *Longitude:* 69.53; *Latitude:* 62.51

Kimmirut is located on the southern edge of Baffin Island on the Meta Incognita Peninsula at 62'51 N, 69'53 W. It sits at the upper end of a drowned river valley, 23 km from the open sea. Formerly known as Lake Harbour, Kimmirut is 120 air km south-west of Iqaluit and 2,245 air km north-east of Yellowknife.

#### **CLIMATE**

Kimmirut receives an average of 20.0 cm of rainfall and 210.1 cm of snowfall per year. Mean annual precipitation totals 41.2 cm. July mean high and low are 12.2 C and 3.9 C. January mean high and low are -20.0 C and -27.2 C. The winds are north and south and annually average velocities of 15-30 km/h.

#### **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 579 m x 23 m certified Arctic C gravel runway. Facilities and services include a terminal building, runway lighting for emergencies only, and weather/navigation equipment. Scheduled flight service is available from First Air via Iqaluit. In the event of the Hamlet's expansion, the runway, with high terrain on all sides, would have to be relocated.

Marine transportation is provided by Eastern Arctic Sealift and Transport Canada (Montreal). Facilities include beach landing and well sheltered anchorage at the head of the narrow inlet. There is no direct road access to the community. Within the community there are approximately 5.9 km of gravel surface roads, all with steep grades. This can cause some problems with slippage, gas mileage, and a greater wear and tear on vehicles. Many of the roads have a tendency to erode during periods of rapid run-off. Calcium chloride is applied annually to act as a dust suppressant and surface stabilizing agent.

# **GEOLOGY**

Kimmirut is located in the Frobisher Upland Physiographic Region. Situated on an uneven deposit (hummock) of granular glacial soil, it is surrounded by high hills of Precambrian rock mixed with some limestone. The hills are the eroded remnants of an ancient mountain range comprising the south-western portion of Baffin Island. At high tide, a stony beach lies below the Hamlet.

Exposed bedrock, extensive throughout the region, consists primarily of quartzite, schist, and limestone. Quartzite and schist are resistant to breakdown caused by freeze-thaw cycles. Limestone, however, is susceptible to mechanical weathering; areas with exposed limestone tend to be less favourable for building sites. Kimmirut lies on a line which separates the widespread discontinuous and continuous permafrost zones. Permafrost is present to a depth of 60 m.

#### **VEGETATION**

Mosses, lichens, and grasses grow in the summer months.

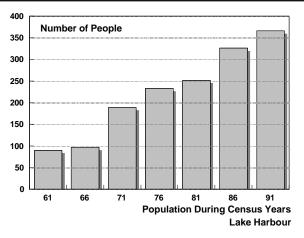
#### **HISTORY**

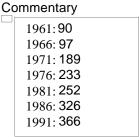
There have been Inuit in the Kimmirut area for centuries. European whaling began in the mid-nineteenth century, with ship captains employing local labour as necessary. An Anglican mission was established in 1900, a Hudson Bay Company post opened in 1911, and the RCMP set up a detachment in 1924. The Community thrived with its mica mining operation, the whaling industry, and the Hudson Bay Company until after the Second World War. At this time, a series of introduced diseases almost destroyed the population despite the establishment of a nursing station. In the 1960's, a canine epidemic decimated the Inuit dog population. The result was a mass movement of people from outlying camps into the settlement. The first school was built in 1960.

The Community's economic base stems from the harvest of marine mammals and the sale of traditional ivory and soapstone carvings. The light-green soapstone found in the area helps to produce carvings which are distinctive to Kimmirut artists. The tourism industry will become stronger with the opening of Katannilik Park, a haven for kayakers, hikers, and outdoorists of all kinds.

Local businesses include fur buyers, arts and crafts wholesalers, general retailers, food suppliers, and recreational vehicle dealers. Kimmirut, which means looks like a heel, gained Hamlet status on April 1, 1982 and officially changed its name from Lake Harbour on January 1, 1996.

# **POPULATION**

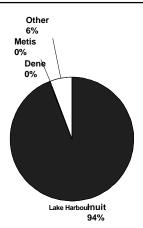


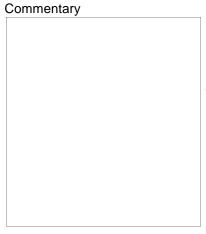


Source: Census

**Population Statistics** 

# **ETHNICITY**



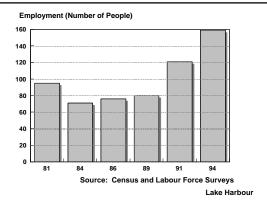


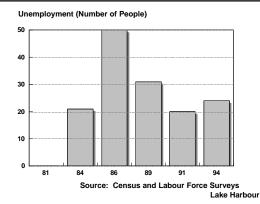
Inuit: 343
Dene: 1
Metis: 0

Other: 21

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





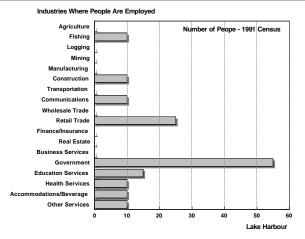
Source: 1994 Labour Force Survey, Bureau of Statistics

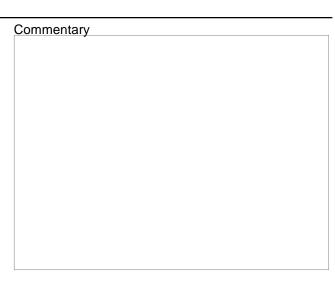
# **Employment Statistics 1994**

Over 15 Pop: 235 Abor. Employed: 130 Labour Force: 183 Unemployed: 24 Employed: 159 Ab. Unemployed: 21

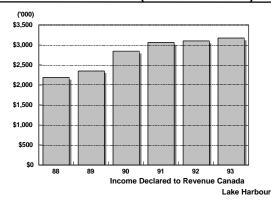
# Commentary

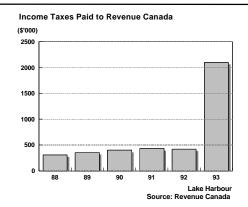
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





# Average Incomes

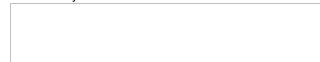
# People Paying Inc.Tax 1993: 180

1993: \$17,633 1992: \$18,241 1991: \$18,024

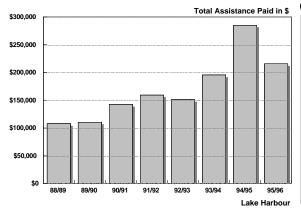
1992: 180 1991: 170

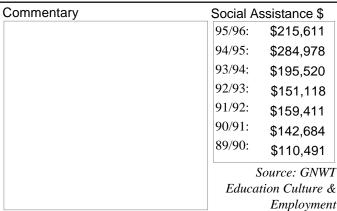
Source: Revenue Canada - Community Data

# Commentary

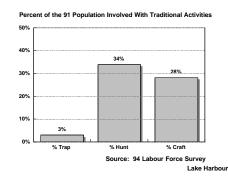


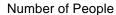
# SOCIAL ASSISTANCE PAYMENTS





# TRADITIONAL ACTIVITIES



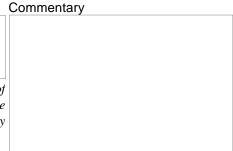


Trapped Some: 11

Arts & Crafts: 103 Hunted in 93: 124

Source: GNWT Bureau of Statistics - Labour Force

Survey



Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Lake Harbour Page 5

# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Kimik Hotel accommodates eight guests.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary

The number of occupied private dwellings increased 16.1% between 1986 and 1991. As of 1994, the Housing Corporation owned 76 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 15 new homes in the community.

Detached: 55

Apartment: 15

Row House: 0

Source: 1991 Census Data

Trailer: 0

# **COMMUNITY SERVICES**

#### Education

Aqiggiq School teaches grades K-9. Four teachers and two classroom assistants are on staff. The Kimmirut Education Council overlooks community education. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

#### Health

The health centre (1,038 m2), built in 1985, contains two medical beds, one bassinet, and one crib. Four medical staff are employed.

#### Fire

The Hamlet has an eighteen person volunteer fire brigade. Equipment include a 1986 Ford model F-800 triple combination pumper (4546 L capacity) and a six telephone alarm system in place for quickened response. The Community has a firehall (95 m2).

# Recreation Services

The community gymnasium (442 m2) was built in 1989. Other facilities include a community hall, a playground, a playfield and a developed trail system.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office has a staff of one. The Anglican Mission provides church services in the Hamlet. The Community has an Alcohol Education Committee.

Mail is delivered three times per week. NorthwesTel local and long distance telephone service, CBC Radio and CBC Television are available via the Anik satellite system. There is also a community radio station. NWTPC provides 690 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a hamlet office (156 m2), a three-bay parking garage (231 m2), and a four-bay maintenance garage (307 m2).

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

### **COMMUNITY WATER**

# Water Supply

In recent years, Lake Fundo has been used successfully as the source for potable water. Contamination due to windblown refuse from the solid waste management site and the exhaust of snowmachine traffic in winter have raised concern for community health and alternate water sources have been the subject of some study.

# Water Storage

Lake Fundo has an estimated storage volume of 6,783,000 m2. Due to ice buildup the volume is reduced to 5,710,000 m2 in the winter months. When compared with a projected community demand of 16,000 m2 in the year 2004 for trucked water, it is apparent that Fundo has adequate winter storage and annual recharge to more than meet present and future requirements.

The new source pumphouse, constructed in 1995, is a small, insulated wooden building (36 m2). It includes truckfill pumps, a loading arm, a generator, and related equipment. The truckfill has a 1000 L/min. flow rate in the event of fire, as per recommended guidelines.

Water is trucked over an all-season road from the middle of Lake Fundo, one km to the south of the community. The Hamlet uses a 5448 L (1991) truck for delivery, which is usually three times per week. All water deliveries are metered.

#### Water Treatment

Water treatment is done at the water truckfill station by hypochlorination.

# Water Quality

A 1986 report found the water from Lake Fundo to be acceptable under NWT Drinking Water Regulations; all concentrations tested were reported to be within the maximum allowable limits. In 1990, Lake Fundo was officially designated as Kimmirut's long-term water supply.

# **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected five days per week using a Ford model F-350 Haul-All garbage compactor. The Hamlet employs a crew of one. Large, bulky items are collected by the Hamlet loader.

Solid waste is deposited at the solid waste management site (2,500 m2), located 0.8 km south-west of the Hamlet. Partial fencing was recently constructed on the north side of the site to restrict entrance and limit windblown material from leaving the area. Metal wastes are not segregated from other wastes. Used oil is stored in 205 L oil drums 150 m north of the site.

Availability of gravel and rock enables annual covering during the summer months. Wastes are compacted monthly using a Caterpillar loader.

# Sewage Disposal

Pumpout sewage is collected three days per week by a 1985 (4646 L capacity) and a 1994 (5448 L capacity) truck. The sewage treatment area is located 0.8 km to the south of the community at the garbage dumpsite, at a point high in the valley. Access to the site is over a winding gravel road. Pumpout sewage and sewage bags are segregated from each other, and from the solid waste. Using an overland flow treatment process, liquid waste percolates through the gravel down a slope between the dump and the ocean inlet. Large tidal currents transport and dilute effluent upon entering the ocean.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Lutselk'e

What the name means: Place of Small Fish

Alternate Name: Snowdrift

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: South Slave Member of the NWT Legislature: Don Morin

Member of Parliment: Ethel Blondin

Mayor: Felix Lockhart

Senior Administration Officer: Jackie Coulter GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Smith

NWT Legislature Riding: Tu Nedhe Languages Spoken: Chipewyan Land Claim Area: Treaty 8

LOCATION Longitude: 110.44; Latitude: 62.24

Lutselk'e is located on a peninsula which extends into Christie Bay, on the southern shore of the East Arm of Great Slave Lake. The Community is situated at an elevation of 175 m, 201 air km east of Yellowknife at 62'24N latitude and 110'44W longitude.

# **CLIMATE**

Lutselk'e receives an average of  $16.7~\rm cm$  of rainfall and  $126.7~\rm cm$  of snowfall per year. Mean annual precipitation totals  $29.3~\rm cm$ . July mean high and low temperatures are  $20.6~\rm C$  and  $11.7~\rm C$ . January mean high and low temperatures are  $-21.8~\rm C$  and  $-30.2~\rm C$ . Winds are generally south-east and annually average  $16~\rm km/h$ .

# **TRANSPORTATION**

An unlicensed 683 m x 24 m gravel runway is operated by the Community of Lutselk'e (GNWT). Limited airfield maintenance is available. No services are available at the water aerodrome. Scheduled flight service is available from Yellowknife. Barge service is provided by the Northern Transportation Company Ltd. from Hay River each July. Lutselk'e is not accessible by road. Within the community, 3 km of access roads are treated with calcium chloride to act as a dust suppressant and surface stabilizing agent.

# **GEOLOGY**

The area is underlain by Precambrian sedimentary and volcanic rock types. A thin, fragile layer of soil covers the surface, although there is much exposed bedrock. The townsite is on relatively level ground but the surrounding terrain features include hills and ridges.

# **VEGETATION**

Located 160 km west of the treeline, vegetation is sparse and predominantly sub-arctic. Black and white spruce, poplar, tamarack, willow, and birch are generally stunted in appearance. Mosses and grasses cover open land.

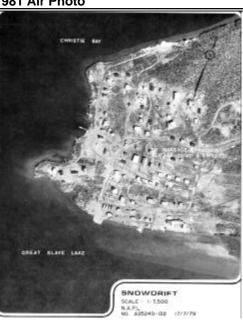
#### HISTORY

The Community of Lutselk'e is the most northerly of the Chipewyan settlements. The site has been the focal point for residents of the surrounding region since 1925, when a Hudson Bay Company Post was established. Development expanded in 1954, as homes were moved to the present townsite. A school was built in 1960.

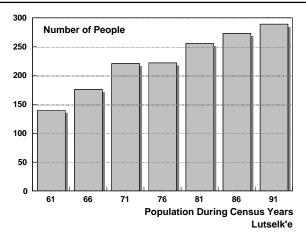
The economy is based primarily on trapping, fishing, and tourism. The Lutselk'e fishing lodge is open during the summer months. Great Slave Lake's East Arm is the deepest fresh water in the Western Hemisphere, producing trophy-sized Lake Trout. Tourism is boosted by the sale of handicrafts, which include beadwork and Caribou bone crafts.

Although no mining is taking place in the area, deposits of uranium, beryllium, and rare earth elements have been located approximately 100 - 130 km north of the community. Lutselk'e has no legal municipal status. Formerly known as Snowdrift, the community changed its name on July 1, 1992. The name "Lutselk'e" means "place of small fish".

# 1981 Air Photo



# **POPULATION**



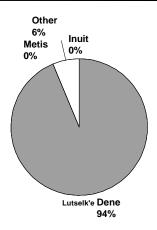
# Commentary

1961:140 1966: 176 1971: 221 1976: 222 1981: 256 1986: 273 1991: 289

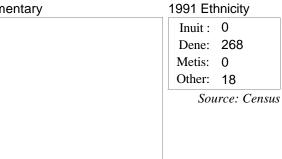
Source: Census

# **Population Statistics**

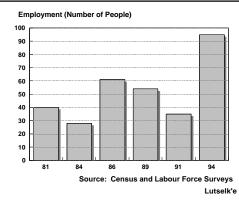
# **ETHNICITY**



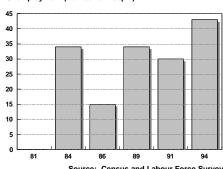
# Commentary



# **EMPLOYMENT AND UNEMPLOYMENT**



# **Unemployment (Number of People)**



Source: Census and Labour Force Surveys Lutselk'e

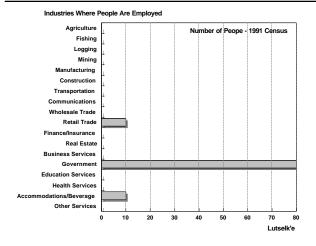
Source: 1994 Labour Force Survey, Bureau of Statistics

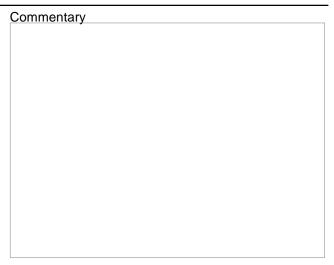
# **Employment Statistics 1994**

Over 15 Pop:	223	Abor. Employed: 75
Labour Force:	139	Unemployed: 44
Employed:	95	Ab. Unemployed: 41

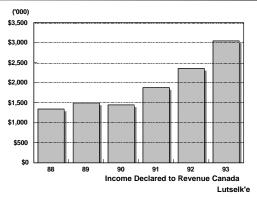
# Commentary

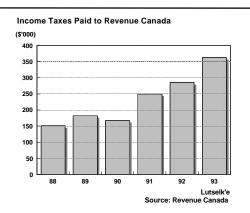
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





# Average Incomes

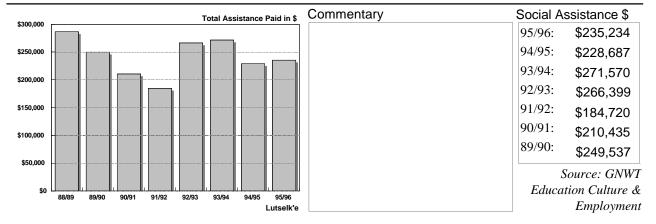
People Paying Inc.Tax 1993: \$19,025 1993: 160

1992: 160 1992: \$18,123 1991: 120 1991: \$15,633

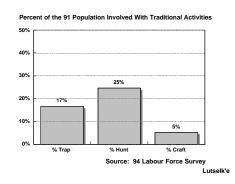
Source: Revenue Canada - Community Data

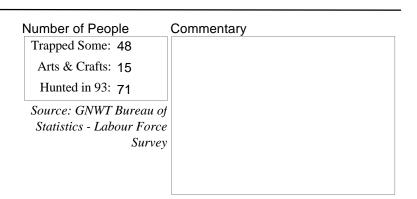
Commentary

# SOCIAL ASSISTANCE PAYMENTS



# TRADITIONAL ACTIVITIES





# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Snowdrift Co-op Hotel accommodates six with kitchen and shared bath facilities.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

# Commentary The number of occupied private dwellings increased by 35.8% between 1986 and 1991. As of 1994, the Housing Corporation owned 32 housing units. As of March 1995, the Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program had accounted for 34 new homes in the community. Detached: 55 Apartment: 0 Row House: 15 Trailer: 0

# Source: 1991 Census Data

#### **COMMUNITY SERVICES**

Education

Education	nealth
Lutselk'e Dene School teaches grades K-9. Three teachers and one classroom assistant are on staff.	The health centre (915 m2) was built in 1986. The facility, employing a staff of four, houses one bed, one bassinet, and one crib.
Fire	Recreation Services
Fire equipment consists of a triple-combination pumper truck. The firehall is complexed with the parking garage.	Recreational facilities include an outdoor rink, a drop-in centre, a community gym, and a playfield. An Active Recreation Committee coordinates community events.

Llaalth

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office has a staff of one. Social programs include the Lutselk'e Alcohol Program and the Home Care Program.

Mail is delivered twice per week. NorthwesTel local and long distance telephone service, CBC Radio, and CBC Television are available via the Anik satellite system. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides 650 kW of diesel power to the community.

Other infrastructure funded by Municipal and Community Affairs programs includes a parking garage, which is complexed with the firehall, and a community office, which is leased.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

#### Water Supply

In winter, water is taken from Great Slave Lake on the north side of the community. In summer, water is taken from the Snowdrift River, 3 km to the south of the community.

## Water Storage

The truckfill/pumphouse station was constructed in 1986, complete with an insulated intake line into the lake and a pumped water supply to a truckfill point. The pumphouse has a filling capacity of 1000 L/min.

# Water Treatment

The water is chlorinated regularly.

#### Water Quality

The supply water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the chemical analysis the water is moderately hard, moderately buffered, neutral to slightly alkaline, and with a moderate amount of dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters, with the exception of the raw water manganese concentration and turbidity, as below the recommended maximum limits.

#### **COMMUNITY WASTE**

#### Solid Waste

Solid wastes are placed in 204 L drums in front of each residence on elevated wooden stands. Wastes are often burned in the drums prior to pickup. Twice per week, a two-person crew using the two-ton pickup truck collect all solid wastes. Bulky wastes are picked up by the collection crew upon request. A spring clean-up is organized each June.

The partially-fenced solid waste management site is located 2.6 km west of the settlement near the airstrip. Wastes are usually covered four times per year. Front-end loader and bulldozer service are available at this site. Both honeybags and bulky waste are disposed of at an adjacent site, separate from the solid waste area.

# Sewage Disposal

Thirty-one residences use pumpout sewage tanks and 27 use honeybags for sewage disposal (1993). The Co-op Hotel and one RCMP house remain on a leaching field system. A 4550 L pumpout truck is used to collect pumpout sewage. In the past, sewage was treated at a seepage pit constructed at the solid waste site. Tests showed that Great Slave Lake's water contained very low levels of total coliforms and no detectable faecal coliforms, indicating that the low marshy area surrounding the seepage pit was effectively reducing bacterial activity before the effluent entered the Lake. As the seepage pit was located next to the airstrip, concerns were held for birds interfering with air traffic. In 1994, a lake 5 km east of the community was converted into a lagoon and wetland treatment area.

Honeybags are collected three times per week, separately from solid waste, on a open-backed two-ton truck. In summer, the bags are stored in 204 L drums which have had their tops removed. In winter, the bags quickly freeze at the roadside prior to pickup. The honeybag disposal pit 2.6 km from the community, is constructed on sloping ground with a woven wood fence at the bottom of the incline. Runoff is allowed to move through the fence where natural percolation takes place, while solids are contained by the fence.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Vahanni Butte

What the name means: Strong Rock Alternate Name: Tthenaago

**POLITICAL** 

Located in the future territory of: Western Arctic RWED Administrative Region: Deh Cho Member of the NWT Legislature: James Antoine Member of Parliment: Ethel Blondin

Mayor: Fred Tesou

Senior Administration Officer: Pauline Vital GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Simpson

NWT Legislature Riding: Nahendeh Languages Spoken: South Slavey Land Claim Area: Treaty 11 - Deh Cho

**LOCATION** *Longitude: 123.23; Latitude: 61.02* 

Nahanni Butte is located near the junction of the South Nahanni and Liard Rivers at 61'02N latitude and 123'23W longitude. The community is 142 air km south-west of Fort Simpson and 507 air km south-west of Yellowknife.

# **CLIMATE**

Nahanni Butte averages 38.1 cm of rainfall and 154.9 cm of snowfall per year. Mean annual precipitation totals 53.3 cm. July mean high and low temperatures are 25.6 C and 12.2 C. January mean high and low temperatures are -23 C and -32.7 C. Winds are generally north-west and annually average 16 km/h. The community averages 138 frost free days per year.

## **TRANSPORTATION**

Nahanni Butte is accessible by chartered aircraft, water or barge. The GNWT operates a 762 m x 18 m gravel aerodrome. No lights or navaids are present and there is not a shelter. Scheduled service is available with Simpson Air via Fort Simpson. There is also unlicensed float plane access at the rivers. Water transportation is available from Fort Nelson, B.C. The road connecting the community with the airstrip becomes muddy in inclement weather. There is no road system within the settlement, only paths connecting buildings. A winter ice road connects Nahanni Butte to the Liard Highway.

## **GEOLOGY**

The Community is situated in a wooded area on a level river plain composed predominantly of sands and silt. A high butte rises to the north. The site has been subject to flooding in the past and the river bank is eroding quite rapidly. The most severe flooding occurred in June 1977 when about half of the settled area was flooded. All newer homes and facilities have been located 30 m or greater from the riverbank on higher ground. The remainder of the area is generally well-drained with low ridges and swales directing excess runoff northward to the South Nahanni River. Some muskeg deposits are found where the gradient of the swales is flat.

The local topography consists of sub-parallel levees and drainage courses which are oriented north-north-west to south-south-east. The levees, reaching a depth of 2 - 4 m, are primarily silt and fine sand deposits of the Liard Meander Plain. Underlying the levees is a sand strata either of Liard deltaic material or South Nahanni terrace deposits. Permafrost features are not evident, however, the silty soils are highly susceptible to frost and very soft in the spring.

# VEGETATION

The area is thickly wooded with spruce, birch, tamarack, bushes, and shrubs. With respect to rate of growth and overall size, tree growth is similar to more southern locales.

# 1981 Air Photo

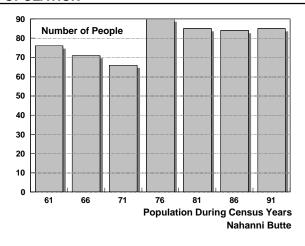


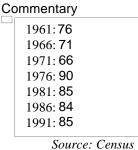
#### **HISTORY**

The majority of Nahanni Butte is of Slavey Dene origin. Historically, the Kaska group of the Nahanni Dene traded into Fort Liard, Fort Nelson, and as far as the coastal regions. The community was founded as people from the settlement at Netla River were moved 24 km to the present site by government. The people of the region continue to rely on trapping as a main source of income.

Nahanni National Park sits on the community's doorstep. Rafting, kayak, and canoe trips are very popular. The Park also boasts fantastic scenery and wildlife. Hot springs are also a major attraction. There is little or no commercial development in the area besides outfitters and a general store. Nahanni Butte has no legal municipal status and is considered an unorganized community. A traditional name for the community is Tthenaagoo, meaning "strong rock".

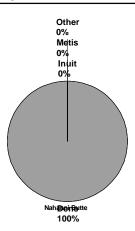
# **POPULATION**

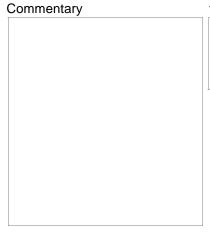




**Population Statistics** 

# **ETHNICITY**

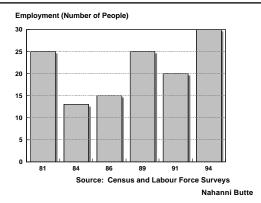


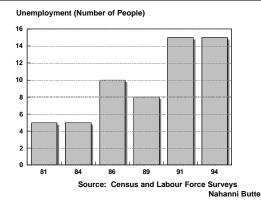


Inuit: 0
Dene: 85
Metis: 0
Other: 0

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





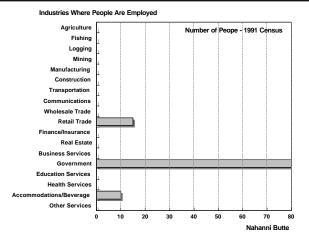
Source: 1994 Labour Force Survey, Bureau of Statistics

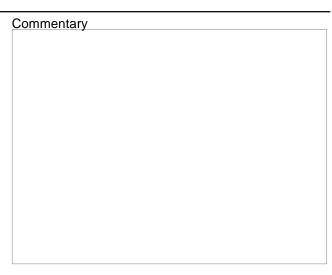
# **Employment Statistics 1994**

Over 15 Pop:	81	Abor. Employed: 15
Labour Force:	45	Unemployed:
Employed:	30	Ab. Unemployed:

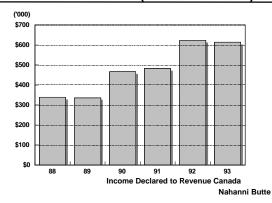
# Commentary

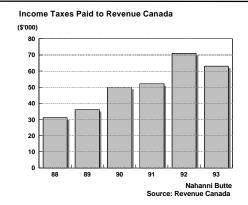
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax 1993: 40

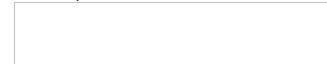
1993: \$15,350 1992: \$15,575

1992: 40 1991: 40

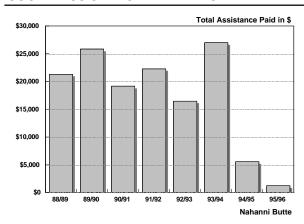
1991: \$12,075

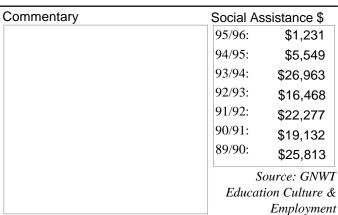
Source: Revenue Canada - Community Data

# Commentary

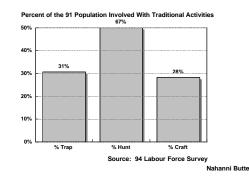


# SOCIAL ASSISTANCE PAYMENTS





# TRADITIONAL ACTIVITIES



Number of People

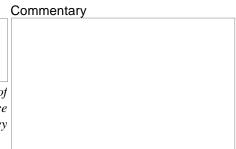
Trapped Some: 26

Arts & Crafts: 24

Hunted in 93: 57

Source: GNWT Bureau of Statistics - Labour Force

Survey



Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Nahanni Butte Page 5

# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	There is no commercial accommodation in Nahanni Butte.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type	of Housing
Occupied private dwellings in Nahanni Butte increased 21.1% between 1986 and 1991. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 21 new homes in the community.	Owned: Rented: Band Owned:	5
	Detached: Apartment: Row House: Trailer:	0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

Education	Health
The Charles Yohin School teaches grades K-9. One teacher is on staff.	The health station (140 m2) was built in 1990. There are no resident nurses and services are by lay dispenser. Visiting medical staff travel periodically from Fort Simpson.
Fire	Recreation Services
Fire protection consists of community fire extinguishers.	A community hall/office complex was built in 1994.

# Police, Mail, Electrical and Other Services

RCMP services and social services are available from Fort Simpson. Postal services consist of a courtesy bag. NorthwesTel provides mobile radio/phone service. As of 1996, NorthwesTel will provide full local and long distance telephone service to its customers in Nahanni Butte. CBC Radio and CBC Television are available via the Anik satellite system. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides 155 kW of diesel-generated capacity power to the community. Infrastructure funded by Municipal and Community Affairs programs includes staff housing, the community office, and a parking/maintenance garage complex.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

### **COMMUNITY WATER**

# Water Supply

In the past, water was obtained directly from two sources, the South Nahanni River, and Bluefish Creek, which is on the opposite side of the South Nahanni from the community.

In 1988, a small water supply was developed using the school well, providing individuals with domestic water only. The facilities include a .56 kW centrifugal well pump, a chlorination system, a manganese greensand filter system, and a pressure tank and hose used to fill the community water wagon. The school and the teachers residence have pressurized water systems, supplied by a 0.6 m diameter, 10.5 m deep well.

The remainder of the community is serviced by two wells constructed in 1996 in an area approximately 500 m west of the developed community and north of the winter road right of way. The water is chlorinated. This water supply system consists of the water wells, a pumphouse, and a truckfill building. The truckfill station is designed to achieve a fill rate of 1000 L/min. This flow rate can be achieved either by flow directly from the wells or a combination flow from the wells and from the heated day tank.

## Water Storage

A tank storage area provides one day's heated storage. Delivery is performed using a truck.

#### Water Treatment

The water is chlorinated. This water supply system consists of the water wells, a pumphouse, and a truckfill building. The truckfill station is designed to achieve a fill rate of 1000 L/min. This flow rate can be achieved either by flow directly from the wells or a combination flow from the wells and from the heated day tank.

# Water Quality

Nahanni Butte's water supply, for the time and locations sampled, is of an acceptable chemical quality for domestic use. Based on the chemical analysis the water is very hard, very well buffered, slightly alkaline, and high in dissolved solids. Both the raw and treated water samples were high in turbidity. The supply water is supersaturated with respect to CaCO3 and its precipitation accounts for the increase in turbidity. Manganese concentrations of the raw water sample were also above the recommended limit.

Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of turbidity and the raw water manganese concentration, as below the recommended maximum aesthetic value.

# **COMMUNITY WASTE**

# Solid Waste

Solid waste is collected from 205 L drums once per week in a 6 m2 wagon and loader by a one-person crew. The solid waste site (300 m2) is located adjacent to the airstrip, one km from the community. An annual clean-up is organized in the spring.

# Sewage Disposal

The school and teacher's residence use a septic tank/seepage pit system for the treatment and disposal of wastewater. The government buildings also have toilets and septic beds. The remainder of the homes use pit privies. Greywater disposal is to the adjacent ground surface.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Nanisivik

What the name means: Where People Find Things

Alternate Name: Nanisivik

# **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Levi Barnabas

Member of Parliment: Jack Anawak

Mayor:

Senior Administration Officer:

GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: High Arctic

Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

**LOCATION** *Longitude:* 84.33; *Latitude:* 73.02

# **CLIMATE**

# **TRANSPORTATION**

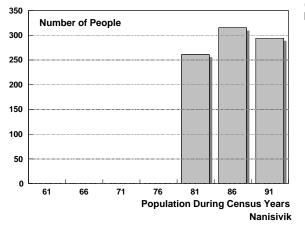
**GEOLOGY** 

1981 Air Photo

# **VEGETATION**

# **HISTORY**

# **POPULATION**



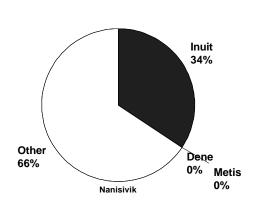
# Commentary

1961:0 1966:0 1971:0 1976:0 1981: 261 1986: 315 1991: 294

Source: Census

Population Statistics

# ETHNICITY





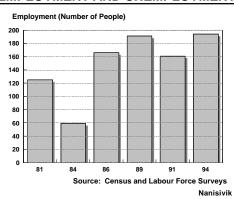
1991 Ethnicity

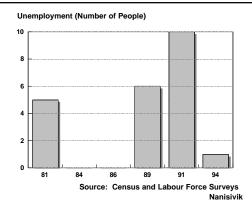
Inuit: 101
Dene: 0
Metis: 0
Other: 193

Source: Census

Nanisivik Page 2

# **EMPLOYMENT AND UNEMPLOYMENT**





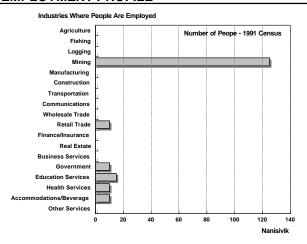
Source: 1994 Labour Force Survey, Bureau of Statistics

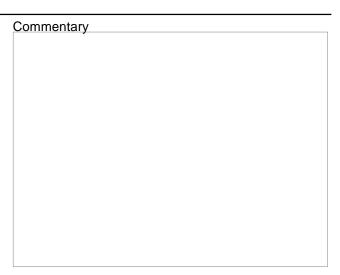
# **Employment Statistics 1994**

Over 15 Pop:	212	Abor. Employed: 0
Labour Force:	194	Unemployed: 0
Employed:	104	Ab. Unemployed: 0

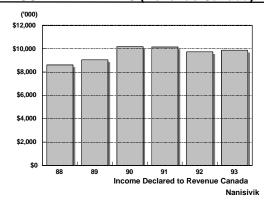
# Commentary

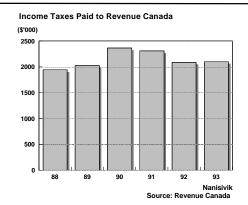
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

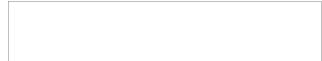
1993: \$51,900 1992: \$54,089

1991: \$57,322

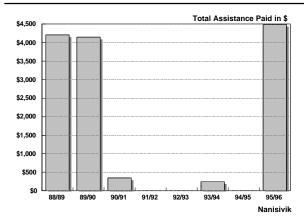
1993: 190 1992: 190 1991: 180

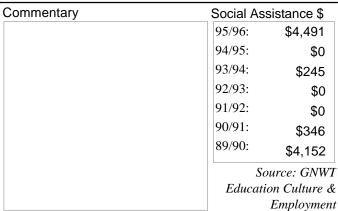
Source: Revenue Canada - Community Data

# Commentary

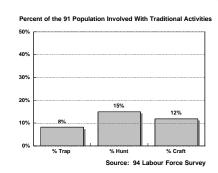


# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES



Number of People
Trapped Some: 24
Arts & Crafts: 35
Hunted in 93: 44

Source: GNWT Bureau of
Statistics - Labour Force
Survey

Commentary

of e
y

TOURISM		
Community Tourism Resources & Markets	Commercial Accommodations  95/96 94/95 93/94 92/93  Source: Non-Resident Only: RWED	Visitor Center Signings
HOUSING AND HOME OWNERSHIP		
Commentary		Ownership/Type of Housing Units Owned: 0 Rented: 80 Band Owned: 0 Detached: 40 Apartment: 5 Row House: 40 Trailer: 0  Source: 1991 Census Data
COMMUNITY CERVICES		Source: 1991 Centillo Band
Education	Health	
Fire	Recreation Services	
Police, Mail, Electrical and Other Services		
DAY CARE SERVICES - NONE REGISTERED	) IF BLANK	
COMMUNITY WATER		
Water Supply		
Water Storage		
Water Treatment		
Water Quality		
COMMUNITY WASTE		
Solid Waste		

Sewage Disposal

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Norman Wells

What the name means: Where There is Oil Alternate Name: Tlegohti

POLITICAL

Located in the future territory of: Western Arctic

RWED Administrative Region: Sahtu

Member of the NWT Legislature: Stephen Kakfwi

Member of Parliment: Ethel Blondin

Mayor: Max P. Melnyk

Senior Administration Officer: Alec Simpson GNWT Assigned Level of Development: Level 2 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Sahtu Languages Spoken: North Slavey

Land Claim Area: Sahtu

LOCATION Longitude: 126.50; Latitude: 65.17

Norman Wells, situated on the north bank of the Mackenzie River, views the entire width of the Mackenzie Valley from the Franklin to the Richardson Mountains. The community is located at 65'17'N latitude and 126'50'W longitude, 80 km north-west of Fort Norman and 684 km north-west of Yellowknife.

#### **CLIMATE**

Norman Wells receives an average of 18.8 cm of rainfall and 147 cm of snowfall per year. Mean annual precipitation totals 32.8 cm. July mean high and low temperatures are 22.0 C and 10.6 C. January mean high and low temperatures are -24.9 C and -32.9 C. Winds are generally north-west and annually average 12.2 km/h.

# **TRANSPORTATION**

A licensed 1829 m x 46 m asphalt runway, taxiways, and apron are managed by the GNWT. Most services are available. Scheduled jet service is available via Edmonton, Yellowknife, and Inuvik, as well as by chartered service. A licensed water/ice aerodrome allows for float plane access between June 1st and September 30th of each year. A network of roads links buildings together within the Town. A winter road leads to Wrigley. The Northern Transportation Company Ltd., based from Hay River, provides barge service between June and September.

#### **GEOLOGY**

Norman Wells is located to the south of the limit of continuous permafrost. However, the soil has high a ice content, is unstable, and is subject to heaving. The upper 3 - 6 m of soil is fluvial silt and sand, sitting above layers of shale and sandstone. The active layer varies from 0.5 - 1.5 m in the fine-grained soils. Degradation of the permafrost occurs when the organic cover is removed and the active layer increases to 3 - 5 m. Permafrost extends 45 m below the ground surface. A quarry was developed near the garbage dump on a limestone ridge. Isolated pockets of sand and gravel may be found in the eskers near the airport runway.

# **VEGETATION**

In better drained areas black spruce, tamarack, white birch, and alder grow. Muskeg supports mosses, grasses, and bushes.

# 1981 Air Photo



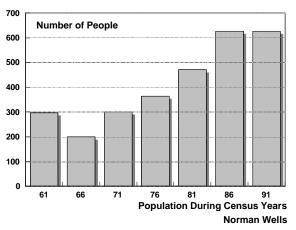
#### **HISTORY**

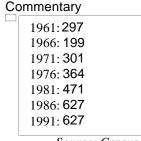
The first traces of oil were found by Mackenzie during his travels up the River. Traces of an oil bearing formation were found in 1911. By 1937, oil exploration in the area was well established by Imperial Oil Ltd. In 1939, a refinery capable of producing aviation fuel was constructed.

Between 1942 and 1944 the Canol Project, which included a pipeline built between Norman Wells and Whitehorse, was designed to supply fuel for the American war effort in the Pacific. The project would see a series of airstrips and winter roads built between Fort Simpson and Norman Wells, a small diameter pipeline constructed over permafrost, and many wells brought into production. At the conclusion of the project, a massive array of garbage was left by the Americans. Although most of it has been crushed and removed, artifacts can be found along the length of the pipeline.

An economically self-reliant community, Norman Wells main industry continues to be oil drilling and exploration. Imperial Oil Ltd. now produces over 1,000,000 barrels of crude oil per year from the site. The majority of this oil is sent to Alberta through the Mackenzie Valley Pipeline. Norman Wells gained Town status on April 12, 1992. A traditional name for the community is "Ttegoti", meaning where there is oil.

#### **POPULATION**

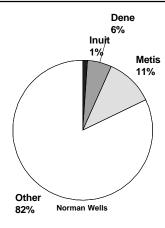


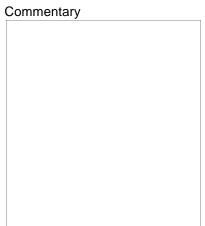


Source: Census

Population Statistics

#### **ETHNICITY**



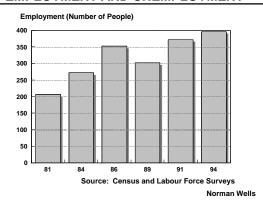


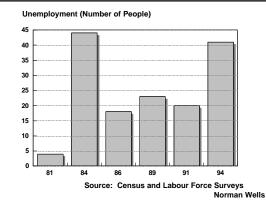
1991 Ethnicity Inuit: 7 Dene: 35 Metis: 70

Other: 515

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





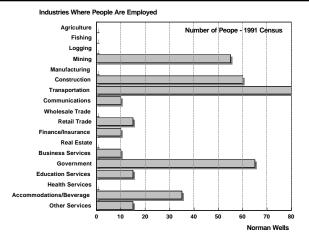
Source: 1994 Labour Force Survey, Bureau of Statistics

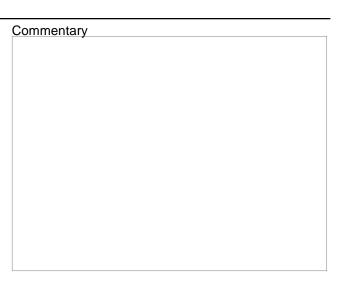
# **Employment Statistics 1994**

Over 15 Pop: 508 Abor. Employed: 56
Labour Force: 435 Unemployed: 39
Employed: 396 Ab. Unemployed: 18

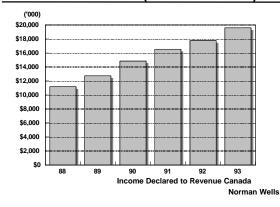
# Commentary

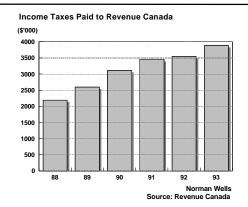
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax 1993: 480

1993: \$40,792 1992: \$42,271

1991: \$42,369

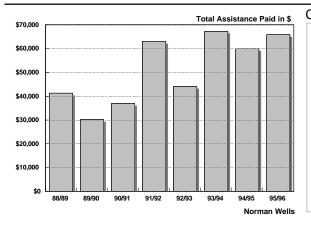
1992: 480 1991: 390

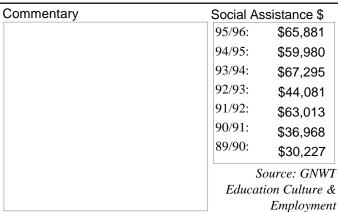
Source: Revenue Canada - Community Data

# Commentary

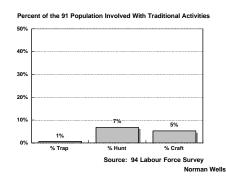
# ,

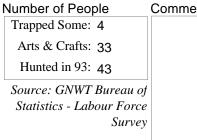
# **SOCIAL ASSISTANCE PAYMENTS**

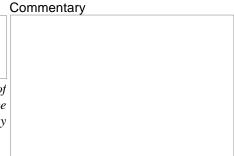




# TRADITIONAL ACTIVITIES







# **TOURISM**

### Community Tourism Resources & Markets Commercial Accommodations Visitor Center Signings The Rayuka Inn, which can 95/96 accommodate 20, has television, 94/95 93/94 radio, and telephone services, along 92/93with a cafe and two lounges. The Norman Wells Inn accommodates 32, Source: Non-Resident with two lounges and a licensed Only: RWED restaurant. The Mackenzie Valley Hotel accommodates 33 with television and telephone services, a restaurant, a dining room, and a lounge.

# HOUSING AND HOME OWNERSHIP

Commentary

Ownership/Type of Housing
The Town of Norman Wells is divided into three residential areas. Imperial Oil Ltd.
homes are in the west end of the community, separated from the town by the refinery.

A private trailer park is located further south along the riverbank. The number of Rented: 180

homes are in the west end of the community, separated from the town by the refinery. A private trailer park is located further south along the riverbank. The number of occupied private housing remanied constant between 1986 and 1991. As of 1994, the Housing Corporation owned 21 housing units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 15 new homes in the community.

Apartment: 15
Row House: 45
Trailer: 30

Detached: 130

Band Owned: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

# Education

Norman Wells Territorial School, which teaches grades K-9, has six teachers on staff. The Norman Wells Education Committee is the local advisory group for education. Vocational and continuing education opportunities are available through the Adult Education Centre. There is one resident adult educator.

# Fire

A ten-person volunteer brigade uses a triple combination pumper truck to fight fires. Telephones and pagers are used as emergency response tools.

# Health

The Norman Wells Health Centre (464 m2) was built in 1978. Four medical staff support four medical beds, one bassinet, and one crib.

# **Recreation Services**

Recreational facilities include a community hall, an arena, a curling rink, and a swimming pool. The school gymnasium is open to the community. Other facilities include the Norman Wells Community Library, ski trails, and a softball field. The Winter Carnival is held annually each March. The Recreation Committee and the Recreation Co-ordinator promote activity and awareness throughout the community.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office has a staff of two. Church services include the Roman Catholic Mission, the Baptist Church, and the Community Church.

Mail is delivered five times per week. NorthwesTel microwave local and long distance service is available, as is VHF radio/phone service. CBC Radio (LPRT), CBC Television (Anik system), and four Cancom television channels are available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. Infrastructure funded by Municipal and Community Affairs programs includes a parking garage, a maintenance garage, the town office, the firehall, and staff housing.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

**COMMUNITY WATER** 

# Water Supply

In the 1950's Imperial Oil Ltd. dammed Bosworth Creek, creating a pond as a water source. In winters where the creek would run dry water would have to be drawn from the Mackenzie River. A few years later the creek dam wall was raised but a growing population meant that the community still occasionally ran out of water. In 1969, a dam was built 1 km upstream and the shortages ended.

The Town of Norman Wells obtains water from two sources. A small reservoir on Bosworth Creek provides raw water for the main community, while an intake on the Mackenzie River provides water for Esso Resources.

The reservoir on Bosworth Creek (150 m x 30 m) has a depth of 3.5 m at its deepest point. The estimated daily flow of the creek averages 0.28 m3/s, and is considered adequate to meet the communities potable water requirements.

# Water Storage

The booster station, completed in 1975, is an insulated metal clad structure on a pile foundation. Structural repairs were required in 1985 due to settling. To meet the requirements of the original design, the booster pumphouse contained a 68,200 L water storage tank. This tank was used to provide fire storage and demand load balancing. A boiler plant in the booster station heated the stored water through shell and tube heat exchangers.

A 910,000 L storage tank was installed in 1978 to increase fire storage and to provide further demand balancing. Located adjacent to the booster pumphouse, the vertical steel tank is insulated with polyurethane foam insulation and protected by metal cladding.

McDonnell-Douglas "Cyro-Anchors" or heat pipes were installed to prevent degradation of the permafrost subsoils beneath the tanks.

Direct heating of the supply water was discontinued in 1985/86 and extensive modifications were made to the piping within the booster station. The 68,200 L storage tank was removed along the heating system boilers, circulating pumps, heat exchangers, and associated controls. The piping was modified to facilitate the present operation.

# Water Treatment

The filtration plant is a 7 m x 11.3 m insulated metal clad building containing the following:

Two "Permutit" pressure filters 1.83 m using sand media, in diameter, and rated for 276 kPa working pressure. The filters are rated at 409 - 455 L/min. in parallel operation and are designed to reduce turbidity. Cyclone filters were installed in 1980-81 to increase the effectiveness of the pressure filters. Valves which allow parallel operation of filters, single filter operation, or filter bypassing. Backwash piping (100 mm) is provided. A fire pump. Booster and standby pumps were installed for the industrial water supply. The 159,000 L heated storage tank for industrial water is located adjacent to the filtration plant.

A 200 mm supply line enters from the Mackenzie River. After filtration, the domestic water is pumped to the boiler house and gas chlorinated. From there the water is sent through a 150 mm diameter main and metered at Esso's meter house, then flows 46 m further to the booster pumping station or distribution point. At the boiler house, the industrial water may be filtered and softened. Subsequently, it is used for boiler feed, cooling, and service water for the refinery complex.

# Water Quality

The supply water for Norman Wells (sampled from Bosworth Creek), for the time and locations sampled, is of acceptable chemical quality for domestic use. Based on the water quality results, the water is very hard, highly buffered, slightly alkaline, and high in dissolved solids. Of the water quality parameters tested, with the exception of the treated water turbidity and total dissolved solids concentration, all were below the recommended limits stipulated in the Guidelines for Canadian Drinking Water Quality.

# **COMMUNITY WASTE**

# Solid Waste

Norman Wells solid waste management site received the 1993 Environment Award from the Association of Professional Engineers, Geologists, and Geophysicists of the NWT. Converted in 1992 from a dangerous open dump perched virtually on the side of a mountain cliff, northern state-of-the-art waste segregation techniques now compliment the technique of modified landfill disposal. The site has become a model for other communities who, after viewing the site and seeing its efficient, low-cost operation, now incorporate many of the practices.

Fundamental to the program is the voluntary community segregation-at-source program employed by business and industry. Solid waste is sorted into various commodities before being taken to the management site. At the supervised site, segregated wastes are stored in assigned areas for ease of reuse and recycling. A solar powered electric fence prevents bears and trespassers from entering. Portable fences (4 m in height) are easily moved to different angles to prevent wind-blown garbage.

Domestic solid waste collection is performed under local contract using a side-loading, rear-dumping truck. Disposed at a location away from public access, the waste is compacted and covered weekly. Each summer a student is hired to help manage the site.

# Sewage Disposal

Prior to 1970, each small area or group of buildings collected their sewage and discharged it over the riverbank and onto the beach. Department of Transportation used a 5000 gallon fibreglass septic tank which they kept heated.

Because of the climate, the size of the Mackenzie river, the variation in flow of the river with spring high water and massive ice flows, there was no build-up of polluted areas along the banks or the beaches. The relatively small quantities involved precluded any adverse effect on the river.

The question of sewage treatment was first answered in 1978. Dr. D.W. Smith found sufficient aeration taking place in the Mackenzie River to permit the direct discharge of untreated, macerated sewage through a multi-port diffuser outfall. This determination challenged earlier policies advocated by the Department of the Environment in the 1960's, which stated that solids removal be performed prior to discharge into lakes and rivers. A macerator/outfall system containing a 500 m outfall line and diffusers was installed in 1979.

In the mid 1980's, the NWT Water Board disallowed the continued discharge of untreated sewage to the Mackenzie River. As a result, a forcemain was constructed to an existing lake, the lake converted to a lake-lagoon through the construction of a control structure, and the downstream wetlands became the new sewage treatment system.

Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment.

Piped Sewage from the community's gravity system flows through a macerator into the lift station and is in turn pumped 2 km via a forcemain to the sewage lagoon. The sewage pipe is 150 mm diameter welded steel with 75 mm polyurethane insulation. The existing system has both buried piped and above-ground utilidor arrangements. Piped sewage which flows through the utilidor system enters the macerator building. Trucked sewage is taken to a dumping point on the utilidor, upstream of the macerator station.

The entire system is designed to accommodate a population of 1240 generating 483,000 L/day of piped sewage and 30,000 L/day of trucked sewage. The existing macerator station is being retained as a component of the overall system as a standby sewage treatment facility and as the overflow from the sewage lift station. Under normal conditions, sewage flowing through the macerator is diverted to the lift station. Pumps:

The lift station is equipped with two Flygt pumps (28 L/s with 15 kW motors). The buried forcemain is 200 mm diameter Series 60 and Series 80 polyethylene insulated throughout with 75 mm urethane insulation. It requires approximately 7 hours for sewage to flow the full 2 km distance to the lagoon. Thaw access points are provided every 200 m. Sewage trucks discharge directly into the primary cells by means of discharge chutes. The forcemain discharges directly into each cell as well.

# Lagoon:

The sewage lagoon system, commissioned in 1987, consists of Seepage Lake, a lift station, and a forcemain. Sewage is retained in the lake and discharged annually. Discharge flows eastward in a natural stream for 4.5 km. Contained within natural contours, the volume of the sewage lagoon measures 153,000,000 L. An interceptor ditch, constructed parallel to the north side of the lagoon, diverts natural runoff from extensive valley slopes on the inland side of the lake.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Norman Wells Page 8

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Pangnirtung

What the name means: Lots of Caribou

Alternate Name: Panniqtuug

# **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Tommy Enuaraq

Member of Parliment: Jack Anawak

Mayor: Manasa Evic

Senior Administration Officer: Rita Mike GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Baffin Central

Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

# **LOCATION** *Longitude:* 65.43; *Latitude:* 66.09

Pangnirtung is located on the south-east shore of Pangnirtung Fiord, on the Cumberland Peninsula of Baffin Island. Situated at 66'09N latitude and 65'45W longitude, the Hamlet is 298 air km north of Iqaluit and 2,333 air km north-east of Yellowknife.

# **CLIMATE**

Pangnirtung receives an average of  $16.2~\rm cm$  of rainfall and  $180.3~\rm cm$  of snowfall annually. Mean annual precipitation totals  $34.8~\rm cm$ . July mean high and low temperatures are  $11.1~\rm C$  and  $3.9~\rm C$ . January mean high and low temperatures are  $-25.6~\rm C$  and  $-37.8~\rm C$ . The winds are east and west and annually average  $24~\rm km/h$ .

# **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 884 m x 30 m certified Arctic C gravel runway. Facilities and services include the terminal building (1994), navigational equipment, and weather-reading equipment. Scheduled flights are available with First Air via Iqaluit. An unlicensed water aerodrome provides float plane access from July through September.

Marine service is provided by Eastern Arctic Sealift and Transport Canada (Montreal). Beach landing facilities are present. In 1996/97, the channel is to be deepened to accommodate small craft and barges. There is no direct road access to Pangnirtung. Within the community there are approximately 12.4 km of gravel surface roads. Calcium chloride is applied annually to 6.2 km of road to act as a dust suppressant and surface stabilizing agent.

# **GEOLOGY**

The community is situated on a gently sloping beach at the bottom of a large horseshoe-shaped valley. It lies on the remains of a tidal beach, an old river delta, and glacial drift, which is composed primarily of silty sand mixed with boulders. The heavily jointed and faulted bedrock is largely metamorphic. Bedrock outcrops are common along the beaches adjacent to the Hamlet as well as on the slopes to the south.

The settlement is bounded on the north and west by the fiord, on the south by steep hills and on the east by the Duval River. Due to the narrowness of the site, expansion can only take place parallel to the beach. Permafrost in the area is continuous. The maximum depth of annual thaw ranges from between 0.5 to 1.5 m, depending on the thickness of the moss cover and the properties of the underlying soils.

# **VEGETATION**

Vegetation consists of lichens and thick mosses with stands of hardy grasses.

# 1981 Air Photo



### **HISTORY**

Cumberland Sound was visited by Davis in 1585. During the seventeenth century, whaling ships gathered in the area. Business alliances and marriages between the whalers and the Inuit were often formed. While the whaling industry began to decline in the early twentieth century, the renewed white fox trade gave rise to the opening of the Hudson Bay Company post in 1921.

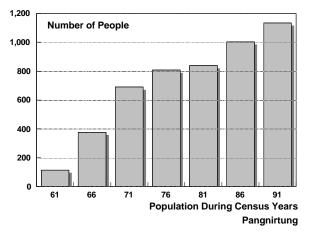
The RCMP started a detachment in 1923. In 1926, the Anglican Mission moved to the community from Blacklead Island, the main whaling station of previous generations. Shortly after, a hospital was established; a nursing station and school would follow. In the 1930's, a failed attempt to establish a settlement at Devon Island had the community in transition. The dog epidemic of 1960, which decimated four-fifths of Kimmirut's canine population, also affected Pangnirtung, although not to the same degree. Outlying camps moved into the community for stability and most stayed.

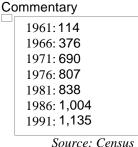
Marine mammal harvesting, tourism, and the sale of arts and crafts are the economic mainstays of the Hamlet. Cumberland Sound was traditionally a very active location for hunting and whaling. European ships decimated populations of belugas, right whale and narwhal during the 18th and 19th centuries. Sealing, whaling, fishing, polar bear and caribou hunting are still vital economic activities for the community.

Opening in 1968, the Pangnirtung Co-operative created a means to promote Inuit arts and crafts throughout Canada and the world. Carrying carvings, prints and textiles, the co-operative was rebuilt in 1994 after fire destroyed the building. Pangnirtung prints and toques are unique to the Hamlet. The Hamlet is the south entrance point to Auyuittuq National Park, the home of the Penny Ice Cap, large mountains and massive retreating glaciers. The Park, known for its ice climbing and backpacking opportunities, draws adventurers from across the globe. Pangnirtung gained Hamlet status on April 1, 1972.

The Hamlet was traditionally known as "Panniqtuuq", meaning lots of caribou.

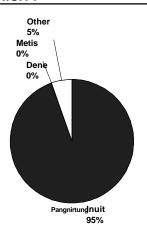
# **POPULATION**

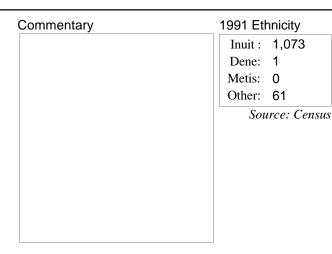




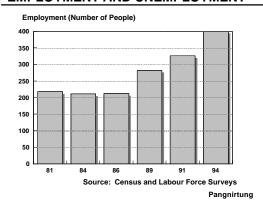
Population Statistics

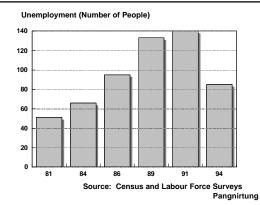
# **ETHNICITY**





# **EMPLOYMENT AND UNEMPLOYMENT**





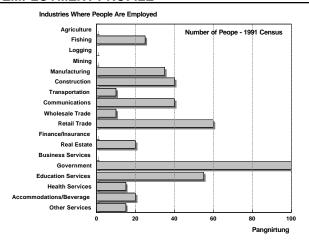
Source: 1994 Labour Force Survey, Bureau of Statistics

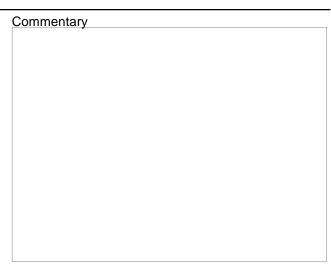
# **Employment Statistics 1994**

Over 15 Pop: 746 Abor. Employed: 341
Labour Force: 485 Unemployed: 85
Employed: 400 Ab. Unemployed: 82

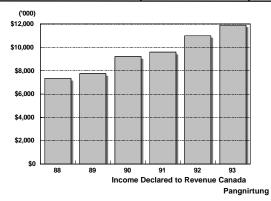
# Commentary

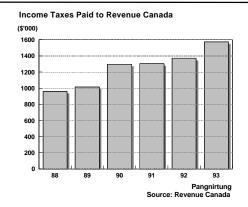
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax 1993: 580

1993: \$20,529 1992: \$20,002 1991: \$18,452

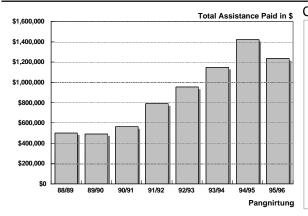
1992: 580 1991: 520

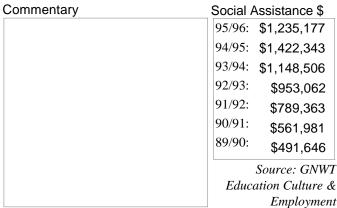
Source: Revenue Canada - Community Data

# Commentary

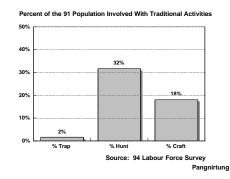
# .

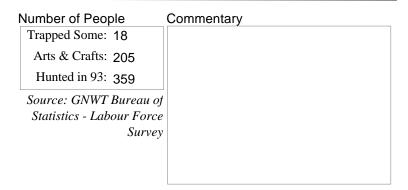
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Auyuittuq Lodge accommodates 34 guests.	95/96 94/95 93/94 92/93
		Only: RWED
		·

### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing
The number of occupied private dwellings increased 24.4% between 1986 and 1991. As of 1994, the Housing Corporation owned 225 housing units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 30 new homes in the community.	Owned: 20 Rented: 235 Band Owned: 0
	Detached: 195 Apartment: 5 Row House: 55

Source: 1991 Census Data

Trailer: 0

# **COMMUNITY SERVICES**

# Education

Alookie School teaches grades K-3 and Attagoyuk School teaches grades 4-12. Seventeen teachers and five language specialists are on staff in the Hamlet. Vocational and continuing education opportunities are available through the Arctic College Extension Program. Two adult educators and an outreach worker are employed.

Health

The health centre (457 m2), built in 1975, was renovated in 1986. The facility contains two medical beds, one bassinet and one crib. Eight medical staff are employed.

# Fire

The Hamlet has a twenty-person volunteer fire brigade. Equipment includes a 1979 IHC model S-1800 triple combination pumper (4546 L capacity). A call box and siren alarm system is in place for quickened response. The community has a firehall (159 m2).

# Recreation Services

Pangnirtung's large arena/curling rink facility (2,380 m2) was built in 1988. Other facilities include a large community hall (1986), the school gymnasium, a public library, a pool hall, and a museum. Outdoor facilities include two playgrounds, a playfield, a rink, and a developed trail system. Bingo night is held each week. Pangnirtung has an Active Recreation Committee.

# Police, Mail, Electrical and Other Services

The RCMP detachment staffs three officers. The Community Social Services Office has a staff of two. Social service facilities and programs include the Baffin Regional Alcohol Information Centre and the Youth Justice Committee.

Mail is delivered twice per week. NorthwesTel local and long distance telephone service, CBC Radio and CBC Television services are available via the Anik satellite system. There is also a community radio station. NWTPC provides 1,620 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the Hamlet office (204 m2), a parking garage and workshop (684 m2), and a maintenance garage (755 m2).

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

Precious Children

# **COMMUNITY WATER**

# Water Supply

The Hamlet traditionally obtained its water from the Duval River during the summer and early fall. During the early winter, ice from the river was melted for water. Once it froze, a small river across the Fiord was used. The present water supply system consists of an intake pipeline which extends from the bank of the Duval River, along a ditch to the reservoir and the truckfill building, which is located on the top edge of the reservoir.

# Water Storage

In 1968, an unlined in-ground storage reservoir was constructed in the moraine area just west of the Duval River. Material was pushed downslope and to the sides to form berms, while the upslope was left at grade.

The soil used in the reservoirs construction is a gravelly, bouldery sand. Initially the reservoir leaked badly and was susceptible to contamination due to the inflow of silty groundwater; this was likely due to faulty installation. In 1973, a liner was installed to mitigate the problems of air entrapment, hydrostatic uplift, and leaks due to the puncture of the liner.

The new reservoir (1987), located to the east of the Duval River, 1.4 km from the community, has a ten-month storage capacity of 120,000,000 L. It was constructed in the side of a slope between an upper and lower plateau, with the longer dimensions parallel to the hill in an east-west direction.

The reservoir facility includes a truckfill station, a sub-drainage system and a filling line from the river. At the truckfill station, water is discharged from an overhead swingpipe. The pumps are capable of discharging 125 IG/min. A remote pump control and water meter readout, reset and warning alarm are installed outside the station. The pump controls have a pump start and stop-override.

Water is delivered to the community by four trucks. A 1990 (5455 L), a 1988 (4546 L), a 1993 (6819 L), and a 1995 (6819 L) are used. All water deliveries are metered.

# Water Treatment

Water is treated by hypochlorination as the delivery truck is being filled. Each fall when the reservoir is filled barrels of hydrofluosilic acid are used to batch fluoridate the water. The water in the reservoir is properly mixed to prevent pooling of the fluoride.

# Water Quality

The Hamlet's supply water was found to be of excellent chemical quality based on its clarity, softness, slight acidity, and lack of dissolved solids. The water was found to be poorly buffered. These characteristics indicate a very soft water, potentially corrosive when in contact with metallic materials.

# **COMMUNITY WASTE**

# Solid Waste

A 1990 Ford model F-450 truck is used for the collection of wastes. The solid waste site is located past the sewage dump site on the road north-east from the Hamlet. The site receives materials such as household waste, construction waste, metals, vehicles, fish offal, honeybags and carcasses.

An incinerator installed in the early-1980's is no longer used due to mechanical problems and excessive operating costs. A modified sanitary landfill and waste management site is under development (1996).

# Sewage Disposal

Most residences receive sewage pumpout service. Sewage is collected using four trucks, a 1985 (4546 L), a 1990 (5455 L), a 1993 (6819 L), and a 1995 (6819 L). Sewage and solid waste are trucked to disposal sites ranging from 1.7 to 2.2 km north-east of the community. Sewage is dumped in a small pond, where it flows a short distance to the Fiord. A sewage lagoon for storage and treatment is under development (1996) in an area to the north-east of the present dump sites.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Paulatuk

What the name means: Place of Coal Alternate Name: Paulatuuq

### **POLITICAL**

Located in the future territory of: Western Arctic

RWED Administrative Region: Inuvik

Member of the NWT Legislature: Vince Steen

Member of Parliment: Ethel Blondin

Mayor: Albert Ruben

Senior Administration Officer: Ken Thompson GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Nunakput Languages Spoken: Inuvialuktun Land Claim Area: Inuvialuit

# **LOCATION** *Longitude: 124.04; Latitude: 69.21*

Paulatuk is located at 69'21'N latitude and 124'04'W longitude on Darnley Bay. The Community is 402 km east of Inuvik and 885 km north-west of Yellowknife.

# **CLIMATE**

Paulatuk receives an average of 10.2 cm of rainfall and 126.7 cm of snowfall per year. Mean annual precipitation totals 22.4 cm. July mean high and low temperatures are 18.8 C and 8.3 C. January mean high and low temperatures are -24.9 C and -32.7 C. Winds are generally east and annually average 14 km/h.

# 1981 Air Photo



# **TRANSPORTATION**

The Hamlets 975 m x 30 m sand runway receives scheduled service from Inuvik. Landing lights and some services are available. The runway is subject to softening in the spring. An unlicensed water aerodrome provides float plane access from August to September. Barge service from Hay River is provided once per year.

### GEOLOGY

The Hamlet was built between the seashore and an inland lake. Silts and sand in the area have a high moisture content. Gravel is scarce in a region dominated by muskeg. The site is underlain by continuous permafrost.

### VEGETATION

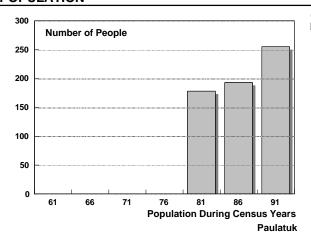
Dry sandy areas contain grasses, mosses and lichens. Reed grasses, sedges, and mosses can be found in lower, wetter areas. Some dense stands of willows may be found in the delta regions of rivers.

### HISTORY

Paulatuk translates as "soot of coal" and was named for the coal that was found and used by the Inuit when they settled there in the early 1920's. During this time, residents grouped together in Letty Harbour, the present site of Paulatuk. In 1935, the Roman Catholic Trading Post was opened. Construction of the DEW-Line site created new wage employment and a subsequent flourish in community wealth.

Eventually the success of the Trading Post would dwindle and it would be taken over by the Paulatuk Co-op. Today, the Co-op is run privately but the Hamlet still grows at a steady pace. Hunting, fishing and trapping remain the major economic activities. The Hamlet is known for its handicrafts and carvings in the Inuvialuit tradition. Oil and gas exploration continues in the Beaufort Sea. Paulatuk gained Hamlet status on April 1, 1987.

# **POPULATION**



# Commentary

1961:0 1966:0 1971:0

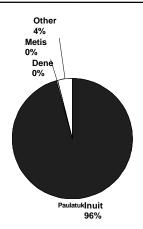
1976:0 1981: 178 1986: 193

1991: 255

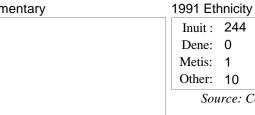
Source: Census

**Population Statistics** 

# **ETHNICITY**

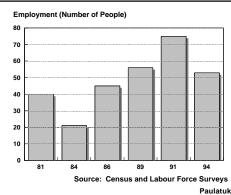




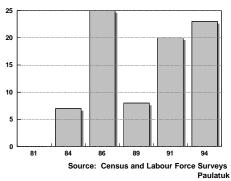


Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**



# **Unemployment (Number of People)**



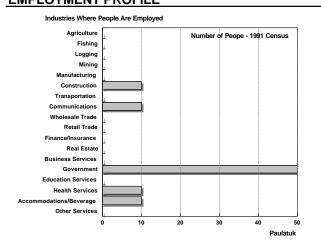
Source: 1994 Labour Force Survey, Bureau of Statistics

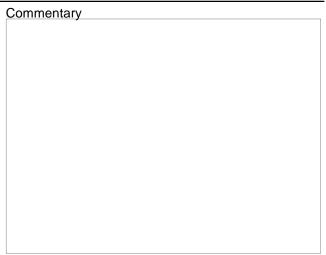
# **Employment Statistics 1994**

Over 15 Pop:	177	Abor. Employed: 50
Labour Force:	76	Unemployed: 25
Employed:	53	Ab. Unemployed: 23

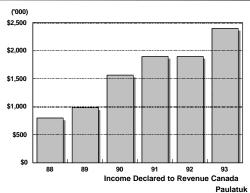
# Commentary

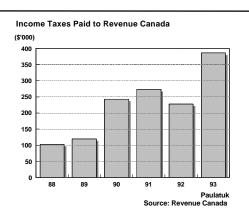
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





# Average Incomes People Paying Inc.Tax

 1993: \$23,980
 1993: 100

 1992: \$18,930
 1992: 100

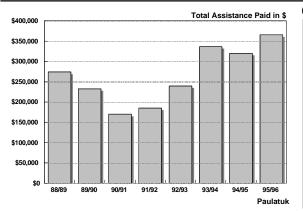
 1991: \$17,236
 1991: 110

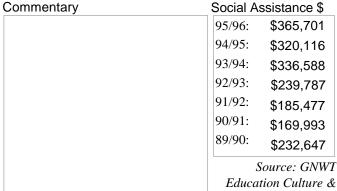
Source: Revenue Canada - Community Data

Commentary

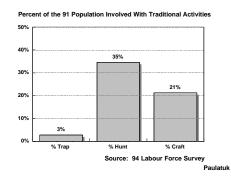
Employment

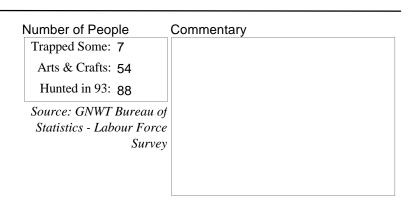
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Paulatuk Hotel accommodates twelve with shared bath facilities.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

# HOUSING AND HOME OWNERSHIP

# Commentary Ownership/Type of Housing Occupied private dwallings increased by 33% between 1986 and 1991. As of 1994.

Occupied private dwellings increased by 33% between 1986 and 1991. As of 1994, the Housing Corporation owned 36 housing units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 19 new homes in the community.

Owned: 15 Rented: 35 Band Owned: 0

Detached: 45 Apartment: 0 Row House: 5 Trailer: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

# Education

Angik School teaches grades K-6. Two teachers and one classroom assistant are on staff. The Paulatuk Education Committee is the local education authority. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

# Health

The health centre (733 m2), which includes a garage and apartments, was built in 1986. Equipment includes one bassinet, one crib, and one hospital. A medical staff of two is employed.

# Fire

A five-person volunteer brigade uses a triple combination pumper truck, a 160 kg dry chemical system, and a 136 kg wheeled extinguisher to fight fires. A fire phone system is in place.

# Recreation Services

A multi-purpose gymnasium/hall is located within the school. Other recreational facilities include a playground and a museum. Paulatuk has an Active Recreation Committee.

# Police, Mail, Electrical and Other Services

RCMP and social services are available from Inuvik. Mail is delivered twice per week. NorthwesTel local and long distance service, CBC Television, CBC-FM radio, and ITV (Edmonton) are available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories.

Other infrastructure funded by Municipal and Community Affairs programs includes the firehall, the hamlet office, and the parking garage. The parking garage is located in a complex shared with a maintenance garage. Staff housing is leased through funds provided by Community Works programs.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

# Water Supply

In the past water had been drawn from Water Lake, located adjacent to the airport, and delivered untreated to the community by truck. A new water supply 4 km south-east of the community was chosen in 1991. New Water Lake has a surface area of approximately 900 m2 and a depth of 7 m. Water is distributed via a new truckfill/pumphouse.

### Water Storage

Water is distributed using a 4500 L truck, usually twice per week. During the winter, some people collect ice to supplement the delivered water.

# Water Treatment

Water taken from New Water Lake is chlorinated en route to the truckfill arm. Treatment equipment includes a Wallace and Tiernan hypochlorinator kit. It features a Chempulse Model 45-100 motor capable of 37.8 L/h @ 344 kPa. The two chemical tanks and mixer are located in the pumphouse.

# Water Quality

V V (

# **COMMUNITY WASTE**

# Solid Waste

Solid waste is deposited in a 4 m x 20 m x 3 m trench and often compacted. Once per year the wastes are covered.

Paulatuk Page 6

Sewage Disposal

Pumpout sewage is collected using a vacuum truck. Bagged sewage is collected three times per week by a front-end loader. All sewage and solid wastes are presently deposited at the waste disposal area, located 0.5 km north-west of the community. Sewage is treated in the adjacent 25 m x 15 m lagoon.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# <u>Pelly Bay</u>

What the name means: Lots of Bowhead Whales

Alternate Name: Arviliqjuat

# **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Kitikmeot Member of the NWT Legislature: John Ningark

Member of Parliment: Jack Anawak

Mayor: Ovide Alakanuark

Senior Administration Officer: Elwood Johnson GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Kitikmeot

NWT Legislature Riding: Natilikmiot

Languages Spoken: Inuktitut Land Claim Area: TFN - Kitikmeot

# **LOCATION** *Longitude:* 89.49; *Latitude:* 68.32

The Community of Pelly Bay is situated to the south of the Kugajuk River on Pelly Bay, at 68'32N latitude 89'48W longitude. Located on the west shore of Barrow Lake, it is within the Wager Plateau Sub-region of the Kazan Region of the Canadian Shield. Barrow Lake is situated at the boundary of the Canadian Shield and the Arctic Lowlands. The Hamlet is 177 air km south-east of Taloyoak and 1,312 air km north-east of Yellowknife.

# CLIMATE

Pelly Bay receives an average 10.3 cm of rainfall and 127 cm of snowfall per year. Mean annual precipitation totals 22.4 cm. July mean high and low temperatures are 9.7 C and 2.9 C. January mean high and low temperatures are -29.7 C and -35.6 C. Winds are westerly throughout most of the year and northerly in summer months.

# 1981 Air Photo



# **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 1,524 m x 30 m certified Arctic C gravel runway with a 305 m overrun. Facilities and services include a terminal building, weather/communications equipment and navigation aids. Scheduled flight service is available from First Air via Iqaluit/Yellowknife.

The GNWT is planning to build a small marshalling area to accommodate future sealift runs following the recent success breaking through the pack ice. There is no direct road access to Pelly Bay. Within the community, 8.5 km of roads have been built by placing fill material over stretches of rocky terrain.

# **GEOLOGY**

To the north and east, the bedrock is predominantly limestone of the Ordovician and Silurian ages. To the west, it is predominantly granite and metamorphic rock of the Precambrian age. Huge outcrops of Precambrian rock are interspersed with plains of till. Many of the ridges and adjacent areas are boulder strewn, particularly near the Kugajuk River. Extensive deposits of coarse granular material are found within a few kilometres of the Community. Smaller deposits of fine granular material and clay are easily accessed.

Construction of buildings began on the flat till plains, where shallow lakes were often a constraint to development. Continuous permafrost conditions require that the soil and rocky material be stripped and allowed to thaw and drain for several days or weeks prior to use.

# **VEGETATION**

Bedrock and till are sparsely covered with mosses and lichens.

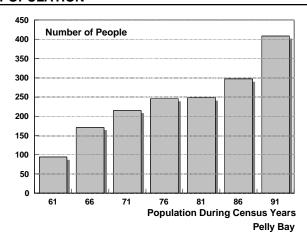
# **HISTORY**

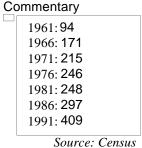
The original inhabitants of Pelly Bay were the Netsilingmuit. The seal-hunting way of life of these people changed very little through the whaling and trapping periods which greatly influenced other Inuit groups. Before any interaction with foreigners, the area was used as a fishing camp. John Ross was the first European to contact the Netsilingmuit, wintering in the area in 1829. The Roman Catholic Mission, built in 1935, began a slow trend toward permanent settlement at Pelly Bay.

Construction of a school, a store, and modern housing began in the mid 1960's. Constricted by pack ice year-round, Pelly Bay has the distinction of having the highest cost of living in the Northwest Territories. In 1994, Sealift broke through the ice for the first time with the help of an icebreaker. In recent years, a small commercial char fishery and fine ivory carving industry have helped supplement the traditionally-based economy. The tourism industry, centred around the sale of arts and crafts, is propelled by local artists who specialize in miniature ivory carvings.

Pelly Bay gained Hamlet status on April 1, 1972. The Hamlets traditional name is "Arviliquat", meaning lots of bowhead whales.

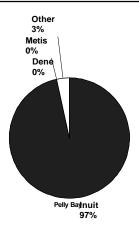
# **POPULATION**

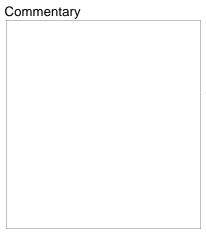




Population Statistics

# **ETHNICITY**



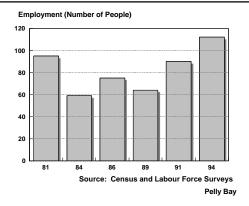


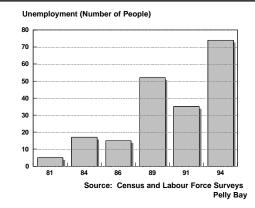
1991 Ethnicity
Inuit: 395
Dene: 0

Metis: 0
Other: 14

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





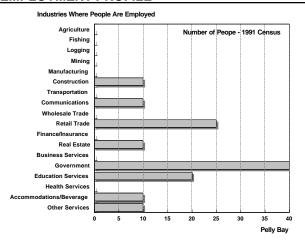
Source: 1994 Labour Force Survey, Bureau of Statistics

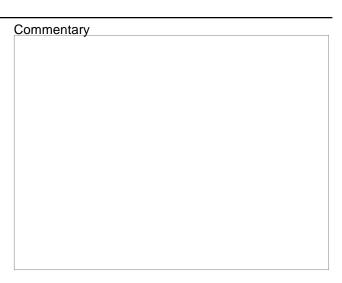
# **Employment Statistics 1994**

Over 15 Pop:	259	Abor. Employed: 107
Labour Force:	187	Unemployed: 75
Employed:	112	Ab. Unemployed: 75

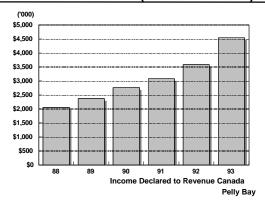
# Commentary

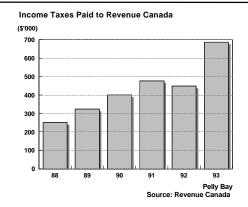
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

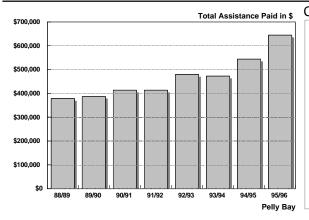
People Paying Inc.Tax

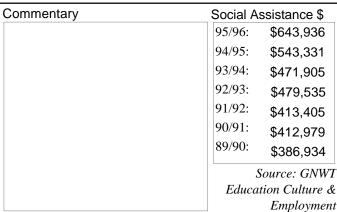
1993: \$21,657 1992: \$18,842 1991: \$17,100 1993: 210 1992: 210 1991: 180

Source: Revenue Canada - Community Data

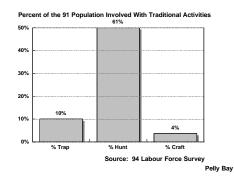
# Commentary

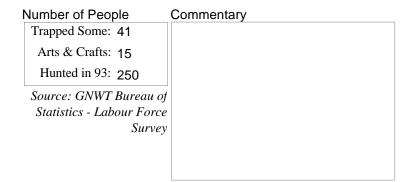
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Inukshuk Inn accommodates six guests.	95/96 94/95 93/94 92/93 Source: Non-Resident
		Only: RWED

### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type	of Housing
The number of private occupied dwellings increased 32.8% between 1986 and 1991. As of 1994, the Housing Corporation owned 64 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 20 new homes in the community.	Owned: Rented: Band Owned:	70
	Detached: Apartment:	
	Row House:	15

Source: 1991 Census Data

Trailer: 0

# **COMMUNITY SERVICES**

# Education

Kugaardjuq School teaches grades K-9. Five teachers and two language specialists are on staff. The Pelly Bay Education Council is the local education authority. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

# Health

The health centre (979 m2), built in 1984, houses four medical beds, two bassinets, and two cribs. Three nurses and a community health worker are on staff.

# Fire

A twenty-person volunteer fire brigade uses a 1980 IHC model 1824 triple combination pumper to fight fires. Equipment also includes a telephone and siren alarm system. The community's firehall (one-bay), built in 1994, is attached to the maintenance garage.

# **Recreation Services**

The Pierre Henri Centre (community gymnasium), which is connected to the Hamlet Office, was built in 1984. Natsilik Arena was built in 1993/94. In 1995, a ballfield was completed. Other facilities include a school playground and a developed trail system.

# Police, Mail, Electrical and Other Services

RCMP services are available from Taloyoak. The Community Social Services Office has one staff member. The Roman Catholic Church provides church services. Mail is delivered three times per week. NorthwesTel local and long distance telephone service, CBC Radio, and CBC Television are available via the Anik satellite system. There is also a community radio station. NWTPC provides 740 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a four-bay parking garage and a three-bay maintenance garage, which was renovated in 1994 to include a firehall.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

# Water Supply

Prior to 1988, water was trucked from three sources. A stream 2.7 km south of the Hamlet was the summer supply. A river at the far end of the airstrip was used during the early winter until the water's turbidity increased. The increased cloudiness was caused by drawing water from the bottom of the river as the ice was thickening. Another source, 2.8 km further upriver, was used for the remainder of the year. In 1988, a new truckfill and intake facility were constructed on the Kugajuk River. The auxiliary pumphouse is a shed on skids housing one pump.

# Water Storage

Water is pumped to two 204,600 L storage tanks in the truckfill building (power house). The supply line drains back to the river at the end of each pumping cycle. Each 204,600 L reservoir can be filled in about 6 hours. Trucked delivery is provided by the Hamlet two to three times per week using 4546 L (1987) and 11,500 L (1991) capacity trucks. Water is trucked approximately 2.7 km. While most residences contain 1,135 L tanks, older residences use 205 L barrels. All water deliveries are metered.

# Water Treatment

The water is batch chlorinated by injection at the central pumphouse/truckfill station prior to delivery.

# Water Quality

Pelly Bay's water has been found to be of excellent chemical quality for domestic use. Based on chemical analysis the water is clear, soft, weakly-buffered, slightly alkaline and low in dissolved solids. Comparison of chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

# COMMUNITY WASTE

# Solid Waste

Domestic garbage is stored in 205 L barrels in front of homes prior to collection. Solid wastes are collected twice per week. A modified landfill site, 1.3 km from the Hamlet, began operation in 1989. The disposal site (30,000 m2) has been designed for a twenty year life span. Future plans are to have the site fenced. A local sand pit provides a source for cover material. Burns occur at the site only and are not permitted at the home.

# Sewage Disposal

Sewage pumpout service is provided by the Hamlet. Two 4546 L trucks (1984 and 1989) are used. The school and nursing station systems partially settle sewage in septic tanks. The effluent is then discharged to the holding tanks, 45,460 L and 6,820 L respectively. The contract for pumpout and disposal or sewage disposal is handled by the Pelly Bay Hamlet Council.

Honeybags are collected daily by the Hamlet Council using a 1994 Ford model F-350 truck, the same vehicle that is used for solid waste collection. Honeybags are placed at the roadside in halved 205 L barrels. In the winter, the honeybags are placed on the snow adjacent to the garbage barrels to avoid the problem of the bags freezing to the barrels.

Pumpout wastes are treated in a single cell lagoon (20,400 m<sup>2</sup>) located approximately 1.3 km from the community. Honeybags are placed in a cell adjacent to the lagoon.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Pond Inlet

What the name means: Place of Mittima's Grave

Alternate Name: Mittimatalik

### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Mark Evaloarjuk

Member of Parliment: Jack Anawak

Mayor: Paniloo Sangoya

Senior Administration Officer: Jake Anaviapik GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Amittuq Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

# **LOCATION** *Longitude: 77.59; Latitude: 72.42*

Pond Inlet is located at 72'42N latitude and 77'59 W longitude, on Eclipse Sound on the northern edge of Baffin Island. It is 525 air km south-east of Resolute and 1,883 air km north-east of Yellowknife.

# **CLIMATE**

Pond Inlet receives an average of 5.7 cm of rainfall and 86.9 cm of snowfall per year. Mean annual precipitation totals 14.6 cm. July mean high and low temperatures are 7.9 C and 1.2 C. January mean high and low temperatures are -26.4 C and -35.1 C. The mean annual ground surface temperature ranges from -10 C to -15 C. The winds are generally south and annually average 9.5 km/h.

# **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 1,219 m x 30 m certified Arctic B gravel runway. Facilities and services include a passenger shelter, weather/communications equipment, and navigational aids. Scheduled flight service is available through First Air via Iqaluit and Kenn Borek Air via Resolute. Marine transportation is provided by Eastern Arctic Sealift and Transport Canada (Montreal), making one run each summer. Facilities include a beach landing and limited staging area. There is no direct road access to Pond Inlet. Within the community there are approximately 10.5 km of gravel surface roads. Calcium chloride is applied annually to 7.2 km of road to act as a dust suppressant and surface stabilizing agent.

# **GEOLOGY**

Pond Inlet is typified by steep snowcapped mountains, long U-shaped fiords, and highland glacial ice. Relief is sometimes extreme with occasional peaks reaching 2500 m in height. Coastal areas are covered by surficial material which has been re-worked by marine activity. The settlement occupies a hilly area near the south shore of Eclipse Sound, on the tip of an extensive glacial deposit. The glacial till is composed mainly of sand, with lesser quantities of gravel and silt.

Bedrock composition is typically Precambrian metamorphic gneiss with a sporadic cover of younger Cretaceous-Tertiary sediments. These younger rocks are part of a regional basin known as the Eclipse trough, which is aligned in a north-west direction. Pond Inlet is within the continuous permafrost zone. Depending on the nature of the ground cover, the thickness of the active layer varies from 0.5 m to 1.5 m. Aerial photographs indicate the presence of vertical ice wedges at closely-spaced intervals.

# **VEGETATION**

Vegetation is sparse. Mosses, lichens, and a few hardy grasses grow in the summer months.

# 1981 Air Photo



Thursday, July 20, 1995

The ancestral homeland of the North Baffin Inuit, Pond Inlet is rich with archaeological sites of the Thule people. The first European contact with the Inuit was made by Lieutenant W.E. Parry in 1820. Beginning in the late nineteenth century, whalers and free traders began to frequent an area 27 km east of the present site. The Hamlet was named by Captain John Ross in 1888, after John Pond, Astronomer Royal.

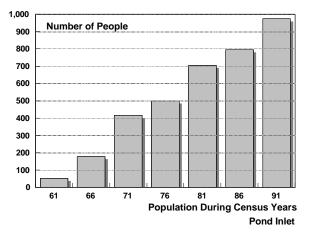
1921 saw the arrival of the Hudson Bay Company and an RCMP detachment. Roman Catholic and Anglican Missions were established the following year. Until the 1960's, when a school was built, the Inuit lived a traditional subsistence life in surrounding camps. The centrality of the school encouraged migration to the rapidly growing settlement.

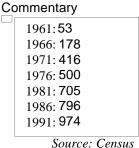
Economic stability continues to stem from marine mammal harvesting, hunting, fishing and trapping. Oil exploration and mining at Nanisivik have contributed to the economy in the recent past. Local business includes building contractors, taxis, general retailers, food sales, consultants, hotels and restaurants.

Tourist draws include a fishing lodge at Koluktoo Bay, the Bylot Island Bird Sanctuary and various package tours from Iqaluit. The tourism industry may expand with the opening of a nature centre and the development of the proposed North Baffin National Park.

Pond Inlet gained hamlet status on April 1, 1975. A traditional name for the Community is "Mittimatalik", meaning place of Mittimas grave. Mittima is thought to be Mitimak, a well-known Inuk who ran the Sabellum Trading Post at Singiyok in the 1930's.

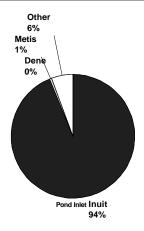
# **POPULATION**

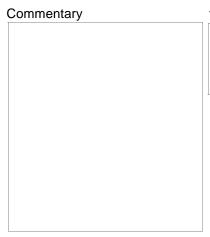




**Population Statistics** 

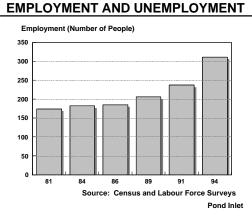
# **ETHNICITY**

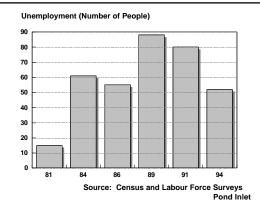




1991 Ethnicity Inuit: 914 Dene: 0 Metis: 5 Other: 55

Source: Census





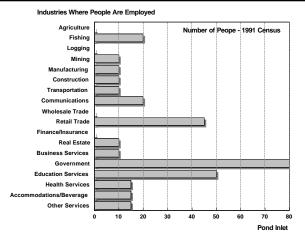
Source: 1994 Labour Force Survey, Bureau of Statistics

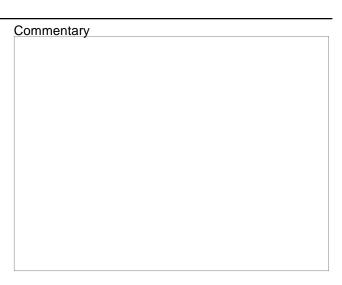
# **Employment Statistics 1994**

Over 15 Pop: 616 Abor. Employed: 257
Labour Force: 366 Unemployed: 55
Employed: 311 Ab. Unemployed: 55

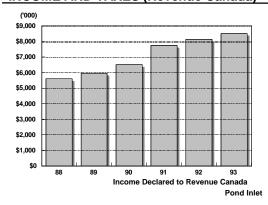
# Commentary

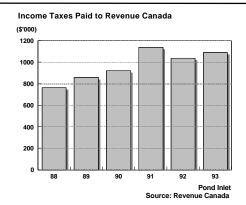
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$19,809 1992: \$19,832

1991: \$18,030

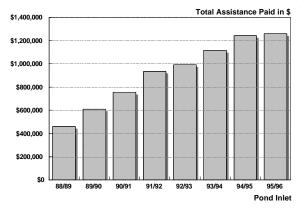
1992: **430** 1991: **430** 

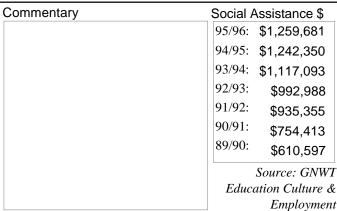
1993: 430

Source: Revenue Canada - Community Data

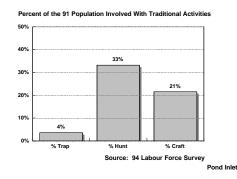
# Commentary

# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES







# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Suaniq Hotel accommodates fifteen guests.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

### HOUSING AND HOME OWNERSHIP

Commentary

The number of occupied private dwellings increased 29.8% between 1986 and 1991. As of 1994, the Housing Corporation owned 165 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 33 new homes in the community.

Detached: 150
Apartment: 0

Apartment: 0
Row House: 35
Trailer: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

# Education

Ulaajuk School teaches grades K-6 and Takijualuk School teaches grades 7-12. Eighteen teachers, three administration staff and six language specialists are on staff. Two resident adult educators, combined with the Arctic College Extension Program, provide opportunities for continuing and vocational education.

# Health

The health centre (455 m2), built in 1977, contains three medical beds, two bassinets and one crib. Seven medical staff are employed, including four nurses.

# Fire

Fire protection in Pond Inlet consists of a fourteenperson volunteer fire brigade. Equipment includes a 1978 IHC model 1700, 4546 L capacity truck and a new 1995 Midship fire truck. There is also a telephone/pager and automatic siren alarm system in place. The community has a firehall.

# **Recreation Services**

Recreational facilities include an arena/curling rink (1784 m2) which was completed in 1986, a school gymnasium built in 1983 and a large community hall. Other facilities include a playground, a playfield, a developed trail system and the Panikpak Idlout Library. Pond Inlet has a Recreation Committee.

# Police, Mail, Electrical and Other Services

The RCMP detachment has two officers on staff. The Community Social Services Office has two staff members. Programs and services include the Alcohol Awareness Program, the Health and Social Services Committee and the Youth Justice Committee. Churches in the community include the Roman Catholic Mission, the Anglican Church and the Fundamentalist Church.

Mail is delivered three times per week. NorthwesTel local and long distance telephone service, CBC Radio, and CBC Television are available via the Anik satellite system. There are also community radio and television stations. NWTPC provides 1,530 kW capacity diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a community office (180 m2), a three-bay maintenance garage (276 m2), and four parking garages. Three of the parking garages have three bays and one has two bays (640 m2 total).

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

# Water Supply

Water Lake has historically been the winter water supply, while Pond Inlet Creek, which flows through the Hamlet, was the summer supply. Water is now obtained year-round from Water Lake, 4.4 km by road south from the centre of the community. Although a water line runs from the lake to a point near the Hudson Bay store, it has been abandoned.

# Water Storage

Water Lake has a watershed area of 277,800 m2. If all the annual precipitation were to reach the lake, the volume would not be sufficient to supply the Hamlet's needs in the design year 2006. The shortfall, if any, would be made up by pumping water from the Salmon River. The truckfill facility accommodates several features in small, practical building. The overhead truckfill arm is used to fill the trucks. The discharge piping from the intakes is run overhead from the building through a galvanized steel pipe. Freezing problems encountered with this type of piping have been mitigated with insulation and heat tracing.

The entire community is on a trucked water delivery service. Over 90% of the buildings have holding tanks with pressurized water systems. Those without pressurized systems are typically older houses (pre-1970), which are in need of retrofitting or replacement. The community is served by four water trucks, one has a 4546 L capacity tank and the other three have truck 6819 L tanks. Household storage tanks vary in size from 205 L to 1135 L. Users with high volume tanks include the school (13,600 L), the nursing station (4540 L), and the hotel (4540 L). All water deliveries are metered.

# Water Treatment

Two 114 L polyethylene tanks mounted above one another are used for chlorination. The upper tank is used for mixing and decanting the lower tank via plastic piping. An impeller type mixer is mounted on the upper tank. The chlorine system is designed to utilize 65-70% calcium hypochlorite powder and to pump a mixed 0.5-1.0% chlorine solution.

# Water Quality

Intake and discharge pipes are insulated and heat-traced to prevent freezing. Submersible turbine pumps direct water through the pipes. At the lower end of the intake pipes a screen is required to prevent debris, organic particles or other solids from entering the pumps, thus ensuring greater water purity.

# **COMMUNITY WASTE**

# Solid Waste

Garbage is collected daily by a two-person crew using an Ford model F-350 garbage packer from wooden boxes placed in front of buildings. Once a year in July the community participates in a spring clean-up. The solid waste management site is located on a sloping site (20,000 m2) between two rock outcrops, one km south-east of the community. Bulky wastes and honeybags are deposited at separate sites. The wastes are burned at the site three times per week. The site is covered and compacted once per year. Gravel for cover is readily available 0.5 km from the landfill. A new site, commissioned in 1996, contains a waste oil cell, a bulky metal disposal area, and a large fenced solid waste area.

# Sewage Disposal

Both bagged and liquid pumpout sewage are collected by the Hamlet. Sewage bags are placed on 204 L drum shells along the roadway prior to collection. Bagged sewage pick-up is usually every second day, using a Ford model F-250 stake truck. To prevent spillage, the bags are loaded into barrels on the back of the truck.

Sewage pumpout is carried out by 6750 L and 5400 L capacity trucks. Houses with holding tanks have an access pipe with a knock-off cap. A suction line from the truck is inserted into the access pipe and activated by the truck-mounted pump. Pumpout service is presently done by the Hamlet.

The honeybag site (22,500 m2) is located adjacent to the solid waste management site, 1.5 km east of the centre of the community. Pumpout sewage is dumped on the land side of a small rock dam built across a minor watercourse. During periods of thaw, sewage percolates through the dam and eventually reaches the sea, 800 m away.

The present sewage site (7,500 m2) has unlimited capacity. Due to a new subdivision development, the mandatory 450 m separation distance from the nearest house to the site will have been broken and the site will have to be relocated. It is anticipated that new sewage and solid waste disposal sites will be established in the medium term, further from the community; in the interim, there are a sufficient number of lots proposed outside the setback limit to accommodate growth until the medium term period. The proposed new site would be located south-west of the community, requiring at least 2.4 km of road construction. When the new site is built, another truck may be added because of the increased haul distance. Construction of the new lagoon is slated for 1995/96.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Rae-Edzo

What the name means: Place of Mbecho' Place/Name of Dene Chief

Alternate Name: Behcho-Ko/Edzo

### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: North Slave Member of the NWT Legislature: James Rabesca

Member of Parliment: Ethel Blondin

Mayor: Dan Marion

Senior Administration Officer: Ralph Butterworth GNWT Assigned Level of Development: Level 2

Government of Canada Administrative Region: Yellowknife

NWT Legislature Riding: North Slave

Languages Spoken: Dogrib Land Claim Area: Dogrib

LOCATION Longitude: 116.03; Latitude: 62.50

Rae is located at 62'50N, 116'4W on a rocky peninsula on the southeast shore of Marian Lake, on the North Arm of Great Slave Lake. The Hamlet is spread over two islands and part of the mainland, 24 road km from its sister community, Edzo. Located at 62'40N latitude, 116'4W longitude, Edzo is bounded on the east side by the West Channel flowing between Marian and Great Slave Lake. Rae is 115 km and Edzo is 106 km north-west of Yellowknife via the Mackenzie Highway. Rae and Edzo are 6 km apart by boat.

# **CLIMATE**

Rae-Edzo receives an average of 14.4 cm of rainfall and 110 cm of snowfall per year. The mean annual precipitation level is 25.4 cm. July mean high and low temperatures are 20.4 C and 11.3 C. January mean high and low temperatures are -23.4 C and -32.0 C. Winds are generally east and annually average 16 km/h. The mean annual frost-free period is 113 days.

# 1981 Air Photo



# **TRANSPORTATION**

Rae-Edzo is accessible by road from the Mackenzie Highway (Highway 3). There is winter road from Edzo to Wha Ti. Ice break-up of Marion Lake is usually at the beginning of June and freeze-up the beginning of October. Within the community, Roadrunner Transit operates a bus/taxi service. There are several local trucking services. An aerodrome is operated by the Hamlet. Facilities include an unlicensed landing strip with fuel and limited services. Charter flight service is available from Edzo Air Ltd.

# **GEOLOGY**

Hilly outcrops and lowlands of silty clays make up the terrain of the Rae area. Edzo is set on a shale and sandstone foundation in rough-timbered country. To the south is the Mackenzie Highway, and to the north are many lakes, ponds, and muskeg. Soil depth tends to be very shallow. Ice lenses and frost heaving result from high moisture content in the alluvially-deposited soils in the area. Non-rocky areas are, for the most part, unsuitable for building construction. Gravel and sand for fill and road construction can be found 24 km away, near Russell Lake. Rae-Edzo's elevation varies from 156 - 163 m above sea-level.

# **VEGETATION**

Ground cover is typically grasses, mosses, lichens, low bushes, small willows, and birch trees. Outside the Hamlet, heavily-forested areas contain spruce, willow, jackpine, white poplar, alder, and tamarack.

### **HISTORY**

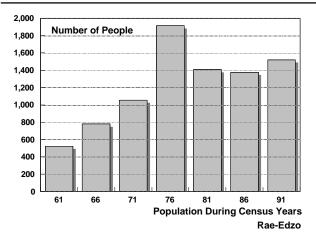
Combining Rae and Edzo created the largest Dene community in the Northwest Territories. The Dogrib tribe has lived in the area for centuries, successfully hunting the caribou herds while living in extended family groups. After 1790, a trading post was established in the area. The ability of the Yellowknives to obtain firearms allowed them to control trade and hunting grounds surrounding Great Slave Lake for thirty years. Historically, the Dogribs and the Yellowknives had quarrelled. About 1823, Edzo, the Dogrib leader and Akaitcho, the Yellowknive leader, made peace. Afterwards, Dogribs returned to their traditional hunting grounds.

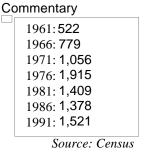
John Rae, for whom Rae is named, opened a Hudson Bay Company post in 1852 at Old Fort Rae, approximately 8 km from the present site. Although settling in the current site at the turn of the century, the Post was moved back to Old Fort Rae in 1904. By 1890, over 600 people had settled in this prosperous area. However, the native populations susceptibility to European diseases caused great tragedy. By 1900, one person in ten was dying of measles. By 1928, tuberculosis and influenza were decimating entire families.

As living standards of the Dogrib reached a low in the 1930's, the authenticity of the signing of Treaty No.11 (1921) was questioned. Permanent housing was built in the 1940's and medical care was available from Yellowknife following World War Two. Electricity was introduced in 1959 and an access road to the highway was built in 1960. Development of Edzo began in 1965.

Although the construction of a school and sanitation facilities in Edzo were intended to attract residents of Rae to the new community, many chose to remain at the more advantageous hunting, fishing, and trapping areas at Rae. As well as hunting, trapping, and fishing, arts and crafts production is an integral part of the economy. Rae-Edzo gained Hamlet status on April 1, 1971. A traditional name for Rae is Mbehchoko, meaning "Mbehchos place".

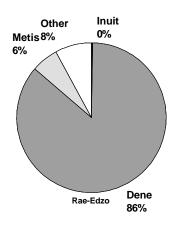
### **POPULATION**

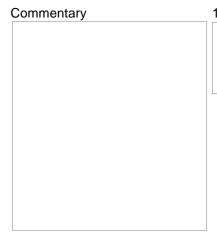




**Population Statistics** 

# **ETHNICITY**

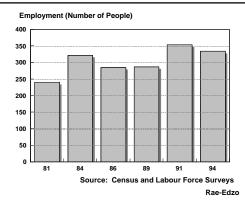


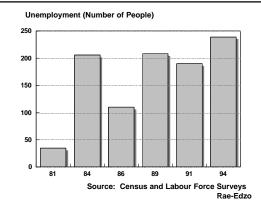


Inuit: 4
Dene: 1,309
Metis: 88
Other: 120

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





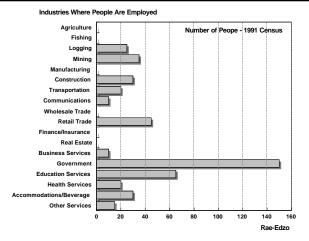
Source: 1994 Labour Force Survey, Bureau of Statistics

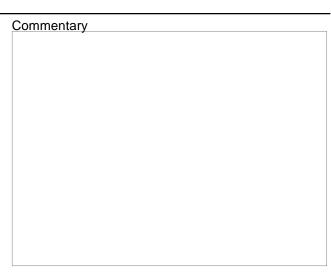
# **Employment Statistics 1994**

Over 15 Pop: 1,101 Abor. Employed: 222 Labour Force: Unemployed: 239 Employed: Ab. Unemployed: 233 334

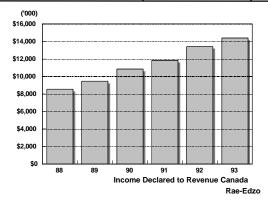
# Commentary

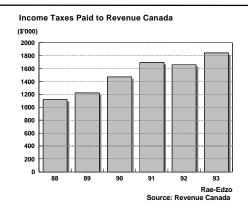
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

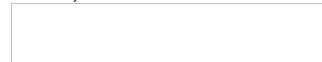
1993: \$17,758 1992: \$17,436

1991: \$16,199

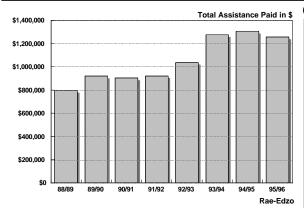
1993: 810 1992: 810 1991: 730

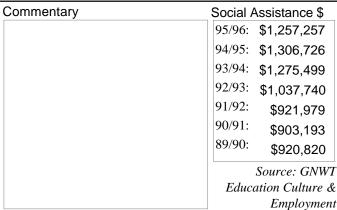
Source: Revenue Canada - Community Data

# Commentary

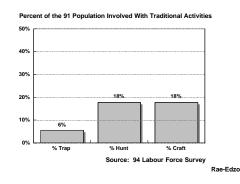


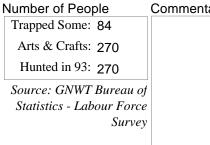
# **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES







# TOURISM

Commercial Accommodations	Visitor Center Signings
The Jeiko Motel, which accommodates 32 and has a craft shop is located in Rae.	95/96 94/95 93/94 92/93
	Source: Non-Resident
	Only: RWED
	The Jeiko Motel, which accommodates 32 and has a craft

### HOUSING AND HOME OWNERSHIP

Commentary

Between 1986 and 1991, occupied private dwellings increased 50%, from 34 to 51 homes. In Rae, the Northwest Territories Housing Corporation owns 161 housing

Ownership/Tourism Commentary

Ownership/Touris

units; in Edzo, they own 20. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for

103 new homes in the community.

Ownership/Type of Housing
Units

Owned: 125 Rented: 195 Band Owned: 0

Detached: 245 Apartment: 20 Row House: 50 Trailer: 5

Source: 1991 Census Data

# **COMMUNITY SERVICES**

# Education

Opened in Rae in 1993, the Elizabeth Mackenzie Elementary School instructs children grades K-6. There are 13 teachers and an enrolment of over 270 students. With the opening of the Elizabeth Mackenzie Elementary School the existing Chief Jimmy Bruneau School in Edzo was converted to the regional high school to instruct grades 7-12. There are 22 teachers and 6 classroom assistants on staff, and an enrolment of over 400.

The Rae-Edzo School Society acts as the local education authority. Continuing education opportunities are available through the Adult Education Centre. One adult educator is on staff. The Arctic College Extension Program also offers continuing education. A local outreach worker is present.

# Health

Prior to 1987, the Cottage Hospital was located in Edzo. In 1987, the hospital was closed following completion of a new health centre (640 m2) in Rae. It staffs ten and has one bed.

# Fire

Rae's volunteer fire brigade uses a triple combination pumper (1981), pagers, and a hydrant system to fight fires. Edzo, along with a nineteen-person volunteer brigade, has a triple combination pumper (1982), pagers, and a hydrant system. Both Rae and Edzo each have their own fire chiefs and firehalls. The Edzo firehall (177 m2) was built in 1970 and the Rae firehall (126 m2) was built in 1982.

# Recreation Services

Rae/Edzo has many recreational facilities. The Khon Go Cho Sportsplex, built in 1984, contains an arena, a curling rink, a community hall, and a seasonal swimming pool. Both Rae and Edzo each have a community gym. Other facilities include the softball diamond and the area at the lake. The Active Recreation Committee helps to co-ordinate the Winter Carnival and Dene Days in the summer.

Police, Mail, Electrical and Other Services

The RCMP detachment has a staff of seven. The Community Social Services office has a staff of four. Programs and services include Rae-Edzo Counselling Services, the CNIB Project, the Senior Citizens Home, the Home Care program, and the Rae-Edzo Friendship Centre. The Roman Catholic Mission performs church services in the Hamlet.

Mail is delivered twice per week. NorthwesTel provides microwave telephone service to Edzo and in turn runs a land line to Rae for service. CBC Radio is run over a low-power relay transmitter (LPRT). Community radio originating in the Hamlet is organized by the Beacho Kho Radio Society. CBC Television is provided via the Anik satellite system. There are two Cancom channels available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes a parking/maintenance garage complex (341 m2), built in 1981, and staff housing. The community office is a leased portion of the Nishi Khon Centre.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

C.J.B.S. Child Development Centre

# **COMMUNITY WATER**

Water Supply

Prior to the establishment of water treatment facilities, water was drawn by bucket directly from Marian Lake. In 1965, an infiltration gallery was built in the lake in an effort to combat the deteriorating quality of the water, a result of surface runoff from the developing community.

Water is currently pumped from the raw water reservoir (formerly the infiltration gallery) to the water treatment plant. The plant is equipped with a Waterboy 82 pump system rated at 227 L/min. with an effective output of 191 L/min. Treatment includes a flocculator, a tube settler, a mixed media filter, and a hypochlorinator.

Water for the new community of Edzo was initially obtained from wells but these soon proved to have insufficient capacities. In 1971, the Edzo water treatment plant, intake, distribution pumphouse, concrete storage reservoir, and distribution mains were built. Water is now pumped through an intake in West Channel to a complex where it is treated, chlorinated, and stored prior to distribution. The complex is located 152 m south of the Mackenzie Highway crossing and 305 m from Great Slave Lake.

# Water Storage

l Rae

The concrete reservoir has a 454,000 L capacity. Piped System

The supply main carrying treated water to the distribution pumphouse consists of 150 mm diameter HDPE pipe, a 50 mm diameter HDPE return pipe, and a 25 mm diameter thaw tube enclosed with polyurethane insulation and a yellow jacket. Twenty-one taphouses are regularly spaced along the 75 mm diameter polyethylene line, looping through much of the community. Water can be obtained from an exterior faucet on the taphouses. In 1991, the Rae Cafe, 18 residences, and the Nishi Khon Centre, which includes offices, a store, a cafe, and the post office had piped water service. Trucked System:

Trucked water service is under contract. Three 9080 L trucks provide contracted truck water delivery service. A number of non-residential buildings also receive trucked water service. A number of residences in Rae are not continuously occupied. Roughly 60-70% of trucked serviced residences use the service. All water deliveries are metered.

# 2 Edzo

Treated water is stored in a 900,000 L earthen-covered concrete reservoir. Installed in 1971 and 1972, the piped water distribution system is entirely underground. The pumphouse pressurizes and circulates water through a single 2300 m, insulated watermain circuit around the community. The majority of this loop (1460 m) is 150 mm asbestos cement (A.C.) Class 200 pipe, while the rest, adjacent to the pumphouse, is 200 mm A.C. Class 200 pipe. The watermain system operates at 280 - 350 kPa. Existing watermains are insulated with 50 mm thick urethane foam. In 1986, Aqua-flo units were installed to prevent freezing of household service connections. The pumps used include:

Number Model Type

- 3 3.7 kW Deming water distribution pumps
- 1 45 kW Deming Fire Water supply pump

# Water Treatment

# 1 Rae

Water is currently pumped from the raw water reservoir (formerly the infiltration gallery) to the water treatment plant. The plant is equipped with a Waterboy 82 pump system rated at 227 L/min. with an effective output of 191 L/min. Treatment includes a flocculator, a tube settler, a mixed media filter, and a hypochlorinator.

### 2 Edzo

The water treatment plant is equipped with a Waterboy 82 system rated at 227 L/min. Treatment includes flocculation, sedimentation, filtration, and chlorination.

# Water Quality

Rae's water supply is of excellent chemical quality for domestic use. The water, for time of season for which it was sampled, was shown to be low in dissolved solids, very soft, poorly buffered, and potentially corrosive to metallic materials. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

Edzo's supply water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the water quality results, the water is very hard, highly buffered, slightly alkaline, and with a moderate amount of dissolved solids. Of the water quality parameters tested, none had exceeded the recommended limits of the Guidelines for Canadian Drinking Water Quality.

# **COMMUNITY WASTE**

# Solid Waste

Solid wastes are collected two to three times per week by private contractor. Once per year, the Hamlet organizes a spring clean-up. Solid waste from both Rae and Edzo is hauled to a modified landfill site located 3 km east of Rae. The site has been in operation for twenty years and was upgraded in 1993. The site is partially fenced and due to insufficient cover material is only covered monthly. Bulky wastes are stored at a separate site.

#### Sewage Disposal

Rae:

Rae most buildings served by piped water service also have piped sewage service. The exceptions are those buildings near the water treatment plant, including the RCMP building and the Rae Cafe. All sewage flows by gravity through shallow-buried insulated 100 mm and 200 mm diameter HDPE pipes to a holding tank just east of the community. From there it is trucked to the sewage lagoon. A lift station with two 2.4 kW Flygt submersible pumps was added to the system in 1979. The system has 16 access yaults.

Sewage pumpout service is under contract. Three 9980 L vacuum tank trucks provide contract sewage pumpout from buildings without piped services. Sewage is hauled to a site 3 km east of Rae, adjacent to the access road leading to the Mackenzie Highway. Pumpout sewage is treated in a single-cell long-retention lagoon of approximately 68,000,000 L. Annually, treated sewage is discharged through a control structure to a wetland area.

The wetland discharges to Frank Channel at the outlet of Marian Lake. Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment. Bagged sewage is collected regularly using a truck. It is treated in a 20 m x 30 m x 5 m area adjacent to the sewage lagoon. The area, commissioned in 1994, shares a common berm with the lagoon so that any liquid is discharged to the lagoon for treatment.

#### Edzo:

The Edzo sewage system was also commissioned in 1971. There are 2183 m of 200 mm diameter direct-buried asbestos cement Class 100 sewer pipe. They were factory insulated with 75 mm of urethane and covered with a yellow jacket. The service connections are 100 mm diameter asbestos/cement pipe also insulated with 75 mm of polyurethane and covered with a yellow jacket.

Sewage flows by gravity to a lift station which discharges through a forcemain to the lagoon system. The lift station is located at the east end of the community. It contains two 2.4 kW Flygt submersible pumps, each capable of handling peak sewage flows. The pumps discharge into a 150 mm diameter buried forcemain to a high point in the line where the sewage then flows by gravity along a 200 mm diameter line to the sewage lagoon system. The forcemain runs 640 m west beside the highway, then 460 m south to the lagoons.

The lagoon system, located south of the community, consists of two primary cells, each being 37 m x 37 m at the water line with a depth of 4.3 m. The inside side slopes are roughly 3:1. The total lagoon capacity (4860 m2) provides a possible theoretical retention time of 51 days at an average sewage flow of 95,470 L per day. The primary treated effluent discharges to an overland treatment area 400 m above Great Slave Lake.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

## Rankin Inlet

What the name means: Inlet Alternate Name: Kangiqting

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Keewatin

Member of the NWT Legislature: Manitok Thompson

Member of Parliment: Jack Anawak

Mayor: Keith Sharp

Senior Administration Officer: Antonio Masone GNWT Assigned Level of Development: Level 2 Government of Canada Administrative Region: Keewatin

NWT Legislature Riding: Alvilik Languages Spoken: Inuktitut Land Claim Area: TFN - Keewatin

LOCATION Longitude: 92.05; Latitude: 62.49

The Hamlet of Rankin Inlet is located on Rankin Inlet, on the west coast of Hudson Bay. It is 96 air km south-west of Chesterfield Inlet and 1088 air km east of Yellowknife, at 62'49N latitude and 92'05W longitude.

#### **CLIMATE**

Rankin Inlet receives an average of 16.0 cm of rainfall and 118.1 cm of snowfall annually. Mean annual precipitation totals 27.8 cm. July mean high and low temperatures are 13.1 C and 4.5 C. January mean high and low temperatures are -27.9 C and -35.2 C. Winds are generally from the north and annually average 24 km/h.

#### **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 1,829 m x 46 m asphalt ruhway. Facilities and services include a new terminal building, weather/communications equipment, and navigational aids. Scheduled flight services are available through NWT Air via Yellowknife/Iqaluit/Winnipeg, Canadian North via Yellowknife and Iqaluit, Calm Air via Churchill and First Air via Iqaluit. Charter service is available through Keewatin Air Ltd. and Skyward Aviation.

Marine transportation is available from the Northern Transportation Company Ltd. barge service and a private freighter from Montreal. Facilities include a beach landing on the south-west side of Johnston Cove for petroleum products off-load and a groomed slipway into Melvin Bay for dry cargo. Improvements and relocation of the sea-lift facility took place in 1994. This project included new re-supply facilities.

There is no permanent road access to Rankin Inlet. Within the community there are approximately 21.7 km of roads. Calcium chloride is applied annually to 7.4 km of gravel surface road to act as a dust suppressant and surface stabilizing agent. A 2 km section of road, known as Loop Road, is paved. This road begins at the airport, extends into the core of town and returns to the airport. Maintenance is limited to crack filling and patching due to frost heave. Patching is done by the Hamlet using a cold mix asphalt compound.

#### **GEOLOGY**

Surface material consists mainly of exposed volcanic or sedimentary Precambrian rock and various types of reworked ground moraine, notably marine terraces. The soil is a mixture of organic material, gravel, sands and fines. Numerous eskers provide a good source of granular material. The shoreline is composed of recently deposited sands and silts. The Hamlet is within the continuous permafrost zone, with an estimated permafrost thickness of 300 m. The active layer of permafrost is very shallow, extending 0.3 m below the ground surface.

#### **VEGETATION**

Areas with developed soil layers support hardy grasses, while rock outcrops support lichens. Clusters of small willow bushes grow in well-sheltered areas.

#### 1981 Air Photo



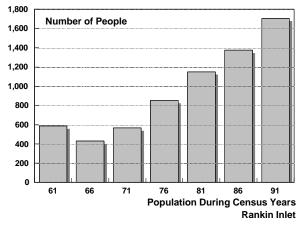
#### **HISTORY**

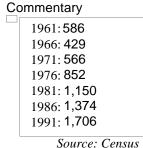
Although Inuit settlement had been common in the area for many years, Rankin Inlet was not established as a community until 1957, when North Rankin Nickel Mines Ltd. opened for business. Until the close of the mine in 1962, a wage economy propelled the settlement. Concerned about the deteriorating conditions of the community, DIAND set up temporary housing, a school, and a workshop for those in need, approximately one km from the mine site. Although the program for change was slow to act and is considered a failure by some, the organization of arts and crafts manufacturing gave a boost to the community.

In the past generation, the establishment of a cannery and the program of natural resource harvesting have helped create a viable economy. As a Territorial Government Headquarters for the Keewatin Region Rankin Inlet is a key transportation and communication centre. Economic activities now include government, commercial fishing, transportation/communications, carving/handicrafts, trapping, hunting, and tourism. Tourist activities include boat trips to historic Marble Island, fishing camps, tours to the Meliadine River, and the sale of arts and crafts. Arts and crafts include soapstone carvings and wall-hangings.

In 1994/95 there were 20 million dollars worth of public and private sector activity in the community. There has been a substantial growth in new businesses and infrastructure designed to serve a growing population. The Inuit Cultural Institute, once located in Arviat, is now in Rankin Inlet. Rankin Inlet gained Hamlet status on January 20, 1975. The Communitys traditional name is "Kangiqtinq", meaning inlet.

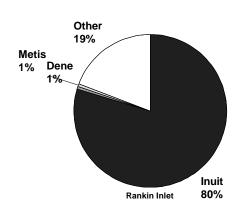
#### **POPULATION**





Population Statistics

#### **ETHNICITY**



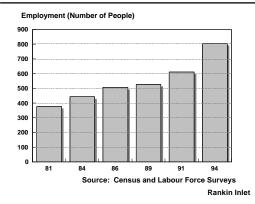


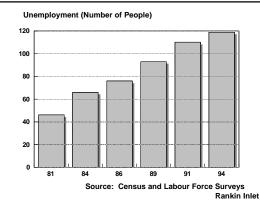
Inuit: 1,374
Dene: 10
Metis: 10

Other: 332

Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**





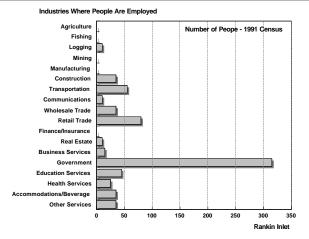
Source: 1994 Labour Force Survey, Bureau of Statistics

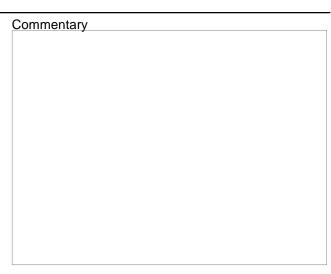
#### **Employment Statistics 1994**

Over 15 Pop: 1,319 Abor. Employed: 502 Labour Force: Unemployed: 125 929 Employed: Ab. Unemployed: 110 804

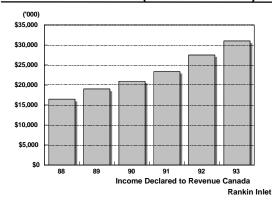
#### Commentary

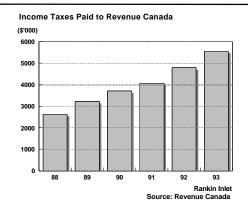
#### **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax 1993: 1,000

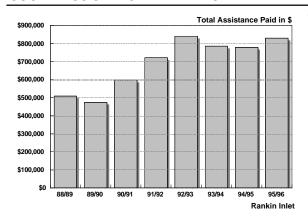
1993: \$30,992 1992: \$30,614 1991: \$27,823

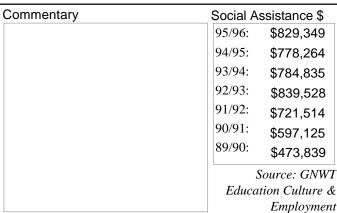
1992: 1,000 1991: 840

Source: Revenue Canada - Community Data

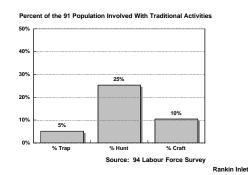
#### Commentary

#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES



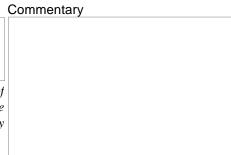
Number of People Trapped Some: 88

Arts & Crafts: 179

Hunted in 93: 433

Source: GNWT Bureau of Statistics - Labour Force

Survey



#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Siniktarvik Hotel accommodates 92 guests, the Keewatin Guest Lodge accommodates 16, and the Nanuq Inn accommodates 10.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary

Ownership/Type of Housing
The number of private occupied dwellings increased 35.7% between 1986 and
1991. As of 1994, the Housing Corporation owned 233 housing units. The Housing
Assistance Program, the Alternative Housing Program, and Government Lease-to-Own

Rented: 415

Rented: 415
Band Owned: 0
Detached: 260

Apartment: 50
Row House: 140
Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Leo Ussak Elementary School teaches grades K-6 and Maani Ulujuk Secondary School teaches grades 7-12. Thirty-three teachers, five language specialists and one special needs teacher are on staff. The Adult Education Centre staffs one adult educator; continuing education is available through the Arctic College Extension Program. The Keewatin Vocational Training Centre offers vocational training.

units have accounted for 73 new homes in the community.

#### Fire

Fire protection consists of an eighteen person volunteer fire brigade. Equipment includes two trucks, a 1976 model Ford with a 840 g/min. pumper, a 1992 model Ford with a 1050 g/min. pumper, and an ambulance (1976). There is also a fire siren and a hydrant system. The community has a firehall (219 m2).

#### Health

The health centre (560 m2) was built in 1970. The facility houses four medical beds, one bassinet, and one crib. Five nurses, one therapist, and one administration staff member are employed.

#### Recreation Services

A large community hall, housing the curling rink and arena, was built in 1988. There is a gymnasium in each of the two schools, both built in 1984. An above-ground seasonal enclosed pool was built in 1992/93. Additionally, there is a playground, a playfield, and a library. A snowmobile race is held each April. Rankin Inlet has an Active Recreation Committee.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs seven officers. Social services include a group home for the handicapped and adolescents, the Sappujjijit Friendship Centre for alcohol and drug abuse, a day care centre, and the Youth Justice Committee. There are three churches in the Hamlet: the Roman Catholic Mission, the Anglican Church, and the Church of Glad Tidings.

Mail is delivered three times per week. NorthwesTel local and long distance telephone service, CBC Radio, and CBC Television are available through the Anik satellite system. There is also a community radio station and the IBC Television production centre. The Rankin Inlet NWTPC area office serves Baker Lake, Chesterfield Inlet, Coral Harbour, Arviat, Repulse Bay, and Whale Cove. The Community is powered by a 3,930 kW diesel generating station.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the Hamlet office (344 m2), a six-bay parking garage (480 m2), and a three-bay maintenance garage (321 m2).

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Kataujaq

Maani Ulujuk Day Care

#### **COMMUNITY WATER**

#### Water Supply

The community continues to draw its water from Lake Nipissar, located 2 km north-west of the Hamlet. Lake Nipissar has a usable storage of about 1,400,000 m3. The Lakes estimated annual recharge of 600,000 m3 per year is considerably higher than the Hamlet's annual consumption of 370,000 m3.

#### Water Storage

From 1965 to 1976, water was pumped into Williamson Lake from Lake Nipissar only during the summer. With the rebuilding of the system in 1976, year-round pumping began. This reduced the need for storage and the lake level was lowered by 0.8 m. As years passed the community expanded to surround the Lake; in 1979, a road to the airport was constructed through the southern part of the Lake. Increasingly, concerns were raised about contamination.

In the 1980's, Williamson Lake was replaced as the storage reservoir. After consideration of many options, including concrete and earthen reservoirs, it was decided to build an insulated steel tank with two-day storage capacity to replace Williamson Lake. The tank was completed in 1993. The Lake was then removed from the system and the intake pipe from the Lake to the pumphouse was sealed. In case of an emergency lasting longer than two days, the Lake could still be accessed by means of a portable pump, flexible hose, and ice auger.

There are two systems of water distribution in Rankin Inlet. Approximately 75% of the population receives piped water while the remainder is on trucked service. Trucked water delivery is handled by the Hamlet of Rankin Inlet; an 8172 L capacity water truck is used. The truck is filled from the truckfill arm, located on the north-west side of the Williamson Lake pumphouse. Trucked water is delivered three to five days per week. Most deliveries are to buildings presently not serviced by the piped system in the Nuvuk subdivision. All water deliveries are metered.

The piped water distribution system consists of shallow-buried and insulated mains, usually installed in the same trenches as the sewer mains to save installation costs. Since the mains both originate and terminate at the Williamson Lake pumphouse, they are known as loops. As part of the freeze protection system, the water is constantly circulating in the loops. Water not consumed is returned to the wetwells at the pumphouse.

Water service connections to single-family residential buildings consist of uninsulated 25 mm HDPE supply and return lines taped together, wrapped in a self-limiting heat tape and inserted into a 100 mm diameter insulated HDPE carrier pipe. Water flows from the main through the supply line to a circulation pump and flow switch, located inside the building. Water required for consumption then flows through a water meter into the building's water fixtures. Water not required for consumption flows into the return line and then back into the main. By maintaining a constant flow, the circulation pump keeps the water in the service lines from freezing. The heat trace cable, controlled by the floor switch on the supply line, keeps the water from freezing when flow is reduced or stops due to circulation pump failure or other causes. This dual-line circulating system has been found to be the most economical and reliable method of providing water service to the buildings.

#### Water Treatment

Rankin Inlet's supply water is of good chemical quality for domestic use. Based on chemical analysis, the water is clear, moderately hard, well-buffered, neutral and has a moderate amount of dissolved solids.

Water for the water storage tank and the distribution system is chlorinated by new gas chlorinators, installed in 1996. A fluoridation system injects hydrofluosilicic acid directly into the water. In addition, compressed air is injected into the raw water at the Nipissar Lake intake.

#### Water Quality

Comparison of raw and treated water samples to the Guidelines for Canadian Drinking Water Quality shows that the parameters tested are below the recommended limits. Microbiological analysis of treated water shows that chlorination eliminates or reduces bacterial presence to moderate or low concentrations.

#### **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected once per week by a three-person crew using a 1995 15 m2 packer truck. Prior to pickup, waste is placed in 205 L drums in front of each home. During the last week of June the community participates in the annual spring clean-up.

The solid waste management site (55,000 m2) is located 1 km south-east of the community on sloping land. Bulky wastes are stored on the margins of the site. Used oil is burned in a trench. There is no separate disposal area for bagged sewage as very few homes use this method. Surveys in 1992 determined that the site had sufficient capacity to meet the Hamlet's needs until the year 2006. In 1995, the Hamlet completed construction of a 2 m high chain-link fence on the berm, surrounding the site.

Gravel cover for the site must be hauled 8.5 km, a process of great time and expense to the Hamlet. Therefore, wastes are only covered once a year in the summer. The collected wastes are burned everyday and subsequently pushed over the end of the site. The wastes are not compacted.

#### Sewage Disposal

There are two systems of sewage collection in Rankin Inlet: approximately 75% of the population has piped sewage service while the remainder receives trucked pumpout service. Pumpout sewage is collected by the Hamlet's 1993 - 4540 L tank truck. The truck discharges the sewage into the piped system through a temporary facility in an old lift station, located just west of the macerator. Most of the trucked service customers live in the Nuvuk subdivision.

The remainder of the buildings in the community are on the piped sewage collection system. The sewage mains are 150 mm or 200 mm diameter insulated shallow-buried HDPE pipes. They are usually installed in the same trenches as the water mains to save installation costs. Sewage from the buildings enters the mains through 100 mm diameter insulated HDPE service connections.

The oldest mains still in service were installed in 1972. Some of the older mains suffer frequent freezing and breakage due to inadequate flow, insufficient slope, backgrading, insufficient cover, damaged insulation, or freezing between the pipe and the insulation. In winter, bleeding from the water mains into the sewer mains is practiced to mitigate some of these problems. Each summer the system is inspected with a sewer camera. The sections of piping in poor condition are repaired or replaced. No problems have been reported in the recently installed mains, except for occasional freezeups of the service connections.

Sewage from the collector mains flow by gravity into the wetwell of the macerator station (which has not been operational for many years), located on the eastern edge of the community. From the macerator, the untreated sewage flows 425 m through a buried/submerged outfall line and discharges into the bottom of Johnston Cove, a confined bay which serves as a small boat harbour and recreational area. For many years, the community expressed concern about the adverse aesthetic and environmental impact of this disposal system and its possible threat to public health. Studies by the Department of Fisheries and Oceans and by MACA in 1990 and 1991 confirmed that the disposal system was unacceptable for health, environmental, and aesthetic reasons.

In response, MACA hired a consultant (1992) to evaluate alternate sewage disposal options. Various treatment processes, such as primary and secondary mechanical treatment, and a lagoon were evaluated and various outfall locations were studied.

The concept selected was a mechanical treatment plant with rotating drum screen to provide partial primary treatment. The recommended ultimate disposal point was in the deep waters of Prairie Bay to the north-east of the community, a location which will provide good conditions for mixing and dispersal of the effluent. Two liftstations with forcemains will be required to pump the sewage to the treatment plant. Design of the system components began in 1993 and construction began in 1994.

Effluent from the treatment plant flows by gravity through a 300 mm diameter buried insulated HDPE pipe to the outfall, completed in 1995. The waste eventually reaches a point near the bottom of Prairie Bay.

To protect against ice scour, the top of the filled-in trench was armoured with rock for the last 35 m of the land section and all of the submarine section. To aid dispersal and mixing, the three steel bellmouths of the diffusor, set 900 apart, will divide the effluent into three separate streams as it enters the receiving waters.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Rankin Inlet Page 8

#### NOTES AND COMMENTS

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# Repulse Bay

What the name means: Seagull Nesting Place

Alternate Name: Naujat

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Keewatin

Member of the NWT Legislature: Manitok Thompson

Member of Parliment: Jack Anawak

Mayor: Donat Milortok

Senior Administration Officer: Sheldon Dorey GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Keewatin

NWT Legislature Riding: Alvilik Languages Spoken: Inuktitut Land Claim Area: TFN - Keewatin

#### **LOCATION** *Longitude:* 86.15; *Latitude:* 66.32

The Hamlet of Repulse Bay, located on the northern shore of Repulse Bay, is on the south shore of the Rae Isthmus. With geographic coordinates of 66'326 N latitude and 86'156 W longitude, Repulse Bay is 443 air km south-east of Taloyoak and 1,424 air km north-east of Yellowknife.

#### **CLIMATE**

Repulse Bay receives an average of 15.0 cm of rainfall and 58.2 cm of snowfall per year. Mean annual precipitation totals 20.6 cm. July mean high and low temperatures are 15.7 C and 5.8 C. January mean high and low temperatures are -29.4 C and -36.4 C. The winds are generally from the north and annually average 23 km/h.

### 1981 Air Photo



#### **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 1,036 m x 30 m certified Arctic C gravel runway. Facilities include the terminal building, weather/communications equipment, and navigation aids. Scheduled flight service is available through Calm Air Ltd. via Rankin Inlet/Churchill.

Marine Transportation is provided by Eastern Arctic Sealift and Transport Canada (Montreal). Facilities include a beach landing and pushout south of the community. Expansion of the facility is limited by high cliffs.

There is no direct road access to Repulse Bay. Within the community there are approximately 8.9 km of gravel surface roads. Calcium chloride is applied annually to 4.5 km of road to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

The Hamlet is located at the northern tip of Roes Welcome Sound in the Churchill Structural Province. The terrain is composed primarily of Precambrian granite gneiss. Foliation and structural lineaments of the bedrock have a visible north-north-west trend. Pleistocene glaciation was prominent in the region and the structural lines of weakness were eroded rapidly during this period. Formerly a relatively level plateau, the land was cut up into a series of steep-sided, narrow valleys and ridges. These blocks begin at the coast where they form narrow deep fiords which point toward the north-west.

The geomorphology of the area is extremely rugged and access inland is difficult. Extensive breakage of bedrock fluting created many marshy depressions. During deglaciation, the area was isostatically depressed, allowing coastal waters to rework the glacial till. Very little soil covers the ridges of bedrock; silty sands and gravel constitute the limited soil layers present. Repulse Bay is well within the continuous permafrost zone and permafrost-created landforms such as solifluction lobes and patterned ground are clearly visible. Since the permafrost table lies near the ground surface, only very limited thawing of the active layer takes place in summer.

#### **VEGETATION**

The climate and soil of Repulse Bay can support mosses, lichens, and some flowering plants.

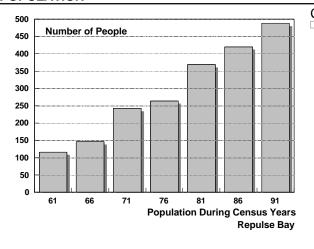
#### **HISTORY**

Repulse Bay is the homeland of the Iglulik Inuit. The first European arrivals in 1741 and 1746 would lead to the formation of a prosperous whaling industry. Inuit guides and skippers were often hired on to European crews. In 1853, Dr. John Rae travelled by dogsled from his base at Repulse Bay in an effort to complete the survey of the Boothia Peninsula. The Hudson Bay Company established the first trading post in 1916, shortly after whaling began to lessen. Revillion Freres, a French trading company, followed in 1923.

The Roman Catholic Mission was established in 1932. Modern development started in the early 1960's with the introduction of rental homes. Government services, a community co-op and a housing association were set up in 1968. The Community Council was formed the following year. Repulse, a very traditional community, is sensitive to new development. Marine mammal harvesting, hunting, fishing, trapping, carving sales, arts and handicrafts are the main economic opportunities available to the Hamlet. The historic sites, bird nesting areas, and natural beauty contribute to the tourism industry, as does the Inuit artwork. Businesses in the community include fur buyers, general retailers, food sales, service stations, hotels, outfitters, restaurants and amusement centres.

Repulse Bay gained Hamlet status on July 1, 1978. The traditional name of the Community is "Naujat", meaning seagull resting place.

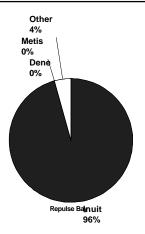
#### **POPULATION**





Population Statistics

#### **ETHNICITY**

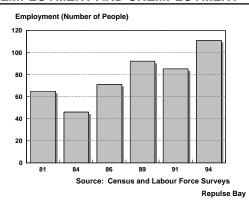


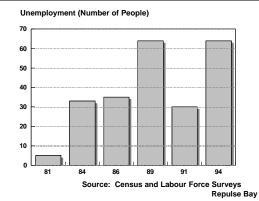


Inuit: 467
Dene: 0
Metis: 0
Other: 21

Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**





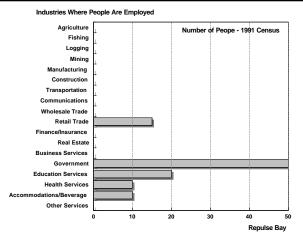
Source: 1994 Labour Force Survey, Bureau of Statistics

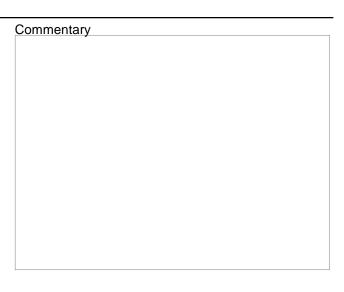
#### **Employment Statistics 1994**

Over 15 Pop: 282 Abor. Employed: 98
Labour Force: 175 Unemployed: 64
Employed: 111 Ab. Unemployed: 63

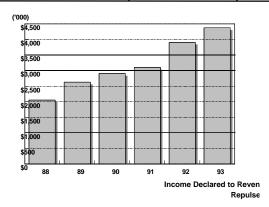
#### Commentary

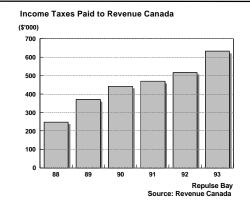
#### **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes 1993: \$19,039

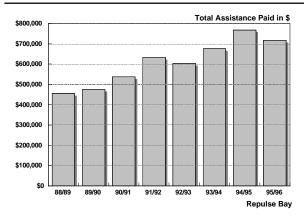
People Paying Inc.Tax 1993: 230

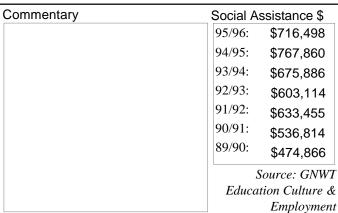
1992: \$20,579 1991: \$16,337 1992: 230 1991: 190

Source: Revenue Canada - Community Data

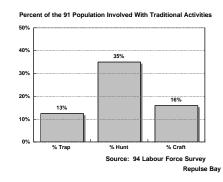
#### Commentary

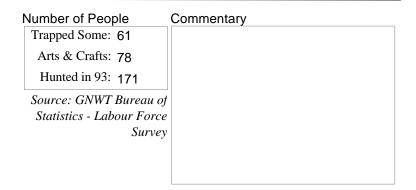
#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Aivilik Lodge accommodates seven guests and the Naujat Co-op Hotel accommodates thirteen.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary

The number of private occupied dwellings increased 23.6% between 1986 and 1991. As of 1994, the Housing Corporation owned 76 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 14 new homes in the community.

Detached: 80

Apartment: 0

Row House: 5 Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Tusarvik school teaches grades K-9. Six teachers and three classroom assistants are on staff. The Repulse Bay Education Council is the local education authority.

#### Health

The health centre (747 m2), built in 1983, houses two medical beds, one bassinet, and one crib. Two nurses, one therapist, and one community health representative are on staff.

#### Fire

Fire protection consists of a twelve-person volunteer fire brigade. Equipment includes a 1980 International 625 g/min. triple combination pumper, a fire siren, and a telephone alarm system. The community has a firehall (116 m2).

#### Recreation Services

Recreational facilities include a gymnasium, built in 1986, and an arena, built in 1991/92. The Community also has a playground and a playfield. Repulse Bay has an Active Recreation Committee.

#### Police, Mail, Electrical and Other Services

RCMP services are available from Coral Harbour. The Community Social Services Office has a staff of two; services include the Youth Justice Committee. Mail is delivered three times per week. NorthwesTel local and long distance telephone service, CBC Radio and CBC Television are available through the Anik satellite system. There is also a community radio station. Other television channels include CTV, Cancom and CHCH. NWTPC provides 690 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the Hamlet office (with six offices), a three-bay parking garage (196 m2), and a three-bay maintenance garage (246 m2).

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

In the past, the water supply had been obtained from a small lake approximately 2 km from the community. A pump was used to draw water from the source to the truck. Disinfection consisted of adding calcium or sodium hypochlorite directly to the truck.

A pre-design study completed in 1984 investigated potential permanent water supply sources. When the truckfill facility was in the planning stages, the community expressed a strong desire to have the water supplied from Nuviq Luktujuq Lake, a much larger lake approximately 4 km from the community.

In 1988, a new intake/truckfill facility was constructed. The site consists of a natural boulder deposit between a bedrock ridge and Nuviq Luktujuq Lake. The boulder deposit extends into the lake to form a flat, shallow shelf which rapidly drops off at a point 35 m from shore. A gravel pad has been placed at the termination of the access road at the top of the rock ridge. The surface area is covered with cobbles and stones, ranging from approximately 100 - 400 mm in size.

#### Water Storage

The Community's water storage is Nuviq Luktujuq Lake. The pumphouse draws water directly from the lake. While the pumphouse facility is designed for maximum truckfill rate of 1000 L/min., the actual capacity is dependent upon the lake level at any given time. During commissioning, the actual flow rate was approximately 1250 L/min.

A truckfill heat trace is installed to thaw the truckfill arm. The arm is removable to facilitate repair or replacement in case of damage. In the event of the duty pump failing, the standby or alternate pump can be selected by the truck driver simply by switching to the alternate pump on the "PUMP1/PUMP2" switch on the driver's control panel.

Repulse Bay is now under a fully trucked water distribution system operated by the Hamlet Council. Water is delivered using a 1994 model F-800 8172 L truck. All water deliveries are metered.

#### Water Treatment

Disinfection of the raw water is provided by a hypochlorinator kit. It consists of a pump (48 L/h), two mixing tanks, a mixer and an injector. A chlorine test kit and a spare chemical feed pump are available.

#### Water Quality

#### **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected at least twice per week by a one-person crew using a 1991 Ford model F-350 9 m3 compactor truck. Burning of wastes in oil drums is not practiced, save for some retailers. Once per year in July or August, the community participates in a spring clean-up.

The modified landfill site is located 1.2 km north-east of the community across from the airstrip, just north of the sewage truck dumping point. Solid waste is stored on a sloping 60,000 m2 unfenced site, where used oil supplies (in summer) are used in a weekly controlled burn. Once each month, the solid waste is compacted. Bulky wastes are stored at a separate 60,000 m2 site.

#### Sewage Disposal

A 1994 Ford model F-800 8172 L sewage pumpout truck is used to collect sewage from residences with holding tanks, discharging the waste at a dumping point 1.4 km east of the community. Treatment is by the natural wetlands method.

Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment.

From the dumping point, the sewage is discharged 1.4 km through a series of ponds and thickly-vegetated area before entering Hudson Bay. Sampling and analysis carried out in summer in 1993 and 1994 showed the wetlands treatment to be very effective. BOD5 levels of <10 mg/L and ammonia levels of <0.08 mg/L were recorded just above the point where the effluent entered the Bay. Bagged sewage is collected twice per week from the buildings that are not equipped with holding tanks. The solid waste pick-up truck is used for this service.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Repulse Bay Page 7

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

## Resolute

What the name means: Seagull Nesting Place

Alternate Name: Qausuittuq

#### POLITICAL 1981 Air Photo

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Levi Barnabas

Member of Parliment: Jack Anawak

Mayor: George Eckalook

Senior Administration Officer: Susan Salluviniq GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: High Arctic

Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

**LOCATION** *Longitude:* 94.50; *Latitude:* 74.42

Resolute is located at 74'42N latitude and 94'50W longitude. It lies on the southern shore of Cornwallis Island, approximately 900 km north of the Arctic Circle and 1,561 air km north-east of Yellowknife.

#### **CLIMATE**

Resolute receives an average of 5.3 cm of rainfall and 84 cm of snowfall annually. Mean annual precipitation totals 13 cm. July mean high and low temperatures are 6.8 C and 1.4 C. January mean high and low temperatures are -28.4 C and -35.7 C. Winds are generally from the north-north-west and annually average 21.5 km/h.

#### **TRANSPORTATION**

Transport Canada and the Hamlet jointly operate a 1,981 m x 61 m certified Arctic A gravel runway. Facilities and services include the terminal building, weather/communications equipment, and navigational aids. Scheduled flight service is available from Canadian North via Edmonton/Yellowknife/Montreal and Kenn Borek Air Ltd. Charter service is also available.

Marine service is provided by Eastern Arctic Sealift and Transport Canada (Montreal). A beach landing facility is available. There is no direct road access to Resolute. Gravel surface roads are built up above the surrounding surface to prevent snowdrifting. Roads are graded to slopes that are 7degrees or less. Roads are 8 m and rights-of-way are 15 m in width. Calcium chloride is applied annually to 2.5 km of roads to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

Cornwallis Island is in the Innuition Region. Most of the land has been worn to a peneplained surface. There is a general slope toward the coast, with high bluffs up to 260 m in the south-east and lower elevations toward the north end of the Island. The shores of Resolute Bay are low and composed of Palaeozoic limestones and shales. The land surface slopes gradually from the shore in a series of gravel ridges which appear to be raised beach lines. Rising to an elevation of 195 m, Signal Hill, a prominent landmark, is situated at the north end of the bay.

Bedrock is typically 1.5 to 9.5 m below the surface. Aggregate materials above the bedrock consist of gravel-sized frost-shattered material, cobbles averaging 20 cm in diameter and fines which are mainly non-plastic. The depth of the permafrost active layer varies between 0.5 m and 1 m. The ice constant varies between 10% and 25% by volume.

#### **VEGETATION**

Vegetation is limited to lichens, mosses and grasses. Grasses tend to grow in wetter areas near lakes and streams.

#### **HISTORY**

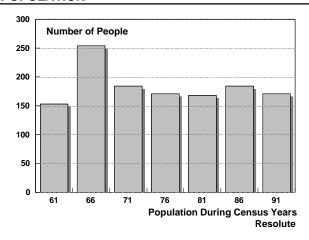
Archaeological findings suggest that the Inuit frequented the Cornwallis Island area but did not permanently inhabit it. There is also evidence of Dorset, Thule and Alaskan Inuit habitation, although their visits were probably short-term as well. The first siting of the island was made by Parry in 1819 in his search for the Northwest Passage. The Hamlet was named for the H.M.S. Resolute, one of the ships in the search for the lost Franklin expedition.

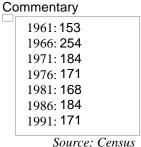
An airfield was established at Resolute in 1947 when the American/Canadian weather station was completed. In 1953, Inuit from Port Harrison and Pond Inlet were relocated there. In the early 1970's it was decided to relocate the settlement from the beach area south of Resolute Lake to a new site. New Town was designed by Ralph Erskine, Architect and Planner from Drottningholm, Sweden. Designed for a population of 1200, the new subdivision improved residential, working, and community facilities markedly, although so far has not yet reached its carrying capacity.

In the last decade Resolute has developed into a major transhipment point for the supply of petroleum exploration equipment to points northward. Nearly five-thousand aircraft takeoffs and landings take place each year. Major economic activities revolve around transportation, communications, oil and gas exploration, and mining. Cominco's Polaris Mine is located nearby on Little Cornwallis Island. Resolute is a base for many Arctic island tours, photographic expeditions, fishing trips, and polar icecap visits. Businesses include air transport, general retail, food services, hotels, outfitting, and restaurants.

Resolute gained Hamlet status on November 3, 1987. A traditional name for the community is "Qausuittuq", meaning place that never dawns.

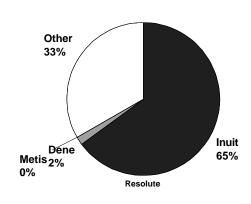
#### **POPULATION**

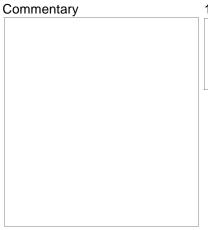




Population Statistics

#### **ETHNICITY**

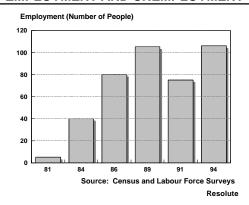


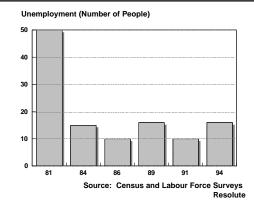


Inuit: 111
Dene: 3
Metis: 0
Other: 57

Source: Census

## EMPLOYMENT AND UNEMPLOYMENT





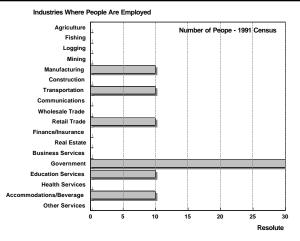
Source: 1994 Labour Force Survey, Bureau of Statistics

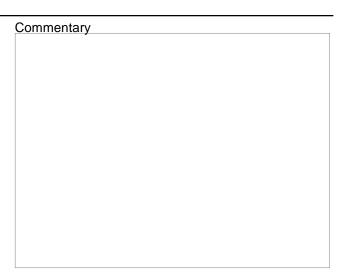
#### **Employment Statistics 1994**

Over 15 Pop:	156	Abor. Employed: 0
Labour Force:	122	Unemployed: 16
Employed:	106	Ab. Unemployed: 0

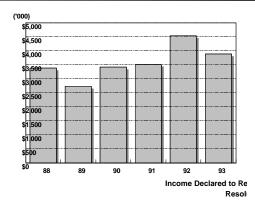
#### Commentary

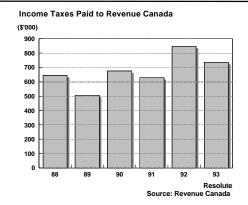
#### **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

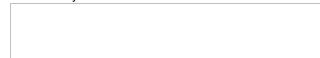
1993: \$35,409 1992: \$34,931

1991: \$29,350

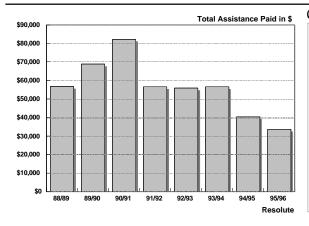
1993: 110 1992: 110 1991: 120

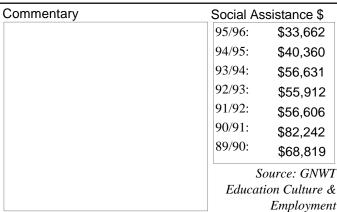
Source: Revenue Canada - Community Data

#### Commentary

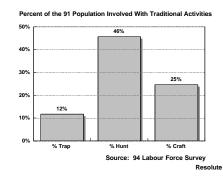


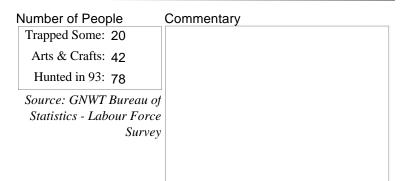
#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	Narwhal Arctic Services accommodates 66 guests and the High Arctic International Explorer Service accommodates 6.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type	of Housing
The number of occupied private dwellings decreased 2.2% between 1986 and		Units
1991. As of 1994, the Housing Corporation owned 35 housing units. The Housing	Owned:	0
Assistance Program, the Alternative Housing Program, and Government Lease-to-Own	Rented:	40
units have accounted for 8 new homes in the community.	Band Owned:	0
	Detached:	40
	Apartment:	0
	Row House:	0
	Trailer:	0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Qarmartalik School teaches grades K-9. Eight teachers and four language specialists are on staff.

#### Health

The health centre (660 m2) was built in 1983. The facility, which includes two medical beds, one bassinet, and one crib. Five staff members are employed.

#### Fire

Resolute has a six-person volunteer fire brigade. Equipment and facilities include a triple combination pumper, a hydrant system, a telephone alarm system, and the firehall (121 m2).

#### Recreation Services

The Resolute gymnasium (416 m2) was built in 1990. Other facilities include a community hall, an outdoor skating rink, a playground, a playfield and a developed trail system.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office has one staff member. Programs include the Drug and Alcohol Program. Mail is delivered twice per week. NorthwesTel local and long distance telephone service, CBC Radio and CBC Television are available via the Anik satellite system. NWTPC provides 3,950 kW capacity diesel power.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a community office (65 m2), and a maintenance/parking garage complex (233 m2).

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

Resolute's potable water source, Char Lake, is located approximately 1.5 km west of the townsite. The majority of the Hamlet is on a utilidor (piped) system.

#### Water Storage

The above-ground insulated steel reservoir (530,000 L) was designed to provide for peak hour and fire demands. It is situated north of the community at a sufficient elevation as to provide distribution main pressures by gravity.

The entire Hamlet is supplied by a shallow-buried water and sewer utility system. An insulated transmission main forms a single loop with continuous re-circulation. Pumps are located at the storage facility and boilers are used to maintain adequate water main temperatures and to prevent freezing. Electrical heat tracing was installed for emergency purposes in the mains but not in the service connections. Hydrants are placed at strategic points for fire protection.

The south camp and some of the buildings at the airport are served by a 9080 L water truck; the service is currently under contract. Water used for the trucked delivery is taken from the piped system at the airport. The airport water storage building serves as the truckfill point. All water deliveries are metered.

#### Water Treatment

Chlorination is provided by dual hypochlorite solution injection pumps (one from standby) located at the water treatment and storage facility.

Water Quality

#### **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected daily by a one-person crew using a Ford model F-350 truck. Garbage is placed in 205 L drums prior to pick-up. Wastes are not burned by residents. Bulky wastes, stored at a separate site (300 m2), are the responsibility of the individual. In August of each year the Hamlet organizes a clean-up day.

The solid waste management site (4,000 m2) is located on sloping ground, 7 km south-south-west of the Hamlet near the MOT base. Burning at the site is practiced every day and the site is covered and compacted monthly despite the absence of abundant cover material.

#### Sewage Disposal

The shallow-buried pipe system houses both the water mains and the sewage pipes. Using insulated, electrically heattraced piping, service lines run directly to each house. Sewage is comminuted prior to discharge into the bay. Sewage runs approximately 500 m to the outfall pipe, located at the shore of the bay at the high tide water edge. The pipe is wrapped with insulation and protected by an outer plastic skin. The last 3 m of the pipe are contained in corrugated steel piping; the end is covered with a steel plate. An oval opening allows sewage to discharge onto a long, downward-sloping concrete surface.

Sewage from the airport complex is conveyed to a holding tank. The effluent from the tank discharges into the water course of the upper reaches of the Meretta and Resolute Lake system. For those not on piped service, liquid pumpout sewage is collected from holding tanks using a tank truck (9080 L). The service is currently contracted. Liquid pumpout sewage is discharged by the contractor at the MOT garbage dump, located approximately 5 km north-west of the south camp. The liquid sewage is separated from the solid waste. Treatment consists of the application of lime coupled with a covering of gravel in the summer. No honeybag service is required in the Hamlet.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

## Sachs Harbour

What the name means: Where You Go Across To Alternate Name: Ikaahuk

POLITICAL 1981 Air Photo

Located in the future territory of: Western Arctic RWED Administrative Region: Inuvik Member of the NWT Legislature: Vince Steen

Member of Parliment: Ethel Blondin

Mayor: Peter Esau

Senior Administration Officer: Jackie Kuptana GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Nunakput Languages Spoken: Inuvialuktun Land Claim Area: Inuvialuit

LOCATION Longitude: 125.14; Latitude: 71.59

Sachs Harbour is located on the south-western shore of Banks Island at 71'59'N latitude and 125'14'W longitude. It is 523 km north-east of Inuvik and 1158 km north-west of Yellowknife.

#### **CLIMATE**

Sachs Harbour receives an average of 4.4 cm of rainfall and 76 cm of snowfall per year. Mean annual precipitation totals 11.4 cm. July mean high and low temperatures are 9.3 C and 2.5 C. January mean high and low temperatures are -26.7 C and -34.1 C. Winds are generally south-east and annually average 20 km/h.

#### **TRANSPORTATION**

A licensed 1219 m x 30 m gravel runway and airport are run by the Hamlet of Sachs Harbour. Airfield lights, taxiway and apron, and maintenance are available. Scheduled flight service is from Inuvik. Barge service from Hay River in June provides the community with bulk food and supplies.

SACHS HARBOUR

#### **GEOLOGY**

Buildings are aligned on hillocks above the shoreline. Soils are generally glacier deposited clay and mixed gravel. There are very few ice lenses and the soil is impervious, so building foundation conditions are favourable. In drainage areas, ice wedges may occur in alluvial deposits of black organic silt. Permafrost is continuous and the active layer in the fine grain soil is less than 0.5 m, increasing to 1 m where vegetation has been disturbed.

#### VEGETATION

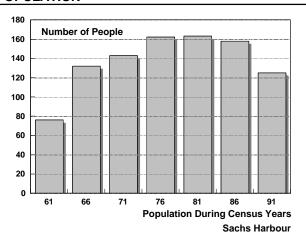
Because of the continuous permafrost, vegetation cover is thin, consisting mainly of mosses and lichens with some grasses.

#### **HISTORY**

Sachs Harbour was named after the ship "Mary Sachs" of the Canadian Arctic Expedition of 1913. A permanent settlement was established in 1929 when three Inuit families moved there to trap. In 1953, the RCMP set up a detachment post. The people maintain a very traditional lifestyle based on the big game hunting of Muskoxen, Caribou, and Polar Bear. Large quotas of Muskoxen are in part due to a very strong herd.

The economy is based primarily on hunting and trapping. Tourism plays a minor role. Oil and gas exploration continues in the Beaufort Sea. Businesses include general retail, food sales, outfitting, and vehicle rentals. Sachs Harbour gained Hamlet status on April 1, 1986. A traditional name for the community is "Ikaahuk", meaning where you go across to.

#### **POPULATION**



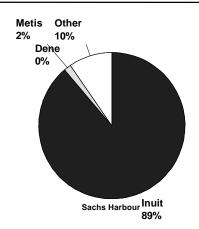
#### Commentary

1961:76 1966: 132 1971: 143 1976: 162 1981: 163 1986: 158 1991: 125

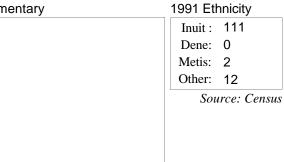
Source: Census

#### **Population Statistics**

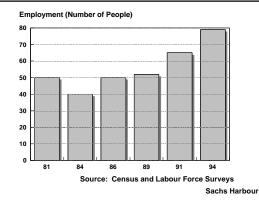
#### **ETHNICITY**



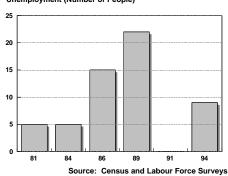
#### Commentary



#### **EMPLOYMENT AND UNEMPLOYMENT**



#### **Unemployment (Number of People)**



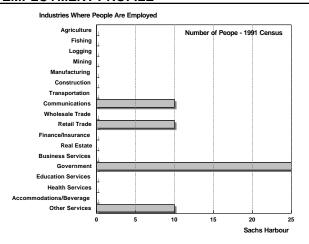
Source: 1994 Labour Force Survey, Bureau of Statistics

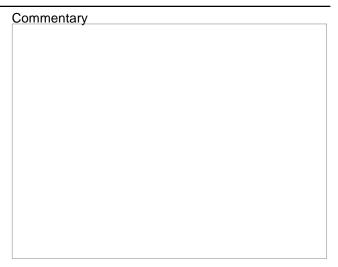
#### **Employment Statistics 1994**

Over 15 Pop:	100	Abor. Employed: 9
Labour Force:	88	Unemployed:
Employed:	70	Ab. Unemployed:

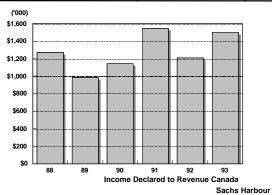
#### Commentary

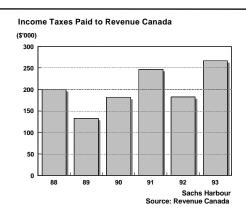
#### **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





## Average Incomes People Paying Inc.Tax

 1993: \$30,000
 1993: 50

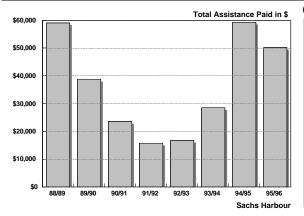
 1992: \$24,160
 1992: 50

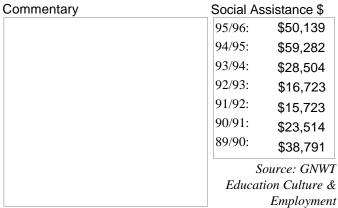
 1991: \$25,783
 1991: 60

Source: Revenue Canada - Community Data

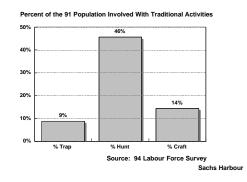
Commentary

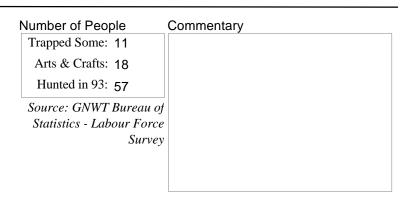
#### **SOCIAL ASSISTANCE PAYMENTS**





#### TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Icicle Inn Ltd. accommodates 26 with recreation facilities and licensed dining.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

#### Commentary

Occupied private dwellings decreased 6.8% between 1986 and 1991. As of 1994, the Housing Corporation owned 31 housing units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 19 new homes in the community.

#### Ownership/Type of Housing

Owned: 10
Rented: 30
Band Owned: 0

Detached: 35 Apartment: 0 Row House: 5 Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Inualthuyak School teaches grades K-9. Three teachers and one classroom assistant are on staff. The Sachs Harbour Education Committee is the local education authority.

#### Health

The health centre (946 m2) was built in 1985. Facilities include one bed, one bassinet, and one crib. A medical staff of three are employed.

#### Fire

A seven-person volunteer fire brigade uses a triple combination pumper to fight fires. Pagers and call boxes are in place to quicken response time to emergencies.

#### Recreation Services

A small arena was completed in 1988/89. The original school gymnasium was built in 1982 and renovated in 1988. A new school gym was added when the school was renovated in 1992/93. Other facilities include an outdoor rink, a playground, and the Sachs Harbour Museum. The White Fox Jamboree is held each May.

#### Police, Mail, Electrical and Other Services

NorthwesTel provides local and long distance service, while CBC provides radio and television services. Sachs Harbour also has community radio. The RCMP detachment staffs two officers. Mail is delivered four times per week. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. Infrastructure funded by Municipal and Community Affairs programs includes the hamlet office, a parking garage, and a maintenance garage. The maintenance garage is housed in the same complex as the parking garage.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

Traditionally, the community collected snow and melted it for domestic use. After the snow melt in late June they would paddle 13 km up the Sachs River to obtain fresh water. The Atmospheric Environment Station (AES) used water from a small lake 1.5 km north-west of the community.

#### Water Storage

Water is delivered to each building two to three times per week in a 4550 L truck. All water deliveries are metered.

#### Water Treatment

At the pumphouse, water is chlorinated by a Wallace and Tiernan 94 Series hypochlorinator.

#### Water Quality

Sachs Harbour's supply water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the chemical analysis the water is hard, well buffered, slightly alkaline, and with a moderate amount of dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

Thursday, July 20, 1995 \*\*\* When printing - specify the pages otherwise all 400 pages will print \*\*\* Sachs Harbour Page 6

#### **COMMUNITY WASTE**

#### Solid Waste

All pumpout sewage and solid wastes were stored in a natural drainage ditch diked by gravel at the downstream end, 1.5 km west of the community. Solid waste was stored at a point 90 m from the dike and covered annually with gravel fill. In 1992, a new solid waste site was commissioned, approximately 6 km west of the community. The facility consisted of two cells when constructed. Since 1994, a project has been underway each summer to upgrade the access road from the community to the solid waste site into an all-weather road.

#### Sewage Disposal

All of the buildings have sewage holding tanks. Sewage pumpout service is performed using a 4500 L truck. There is also a standby tank mounted on a trailer which can be towed. In 1989, a new sewage lagoon was constructed 3 km north-west of the community. The sewage lagoon was transformed from a natural lake. The lake is 250,000 m2 and discharges to the Kellett River, north-west of the community.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# <u>Sanikiluaq</u>

What the name means: Persons Name

Alternate Name: Belcher Islands

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Baffin

Member of the NWT Legislature: Goo Arlooktoo

Member of Parliment: Jack Anawak

Mayor: Peter Kattuk

Senior Administration Officer: Brian Fleming GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Baffin

NWT Legislature Riding: Baffin South

Languages Spoken: Inuktitut Land Claim Area: TFN - Baffin

#### **LOCATION** *Longitude: 79.14; Latitude: 56.32*

Sanikiluaq is located at 56'32N latitude and 79'14W longitude, 1024 air km south-west of Iqaluit and 1282 air km north-west of Montreal. It is situated on the northern end of Flaherty Island, a large central island of the Belcher Islands, which are in turn located in southern Hudson Bay, approximately 150 km west of the Quebec coastline.

#### CLIMATE

July mean high and low temperatures are 25.6 C and 3.3 C. January mean high and low temperatures are -22.8 C and -42.8 C.

#### **TRANSPORTATION**

The Hamlet and the GNWT jointly operate an 1,158 m x 30 m certified Arctic C gravel runway. The airports facilities and services include a passenger shelter, navigational aids and weather/communications equipment. Scheduled service is available with Air Inuit via Montreal. A privately licensed water aerodrome provides float plane access between June and September. Marine transportation is available from Eastern Arctic Sealift and Transport Canada (Montreal).

Facilities include a pushout for dry cargo barge, operated by Moosonee Transport Ltd., and an offshore anchorage for POL tankers with discharge via a floater hose, re-supplied by Shell Canada. There is no road access to Flaherty Island. Within the community there are 7 km of gravel surface roads. Calcium chloride is applied annually to 3.3 km of road to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

The Hamlet rests in the Hudson Physiographic Region. Sedimentary and volcanic rocks of the Proterozoic Age account for the islands formation. The surficial material is dominantly glacial till, with bedrock exposures are common. Extensive granular beaches are the result of retreating and resurging ice movement from the Larentide glacier. Glacial action is also responsible for the deposition of fine-grained sediments. Colluvial deposits are common along steeper slopes and limited alluvial deposits have been formed along streams. The Hamlet is within the zone of widespread discontinuous permafrost. Most subsurface materials beneath a thin active zone are perennially frozen to a substantial depth.

#### **VEGETATION**

Mosses and lichens appear in small patches. Soil cover consists of a layer of dark brown peat up to 150 mm in thickness.

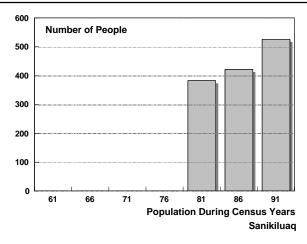
#### 1981 Air Photo



The Belcher Islands were sighted and noted by Henry Hudson in the 1690's. Robert Flaherty published the first recognizable map of the area during his explorations there (1914-16). The only exploration of the islands in the meantime has been by geologists and prospectors looking for iron. Ungava Inuit from the Belcher Islands are noted for their use of the kayak and their capability as fishers. Sanikiluaq is the only permanent settlement on the Islands.

The economy is based on domestic fishing, hunting, and trapping. Renewable resources include fish, marine mammals, and game. Examples of non-renewable resources include iron ore and soft talc serpentine soapstone. The soapstone, quarried on Tukarak Island, is used locally and also exported. Local artists have created carvings which are distinctively their own. Private sector developments include general retail, food and hotels. Sanikiluaq gained Hamlet status on April 20, 1976.

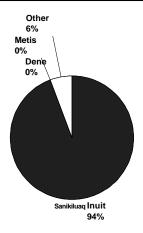
#### **POPULATION**

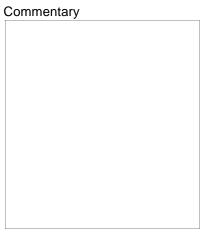




**Population Statistics** 

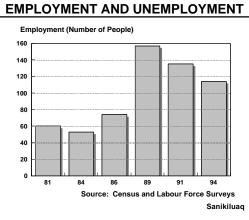
#### **ETHNICITY**

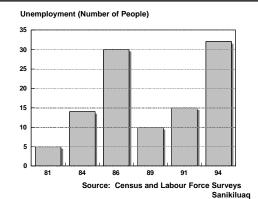




1991 Ethnicity Inuit: 496 Dene: 0 Metis: 0 Other: 30

Source: Census





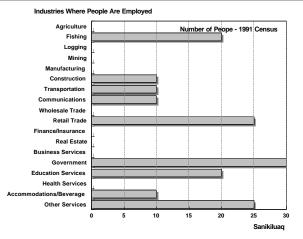
Source: 1994 Labour Force Survey, Bureau of Statistics

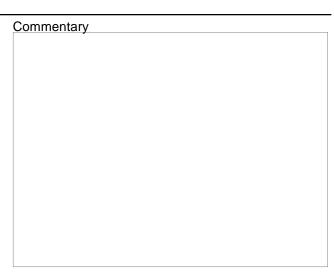
#### **Employment Statistics 1994**

Over 15 Pop:	325	Abor. Employed: 92
Labour Force:	145	Unemployed: 31
Employed:	114	Ab. Unemployed: 31

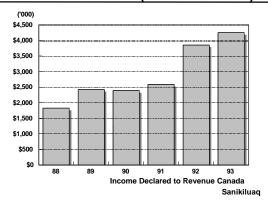
#### Commentary

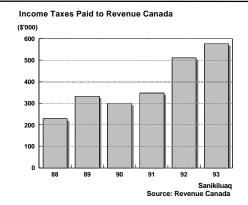
#### **EMPLOYMENT PROFILE**





#### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

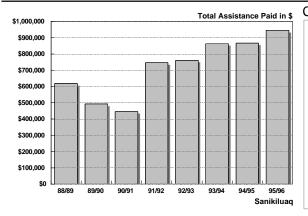
1993: \$16,377 1992: \$16,778 1991: \$14,394 1993: 260 1992: 260 1991: 180

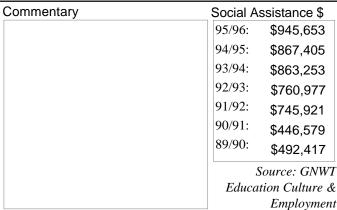
Source: Revenue Canada - Community Data

#### Commentary

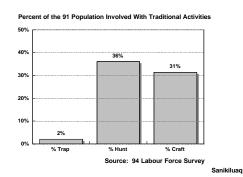


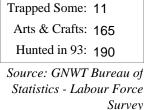
#### **SOCIAL ASSISTANCE PAYMENTS**



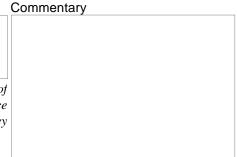


#### TRADITIONAL ACTIVITIES





Number of People



#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Amaulik Motel accommodates seven people.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/ i ype	of Housing
The number of occupied private dwellings increased 40.3% between 1986 and		Units
1991. As of 1994, the Housing Corporation owned 96 housing units. The Housing	Owned:	10
Assistance Program, the Alternative Housing Program, and Government Lease-to-Own	Rented:	85
units have accounted for 18 new homes in the community.	Band Owned:	0
	Detached:	85
	Apartment:	0
	Row House:	5

Source: 1991 Census Data

Trailer: 0

Ournarabin/Tuna of Hausing

#### **COMMUNITY SERVICES**

#### Education

Commontary

Illuvigak School instructs grades K-9. Six teachers are on staff. The Adult Education Centre employs one adult educator. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

#### Fire

A seventeen-person volunteer fire brigade fights fires in the Hamlet. Equipment includes a 1980 IHC model 1700 pumper (4546 L capacity) and a siren alarm system. The Community has a firehall (108 m2).

#### Health

The health centre (831 m2), built in 1984, contains one medical bed, one bassinet, and one crib. Staff includes a nursing staff of two and a community health representative.

#### **Recreation Services**

There are two gymnasiums in the Hamlet. The community gymnasium was built in 1993/94 and the gymnasium complex within the school was built in 1986. Other facilities include a community hall, a playground, a playfield, a developed trail system, and an outdoor arena.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office has a staff of one. Services include the Alcohol and Drug Committee. NorthwesTel local and long distance service, CBC Radio, and CBC Television east and west channels are available via the Anik satellite system. The Community also has a local radio station. Power is provided by a 40 kW-capacity diesel generator.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a community office (174 m2), a two-bay maintenance garage (123 m2) a three-bay parking garage (230 m2), and a two-bay parking garage (173 m2).

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

Thursday, July 20, 1995

#### Water Supply

Prior to construction of the water pumping station in 1980, the Hamlet drew water from Sanikiluaq Lake year-round. Water was distributed by means of a 4500 L tank truck to individual tanks in each residence and building. The Lake, which is replenished by snow melt and rain, has a surface area of 139 ha, a depth of approximately 5 m and a volume estimated at 4.3 million m3. Sanikiluaq Lake discharges to Eskimo Harbour by means of a short, turbulent stream which passes through the Hamlet.

A new pumping station was constructed by the Department of Public Works to obtain water year-round from a greater depth than was possible directly from the tank truck. This also eliminated the need to keep an ice hole open in the winter.

#### Water Storage

Water is conveyed to the tank truck with an overhead pipe and flexible hose which is mounted on the side of the truckfill building. Individual residential water storage systems include large galvanized steel tanks equipped with centrifugal pumps and hydropneumatic tanks to provide for pressurized water flow. The tanks are filled by means of exterior fill and overflow pipes to which the Hamlet tank truck connects directly. Water delivery is provided by the Hamlet, using a 1988 diesel water tank truck (4546 L) and a 1992 truck (6819 L). All water deliveries are metered.

#### Water Treatment

Water is delivered directly to the tank truck by manual control. At the pumphouse, a single hypochlorinator delivers measured doses of chlorine solution by single piston stroke to the discharge line several meters upstream from the flexible exterior discharge pipe. A 65% chlorine calcium hypochlorite powder is added to the solution tank and mixed with a propeller agitator. The chlorinator, controls, water meter, and delivery piping are all within the insulated truckfill building, sitting at the edge of the lake.

Water Quality

#### **COMMUNITY WASTE**

#### Solid Waste

Garbage is placed in wooden boxes by the roadside and collected three times per week using a 1987 Ford model F-310 stake truck. The spring clean-up is scheduled each June.

The solid waste management site (360,000 m2), located next to the sewage lagoon, is 2.9 km west of the Hamlet. The site has been in use for many years. Bulky wastes are disposed of at a separate site (250,000 m2).

Wastes are burned at the disposal site when necessary. Covering of wastes is difficult since the ground consists of very hard clay soil, mixed with boulders. In the past, dynamite and bulldozers were used to dig trenches but this proved not to be cost-effective. Compaction of refuse is done by bulldozer as required.

#### Sewage Disposal

Both bagged and pumpout sewage are collected by the Hamlet. A 1994 sewage truck (6819 L) and a 1993 sewage truck (6819 L) are used to collect pumpout sewage daily. A stake truck is used to collect bagged sewage every second day. This same vehicle is used to collect solid wastes at other times.

Annak Lake, 2.9 km west of the Hamlet, is the treatment site area for both pumpout sewage and honeybags. Despite having only a two hectare surface area, it is 4.5 m deep at its deepest point and has a mean depth of 1.9 m. The active area of the lake is 21,600 m2, while the area of honeybag disposal is 10,000 m2.

Annak Lake, minus sewage inputs, has an average minimum retention time of 58 days from precipitation without evaporation or transpiration. The hydrologic effect of dumping waste water into the lake is minimal.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

## Snare Lake

What the name means; Rock Lake Alternate Name: Wekweti

POLITICAL 1981 Air Photo

Located in the future territory of: Western Arctic RWED Administrative Region: North Slave Member of the NWT Legislature: James Rabesca

Member of Parliment: Ethel Blondin

Mayor: Joseph Judas

Senior Administration Officer: Jim Umpherson GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Yellowknife

NWT Legislature Riding: North Slave

Languages Spoken: Dogrib Land Claim Area: Dogrib

LOCATION Longitude: 114.11; Latitude: 64.11

Snare Lakes is located 195 air km north of Yellowknife at 64'116 N latitude and 114'116 W longitude.

#### **CLIMATE**

Snare Lakes receives an average of 16.5 cm of rainfall and 133 cm of snowfall per year. July mean high and low temperatures are 21.5 C and 8.9 C. January mean high and low temperatures are -24.5 C and -33.5 C.

#### **TRANSPORTATION**

Presently there are no maintained winter roads to or within Snare Lakes. The community is served by float plane in the summer and ski/tire mounted aircraft in the winter. Scheduled services are available from Yellowknife, twice per week. During the freeze and thaw periods, the community is virtually inaccessible.

#### **GEOLOGY**

The Community is situated over glaciofluvial sand and gravel deposits overlaying granitic bedrock in addition to organic peat deposits in poor drainage areas. It is within the zone of discontinuous permafrost within the Canadian Shield.

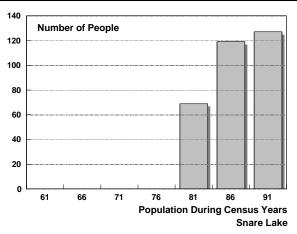
#### **VEGETATION**

Vegetation consists of muskeg in poorly drained low areas and stunted black spruce characteristic of the Boreal Forest Zone.

#### **HISTORY**

An outpost hunting camp until 1962, Snare Lakes is now an permanent community. Hunting, fishing, and trapping are the major economic activities in the Snare Lakes area. Snare Lakes has no legal municipal status. A traditional name for the community is "Wekweti", meaning Loche Lake.

#### **POPULATION**

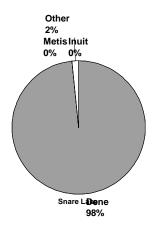


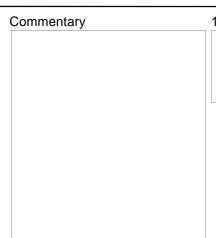
# Commentary 1961: 0 1966: 0 1971: 0 1976: 0 1981: 69 1986: 119 1991: 127

Source: Census

Population Statistics

#### **ETHNICITY**



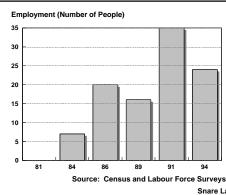


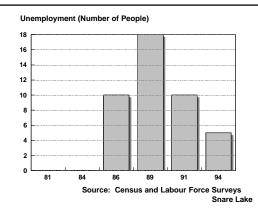
1991 Ethnicity
Inuit: 0

Dene: 125
Metis: 0
Other: 2

Source: Census

#### **EMPLOYMENT AND UNEMPLOYMENT**



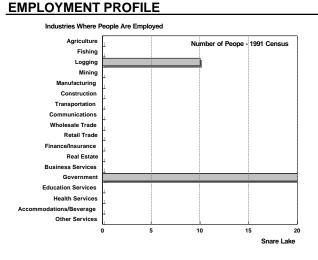


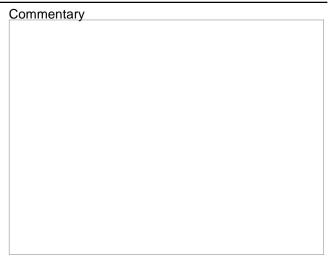
Source: 1994 Labour Force Survey, Bureau of Statistics

#### **Employment Statistics 1994**

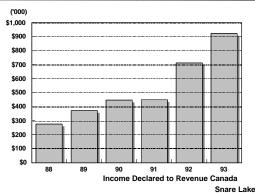
Over 15 Pop:	92	Abor. Employed: 5
Labour Force:	29	Unemployed:
Employed:	24	Ab. Unemployed:

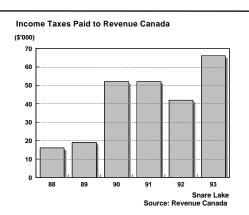
#### Commentary





# **INCOME AND TAXES (Revenue Canada)**





# Average Incomes People Paying Inc.Tax

 1993: \$13,186
 1993: 70

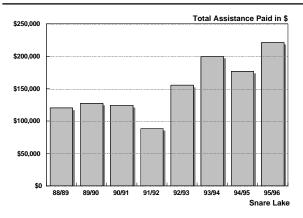
 1992: \$10,171
 1992: 70

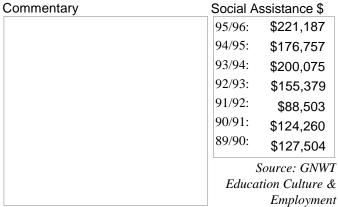
 1991: \$11,225
 1991: 40

Source: Revenue Canada - Community Data

Commentary

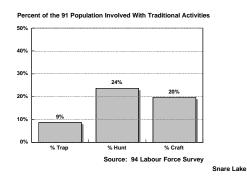
# **SOCIAL ASSISTANCE PAYMENTS**





Commentary

# TRADITIONAL ACTIVITIES



Number of People
Trapped Some: 11
Arts & Crafts: 25
Hunted in 93: 30

Source: GNWT Bureau of Statistics - Labour Force Survey

# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Wekweti Hotel provides accommodation.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

# Commentary

Occupied private dwellings increased 16.7% between 1986 and 1991. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 25 new homes in the community.

#### Ownership/Type of Housing

Units

Owned: 20 Rented: 0

Detached: 25
Apartment: 0

Band Owned: 0

Row House: 0 Trailer: 0

Source: 1991 Census Data

#### **COMMUNITY SERVICES**

## Education Health

Dechi Last'i Entike Ko School teaches grades K-9. Two teachers and two classroom assistants are on staff.

Medical services are available on a periodically basis from Rae-Edzo.

# Fire Recreation Services

Extinguishers are the main form of fire protection. In the summer months, forest fire crews are stationed out of Yellowknife. There is no volunteer fire department.

A gymnasium, located in the school, was completed in 1995. Snare Lakes also has a playground and a playfield.

#### Police, Mail, Electrical and Other Services

RCMP service is available from Wha Ti. Social services are available from Rae-Edzo. Mail service is care of a courtesy bag from Yellowknife. NorthwesTel telephone service came on-line in 1996. Radio telephone service is also available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. Power is provided by Northland Utilities diesel-electric generating plant.

Other infrastructure funded by Municipal and Community Affairs programs includes a community office (100 m2), built in 1967. It is in fair condition. The maintenance garage (217 m2), built in 1991, is in good condition. The parking garage was built in 1982. Two staff apartment units were built in 1993.

# DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

#### Water Supply

In the past, water was taken from Snare Lakes through a hole drilled through the ice about 70m from shore. Three 68 L plastic containers were filled using a small pail and were taken by ATV or snowmobile back to the community. In summer, water was pumped from the lake at the wharf using a portable intake line.

However, this method of obtaining water was unacceptable. Turbidity levels during the open water season were also unacceptable. In 1991, a floating raft intake structure was constructed in an attempt to draw water from deeper parts of the lake. This effort was unsuccessful as ice conditions destroyed the raft.

A truckfill/pumphouse station was constructed in 1996. This system consists of an insulated intake line, a pumphouse, and a truckfill building with a truck turnaround area. The truckfill station is designed to provide a fill rate of 1000 L/min. The water is chlorinated.

#### Water Storage

The 4550 L capacity water truck makes about 20 trips daily to satisfy the demand of domestic use. Most houses have 250 L storage tanks.

#### Water Treatment

The water is chlorinated.

#### Water Quality

#### **COMMUNITY WASTE**

#### Solid Waste

Solid wastes are collected three times per week using a 1991 two-ton dump truck. Garbage is placed in 205 L drums on elevated wooden stands prior to collection. Burning of wastes by residents is common.

The solid waste management site is located 1.5 km east of the community, less than 75 m from the sewage treatment area. The fenced site was commissioned in 1993. Combustibles are burned periodically and buried at this site.

# Sewage Disposal

Government houses, the RCMP, and the school have holding tank and pumpout systems. Three times per week the pumpout waste is taken to the single-cell lagoon located near the airstrip. The lagoon was commissioned in 1993.

Most residents formerly relied on outhouses and sand for domestic sewage disposal. Honeybags are now collected three times per week and taken to a pit 30 m east of the sewage lagoon; the pit was commissioned in 1993. The bags are periodically covered with gravel to prevent windblown matter from scattering and to minimize odours.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# <u>Taloyoak</u>

What the name means: Caribou Blind Alternate Name: Spence Bay

#### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Kitikmeot Member of the NWT Legislature: John Ningark

Member of Parliment: Jack Anawak

Mayor: Dennis Lyall

Senior Administration Officer: Don Pickle GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Kitikmeot

NWT Legislature Riding: Natilikmiot

Languages Spoken: Inuktitut Land Claim Area: TFN - Kitikmeot

#### **LOCATION** *Longitude: 93.31; Latitude: 69.32*

Taloyoak is located on the west coast of the Boothia Peninsula, 460 air km east of Cambridge Bay and 1,224 air km north-east of Yellowknife. The Settlement is situated in a narrow inlet which projects northeastward from the head of Spence Bay. The Hamlet is located at 69'32N latitude and 93'32W longitude.

#### **CLIMATE**

Taloyoak receives an average of 6.5 cm of rainfall and 103 cm of snowfall per year. Mean annual precipitation totals 18.1 cm. July mean high and low temperatures are 11.5 C and 3.2 C. January mean high and low temperatures are -29.7 C and -39.3 C. Winds are generally from the east and south-east.

# 1981 Air Photo



# **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 1,100~m x 30~m certified Arctic C gravel runway. Facilities and services include a terminal building, weather/communications equipment, and navigational aids. Scheduled service is available from First Air via Yellowknife and Iqaluit. The Northern Transportation Company Ltd. (Hay River) does one barge run each year in September. There are no facilities aside from a beach landing. There is no direct road access to Taloyoak. Within the community there are approximately 10.5~km of gravel surface roads. Calcium chloride is applied annually to 5.0~km of road to act as a dust suppressant and surface stabilizing agent.

#### **GEOLOGY**

The western side of the inlet has cliffs of up to 23 m, while those of the eastern side reach 14 m. The inlet is divided by a stretch of land which projects halfway across its width to form an inner and outer harbour. The eastern side of the Inlet is typified by rugged bedrock terrain, while the western side tends be subdued, hummocky relief. Weathered bedrock hills, outcrops and boulder fields are common; boulder fields are often a major obstacle toward orderly development. The small valleys between outcrops contain glacial drift and rock flour deposits thinly overlain by tundra vegetation. The boulder glacial till is underlain by Precambrian granite and gneiss with Palaeozoic limestone. The areas beach material has a coarse composition and is not the first choice for construction purposes.

Taloyoak is within the zone of continuous permafrost; perennially frozen ground is present at a shallow depth. Permafrost depths vary between 46 cm to 94 cm. Active layer depths vary from about 0.5 m in poorly drained areas to about 1 m in well-drained gravel areas. Greater depths of thaw may occur beneath the deeper lakes and larger streams. Small lakes and ponds are common due to the effects of frozen ground.

#### **VEGETATION**

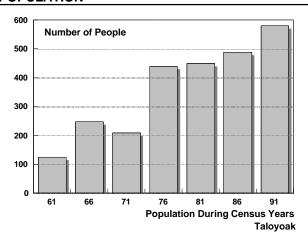
Lichens, mosses, and willows are able to grow despite poor soil quality. Poorly-drained depressions support some grasses.

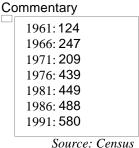
#### **HISTORY**

The Netsilik Inuit are the original people of the Boothia Peninsula. The peninsula was named after Felix Booth, the owner of a London gin distillery who funded John Ross 1829 expedition to the North. Amundsen's 1904 search for the Northwest Passage led him to the west coast of Boothia Peninsula. Beginning in 1934, the Hudson Bay Company began to relocate Inuit families from outlying camps and smaller settlements to various common areas, eventually settling on the present site of Taloyoak.

The economy remains based in hunting, fishing and trapping. The commercial char fishery works in conjunction with other communities of the Central Arctic. Traditional arts and crafts, carvings, and garments are popular with tourists. Local plants and lichen are used to colour wool used to make crafts and toys. Boothia Snowmobile tours are popular in winter; boat tours operate in the summer. Taloyoak has a development corporation and two construction companies. Taloyoak gained Hamlet status on April 1, 1981 and changed its name from Spence Bay on July 1, 1992. The Hamlet is also referred to as "Talurruaq", meaning caribou blind.

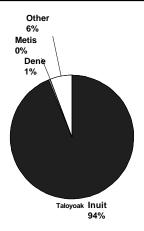
#### **POPULATION**





**Population Statistics** 

#### **ETHNICITY**

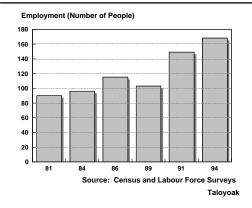


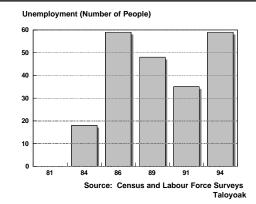


Inuit: 544
Dene: 3
Metis: 0
Other: 33

Source: Census

# EMPLOYMENT AND UNEMPLOYMENT





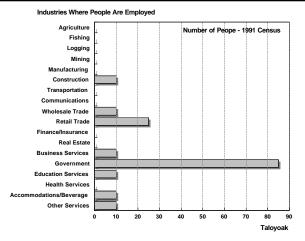
Source: 1994 Labour Force Survey, Bureau of Statistics

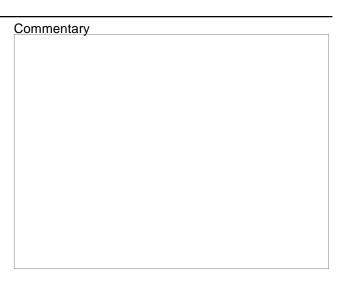
# **Employment Statistics 1994**

Over 15 Pop: 392 Abor. Employed: 148
Labour Force: 227 Unemployed: 59
Employed: 168 Ab. Unemployed: 51

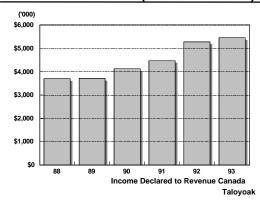
# Commentary

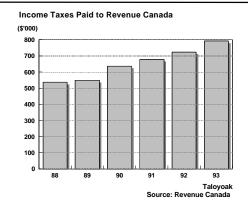
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$20,189 1992: \$19,530

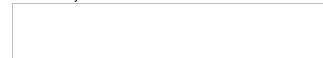
1991: \$17,884

1992: 270 1991: 250

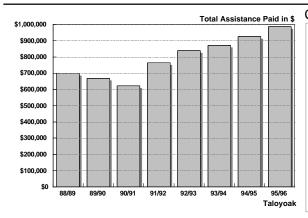
1993: 270

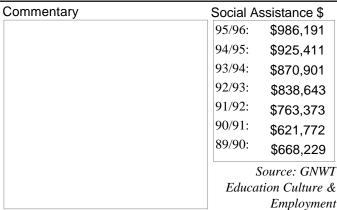
Source: Revenue Canada - Community Data

#### Commentary



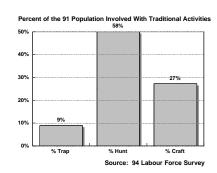
#### **SOCIAL ASSISTANCE PAYMENTS**





Commentary

# TRADITIONAL ACTIVITIES





Number of People

Taloyoak

Source: GNWT Bureau of Statistics - Labour Force

Survey

#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Paleajook Hotel accommodates twelve guests and the Boothia Inn accommodates ten.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary Ownership/Type of Housing Units The number of occupied private dwellings increased 32.8% between 1986 and

1991. As of 1994, the Housing Corporation owned 115 housing units. The Housing Assistance Program, the Alternative Housing Program, and Government Lease-to-Own units have accounted for 15 new homes in the community.

Owned: 0 Rented: 120 Band Owned: 0

Detached: 105 Apartment: 5 Row House: 15 Trailer: 0

Source: 1991 Census Data

# **COMMUNITY SERVICES**

#### Education

The Netsilik School teaches grades K-10. Eight teachers and three language specialists are on staff. Continuing education opportunities are available at the Adult Education Centre; one adult educator is on staff.

#### Health

The health centre (882 m2), built in 1987, contains four medical beds, two bassinets, and two cribs. Two nurses, one dental technician, and one community health worker are on staff.

#### Fire

Taloyoak has a volunteer fire brigade. Equipment includes a 1984 IHC model 4500 L triple combination pumper and a telephone alarm system. The firehall (onebay) is attached to the Hamlet complex.

# Recreation Services

The gymnasium (1974) is located in the school. The Community uses the gym during the evenings and on weekends. The E. Lyall Recreation Complex, which includes an arena and community hall, was completed in January, 1992. The Moses Teelktaq Memorial Pool, completed July 1995, is a seasonal above-ground pool. Other facilities include playgrounds, a slow-pitch diamond, a youth centre a community library and a developed trail system. The Easter Games are held each spring. Taloyoak has an Active Recreation Committee.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs three officers. The Community Social Services Office has two staff members. Social services and facilities include the Drug and Alcohol Education Committee, the Alcohol Drop-in Centre, and the Youth Justice Committee.

Mail is delivered three times per week. NorthwesTel local and long distance telephone service, CBC Radio, and CBC Television are available through the Anik satellite system. Taloyoak has a community radio station. NWTPC provides 1,610 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a Hamlet office, a three-bay maintenance garage (renovated in 1994), and two three-bay parking garages.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

Situated immediately north-east of the community, Water Supply Lake is the source for potable water. Construction of the water supply system was completed in November, 1973. It is a continuously circulating, self-draining, two-pipe (dual) system. Heat traces are in place to preheat the pipes before start-up during winter operation and to prevent freezing under extreme conditions.

#### Water Storage

Water Supply Lake, approximately 13.7 m deep, has a useful storage capacity of about 340 million L. The truckfill/water storage building has a water storage capacity of 11,365 L. The community water storage tank (45,000 L) requires 12-15 hours to fill.

A trucked distribution system serves the community. Delivery is every other day using two 4,500 L tank trucks. The average residential tank is 1,100 L in capacity. All water deliveries are metered.

#### Water Treatment

The truckfill building houses a hypochlorinator and a mixing tank for the chlorination of raw water by injection. Storage in the truckfill building prior to delivery allows for settling of the water to maintain clarity and purity.

#### Water Quality

The supply water is of good chemical quality for domestic use. Based on chemical analysis, the water is clear, moderately hard, slightly alkaline, well-buffered, and has a moderate amount of dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

#### **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected twice per week. The waste is stored in front of each home in 205 L drums. A two-person crew uses a Ford model F-350 Haul-All compactor for collection. According to local by-laws, the burning of wastes in barrels is not permitted at the home.

The current solid waste management site (1989) is located 2.2 km north-west of the community. The fenced site (45,000 m2) was designed to service the community for twenty years. Access to the area is not controlled. Wastes are burned once per week and the adjacent hillside provides a good source for granular cover material.

#### Sewage Disposal

Most houses are equipped with pressure plumbing systems and sewage holding tanks. Pumpout sewage is collected by three 4,500 L vacuum sewage tank trucks (1985, 1989 and 1992) twice per week. A single-cell lagoon (37,500 m2) located 2.5 km north-west of the community is used for treatment. Honeybags are collected daily with a stake truck and delivered to a cell adjacent to the sewage lagoon.

# NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Trout Lake

What the name means: Trout Lake

Alternate Name: Sambaa K'e

**POLITICAL** 

Located in the future territory of: Western Arctic RWED Administrative Region: Deh Cho Member of the NWT Legislature: James Antoine Member of Parliment: Ethel Blondin

Mayor: Andrew Lomen

Senior Administration Officer: Ruby Jumbo GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Simpson

NWT Legislature Riding: Nahendeh Languages Spoken: South Slavey Land Claim Area: Treaty 11 - Deh Cho

**LOCATION** *Longitude: 121.15; Latitude: 60.26* 

The community of Trout Lake is located on the south shore of Trout Lake, 161 air km south of Fort Simpson and 442 air km south-west of Yellowknife, at 60'266 N latitude and 121'156 W longitude.

#### **CLIMATE**

Trout Lake receives an average of 38.1 cm of rainfall and 132 cm of snowfall per year. Mean annual precipitation totals 48.3 cm. July mean high and low temperatures are 25.6 C and 12.2 C. January mean high and low temperatures are -23.0 C and -32.7 C. Winds are generally southwest and annually average 16 km/h.

# **TRANSPORTATION**

Trout Lake has limited airfield maintenance at its 762 m x 18 m gravel runway. Facilities include an apron and taxiway. Navaid services are available. Unlicensed float plane access is available, but there are no services. A winter road links Trout Lake with the Mackenzie Highway.

# **GEOLOGY**

Trout Lake lies on flat, sandy ground in a thickly-wooded area, west of the point where the Island River flows into Trout Lake.

#### **VEGETATION**

Forest cover is comparable in size to that of Northern Alberta and British Columbia.

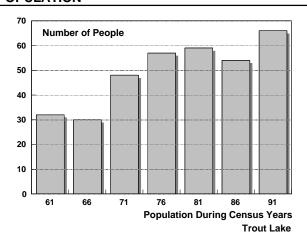
#### **HISTORY**

Although the Northwest Company established a post on the Trout River in 1796, Trout Lake did not become an organized community until the late 1960's. Hunting, fishing, and trapping are the major sources of economic income for the community. A fishing lodge generates additional income in the summer months. Trout Lake has no legal municipal status. It is also known as "Saamba Tu", meaning Trout Lake.

#### 1981 Air Photo



# **POPULATION**



# Commentary 1961: 32 1966: 30 1971: 48

1966: 30 1971: 48 1976: 57 1981: 59 1986: 54 1991: 66

Source: Census

**Population Statistics** 

# **ETHNICITY**



Trout **D2Me** 

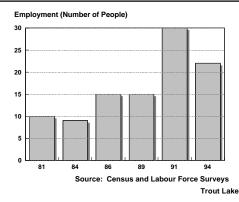
# Commentary

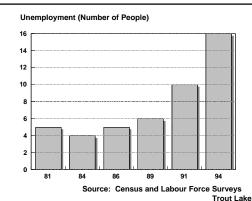
1991 Ethnicity

Inuit: 0
Dene: 61
Metis: 4
Other: 1

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





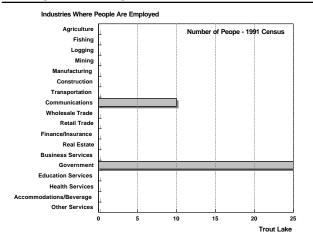
Source: 1994 Labour Force Survey, Bureau of Statistics

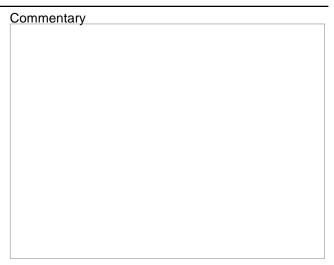
# **Employment Statistics 1994**

Over 15 Pop:	57	Abor. Employed: 16
Labour Force:	38	Unemployed:
Employed:	22	Ab. Unemployed:

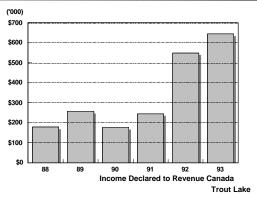
# Commentary

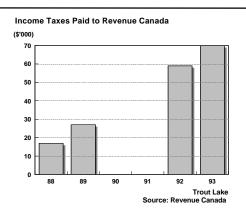
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





#### Average Incomes People Paying Inc.Tax

1993: \$16,100 1993: 40 1992: \$18,300 1992: 40 1991: 30 1991: \$8,167

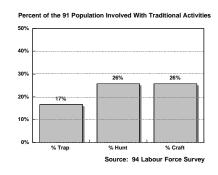
Source: Revenue Canada - Community Data

# Commentary

# **SOCIAL ASSISTANCE PAYMENTS**

Commentary	Social Assistance \$	
	95/96:	\$14,082
	94/95:	\$11,172
	93/94:	\$22,057
	92/93:	\$24,947
	91/92:	\$31,172
	90/91:	\$28,448
	89/90:	\$38,743
	S	ource: GNWT
	Education Culture &	
		Employment

# TRADITIONAL ACTIVITIES



Number of People Commentary

Trapped Some: 11

Arts & Crafts: 17

Hunted in 93: 17

Source: GNWT Bureau of Statistics - Labour Force

Trout Lake

Survey

# **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations  The Trout Lake Transient Centre accommodates six and has cooking facilities. The Trout Lake Indian Lodge, open from June until the end of September, accommodates fourteen.	Visitor Center Signings  95/96 94/95 93/94 92/93  Source: Non-Resident Only: RWED
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# HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Hous	ing
Occupied private dwellings increased 37.5% between 1986 and 1991. The Housing	Units	
Assistance Program, the Alternative Housing Program, and the Government Lease-to-	Owned: 20	
Own Program have accounted for 14 new homes in the community. GNWT staff	Rented: 0	
housing includes a house and a mobile home.	Band Owned: 0	
	Detached: 20	
	Apartment: 0	
	Row House: 0	
	Trailer: 0	
	G 1001 G	ъ.

Source: 1991 Census Data

# **COMMUNITY SERVICES**

# Education

Trout Lake Territorial School teaches grades K-9. One teacher and one classroom assistant are on staff. The Trout Lake Education Committee is the local educational authority. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

# Health

Medical services are available at Fort Liard.

Fire	Recreation Services
Fires are fought with extinguishers.	Recreational facilities include the community hall, a playground, and a playfield. The Community has an Active Recreation Committee.

#### Police, Mail, Electrical and Other Services

RCMP services and all social services are available from Fort Liard. Mail is delivered to a courtesy bag via Fort Simpson. Mackenzie Court Workers Services are available from Yellowknife. NorthwesTel plans to begin full telephone service to Trout Lake in 1996. Radio/mobile phone service are available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. Other infrastructure funded by Municipal and Community Affairs programs includes the Community Office, some staff housing, and a parking garage.

## DAY CARE SERVICES - NONE REGISTERED IF BLANK

COMMUNITY WATER

#### COMMONTT WATE

Water Supply

In the past, water was hauled by hand from Trout Lake and not treated. In 1996, a truckfill and reservoir (5,700 m3) were commissioned.

#### Water Storage

A 3400 L water truck is used for water delivery service.

#### Water Treatment

A chlorine solution is injected into the truckfill arm during the fill process.

Water Quality

#### **COMMUNITY WASTE**

#### Solid Waste

The Band Council has a two-person crew collect solid waste once per week. In winter, residents burn all combustibles in 205 L drums prior to garbage collection. The solid waste disposal site is located 0.5 km south of the community. A spring clean-up is scheduled annually.

# Sewage Disposal

The entire population uses outdoor pit privies. There is no bagged sewage pickup service.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# **Tsiigehtchic**

What the name means: Mouth of the Iron River

Alternate Name: Arctic Red River

#### **POLITICAL**

Located in the future territory of: Western Arctic

RWED Administrative Region: Inuvik

Member of the NWT Legislature: David Krutko

Member of Parliment: Ethel Blondin

Mayor: Grace Blake

Senior Administration Officer: Brian Kelly GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Mackenzie Delta

Languages Spoken: Gwich'in Land Claim Area: Gwich'In

#### **LOCATION** *Longitude: 133.44; Latitude: 67.27*

Tsiigehtchic is located at the confluence of the Arctic Red River and the Mackenzie River, at 67'27'N latitude and 133'44'W longitude. The Community is 96 km south of Inuvik and 1011 km north-west of Yellowknife.

#### **CLIMATE**

Tsiigehtchic receives an average of  $13.5~\rm cm$  of rainfall and  $160.8~\rm cm$  of snowfall per year. Mean annual precipitation totals  $31.2~\rm cm$ . July mean high and low temperatures are  $19.9~\rm C$  and  $9.4~\rm C$ . January mean high and low temperatures are  $-24.9~\rm C$  and  $-32.7~\rm C$ . Winds are generally from the east and annually average  $9.6~\rm km/h$ .

#### **TRANSPORTATION**

An unlicensed float plane aerodrome is the only access for air travel. Beaching is possible on the shores of the Arctic Red River. Break-up is usually June 15th and freeze-up usually October 15th. No services are available. The Dempster Highway ferry crossing connects Tsiigehtchic with Inuvik. Services are available from Inuvik. Barge service from Hay River is active during the month of June.

#### **GEOLOGY**

The townsite is built on fluvial glacial terraces. Land area above the riverbank tends to be well drained. Most buildings are 7.5 m - 30.5 m above the rivers surface. Surface material is a mixture of gravel, sand, and fine sediments with outcrops of sandstone and shale. Underneath is a layer of sand or silty clay. These unconsolidated materials average 7.5 m - 9.0 m in thickness and are underlain by Devonian shale. Tsiigehtchic is in the continuous permafrost zone. The active layer averages 0.3 m - 0.5 m.

#### **VEGETATION**

Black spruce and birch grow on the well-drained land, while willows grow in the poorly drained areas. A local sawmill, now closed, used the large areas of scrub forest nearby as a source for wood.

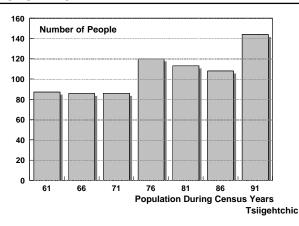
#### **HISTORY**

In 1868, a Roman Catholic Mission was established at the traditional fishing camp. A trading post was established soon after. By 1940 there were only three permanent families at the site. The construction of the Dempster Highway solidified the growing population and attracted more residents. Trapping, hunting, and fishing remain the prominent sources of income. Ferry crossing maintenance provides a few jobs. The Red River Incorporated Band Ltd. runs the local retail store/post office. Formerly known as Arctic Red River, Tsiigehtchic gained Charter Community Status in 1993. "Tsiigehtshik" means mouth of the iron river.

# 1981 Air Photo



# **POPULATION**

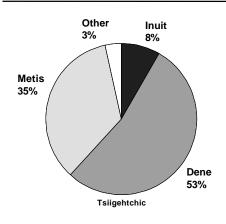


# Commentary 1961: 87 1966: 86 1971: 86 1976: 120 1981: 113 1986: 108 1991: 144

Source: Census

**Population Statistics** 

# **ETHNICITY**



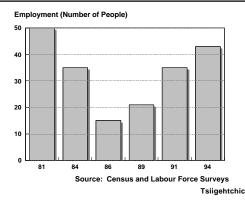


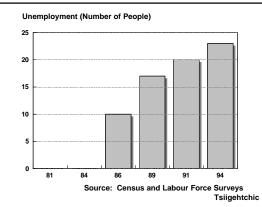
1991 Ethnicity

| Inuit : 12 |
| Dene: 77 |
| Metis: 50 |
| Other: 5

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





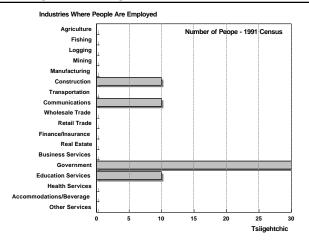
Source: 1994 Labour Force Survey, Bureau of Statistics

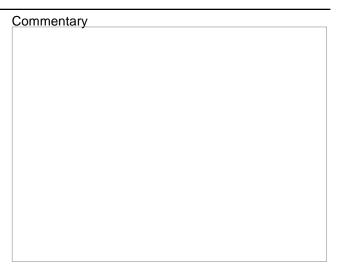
# **Employment Statistics 1994**

Over 15 Pop:	100	Abor. Employed: 23
Labour Force:	66	Unemployed:
Employed:	43	Ab. Unemployed:

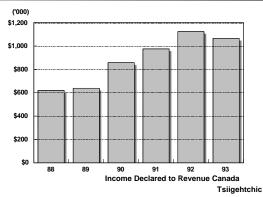
# Commentary

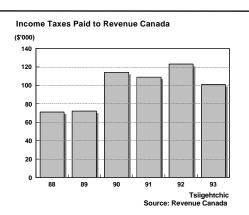
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes People Paying Inc.Tax

 1993: \$15,243
 1993: 70

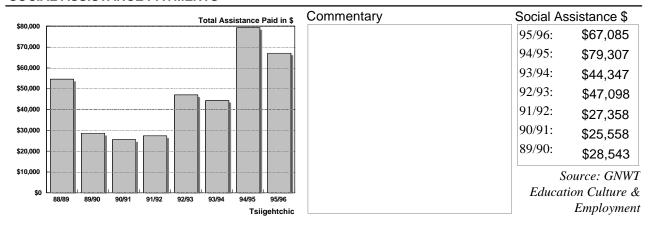
 1992: \$16,043
 1992: 70

 1991: \$13,929
 1991: 70

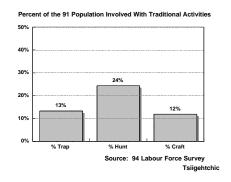
Source: Revenue Canada - Community Data

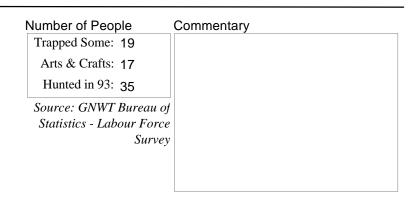
Commentary

# SOCIAL ASSISTANCE PAYMENTS



# TRADITIONAL ACTIVITIES





# TOURISM

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Arctic Red River Tourist Centre accommodates eight in two rooms with shared bath and kitchenettes.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

#### HOUSING AND HOME OWNERSHIP

#### 

# Source: 1991 Census Data

#### **COMMUNITY SERVICES**

#### Education

Chief Paul Niditchie School teaches grades K-9. Two teachers and one classroom assistant are on staff. The Tsiigehtchic Education Committee is the local education authority. Continuing education and vocational training opportunities are available through the Arctic College Extension Program.

#### Health

The health station (147 m2) was completed in 1985.

#### Fire

A ten-person volunteer brigade uses a 4500 L triple combination pumper truck to fight fires. A 136 kg fire extinguisher on wheels is also available. Call boxes and sirens are in place in case of emergency.

#### Recreation Services

Recreational facilities in Tsiigehtchic include a community hall, community centre, community club, and a playground. The school gymnasium was completed in 1988. The Community has a recreation committee.

#### Police, Mail, Electrical and Other Services

RCMP services and all social services are available from Fort McPherson. Mail is delivered once per week. NorthwesTel provides local and long distance microwave telephone service. CBC Radio and Television are broadcast via the Anik satellite system. NorthwesTel VHF radio/telephone service is available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories.

Infrastructure funded by Municipal and Community Affairs programs includes the firehall, the charter community office, and the parking garage. The maintenance garage is housed in the same complex as the parking garage.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

# **COMMUNITY WATER**

#### Water Supply

In the past, Tsiigehtchic had two seasonal sources of water. The winter source was the Arctic Red River. From the end of May to October when turbidity levels were high in the Arctic Red River, water was drawn from a small lake 60 m east of the school. A risk of pollution and potential health hazards led to the construction of a new water source and pumphouse. Tso Lake, 2.5 km south-east of the community, provides excellent quality raw water. Its dual intakes help to serve the water supply needs of the community more efficiently.

#### Water Storage

Most of the buildings are equipped with 1135 L aluminum water tanks with outside fill pipes. No houses have pressure water systems. Water is delivered it twice per week with a 4500 L truck. A 4500 L fibreglass water storage tank in the centre of the community is to be used by residents if the water truck breaks down or roads are impassable. The tank is generally not used however.

#### Water Treatment

Chlorination equipment consists of two 114 L polyethylene tanks, one on top of the other, and a Wallace and Tiernan 1/20 hp mixer to mix the chlorine solution into the top tank. A chlorine adjustable feed pump draws from the lower tank and blends it with the raw water.

With respect to corrosivity, the calcium carbonated based indices indicate Tsiigehtchic's supply water is very aggressive. The water is undersaturated with respect to CaCO3 and will definitely dissolve CaCO3.

#### Water Quality

Tsiigehtchic's water, for the time and locations sampled, is of good chemical quality for domestic use. Based on the chemical analysis the water is soft, well buffered, slightly alkaline, and low in dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested, with the exception of the raw water cadmium concentration, as below the recommended maximum limits.

With respect to corrosivity, the calcium carbonated based indices indicate Tsiigehtchic's supply water is very aggressive. The water is undersaturated with respect to CaCO3 and will definitely dissolve CaCO3.

#### **COMMUNITY WASTE**

#### Solid Waste

The new solid waste site, designed with pits for bagged sewage, is located just south of Lake "E". The area operates as a modified landfill.

#### Sewage Disposal

Houses are now equipped with sewage holding tanks which receive pumpout service. Bagged sewage services are available for remaining residences which use honeybags. In the past, the disposal area was located on a flood plain of the Mackenzie River north-east of the settlement about 500 m from the nearest residence. In 1986, pumpout sewage disposal was moved to Lake "E", located 1500 m west of the community. A 600 mm plastic pipe forms the sewage chute from the pumpout truck. Bagged sewage is disposed of in pits at the new solid waste disposal area just south of the lake.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# <u>Tuktoyaktuk</u>

What the name means: Looks Like a Caribou

Alternate Name: Tuktuujaartuq

#### **POLITICAL**

Located in the future territory of: Western Arctic

RWED Administrative Region: Inuvik

Member of the NWT Legislature: Vince Steen

Member of Parliment: Ethel Blondin

Mayor: Patrick Gruben

Senior Administration Officer: Lucy Kuptana GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Nunakput Languages Spoken: Inuvialuktun Land Claim Area: Inuvialuit

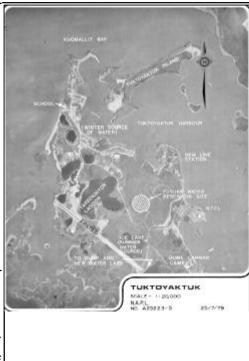
**LOCATION** *Longitude: 133.02; Latitude: 69.27* 

Tuktoyaktuk is located on Kugmallit Bay at 69'27'N latitude and 133'02'W longitude, near the Mackenzie River Delta. The Community is one of the northernmost on the Canadian mainland, 137 km north of Inuvik and 1130 km north-west of Yellowknife.

#### **CLIMATE**

Tuktoyaktuk receives an average of 7.2 cm of rainfall and 65 cm of snowfall per year. Mean annual precipitation totals 13.8 cm. July mean high and low temperatures are 15.2 C and 6.0 C. January mean high and low temperatures are -25.0 C and -31.6 C. Winds annually average 17.4 km/h. The region has eight months of winter, one month approximately of spring and fall, with only two months of above freezing temperatures. The ice breaks up in late June and the harbour freezes again in early October.

#### 1981 Air Photo



# **TRANSPORTATION**

A 1524 m x 46 m gravel runway is operated by GNWT. Scheduled airfield maintenance is available. A licensed aerodrome has float plane access with dock. Scheduled barge service provided by NTCL is active between June and September. There are roadways within the Hamlet but no direct access from other communities. An ice road is cleared for access to Inuvik in winter.

#### **GEOLOGY**

The surrounding terrain consists of flat barren tundra dotted with shallow lakes. The active layer above the permafrost is generally less than 0.5 m. Patterned ground indicates the presence of frost-heaving silt in local soil deposits. In areas where silt predominates, ice layers have formed and grown together resulting in pure blue ice. These layers have been found as deep as 7 m. Tuktoyaktuk Island, 1.5 km long and 180 m wide, is located at the mouth of the 4 km long harbour. The land is flat, consisting of glacially deposited silt, sand and gravel, with steep 10 - 15 m banks above the sea.

The peninsula on which the majority of the community rests is approximately 1300 m long, 90 - 425 m wide, and 1.5 - 8 m above sea level. It was formed by transported erosion material, course sands, silt, clay, and gravel with interbedded ice lenses. Significant erosion is occurring on its exposed west side and a program of shoreline protection began in 1986. A beach to protect and insulate the permafrost under the shoreline was filled with dredged material and gravel. There are over 1400 in the pingos in the area. These tiny mountains, which can reach up to 40 m in height, are a result of frost action. They are soil covered ice hills which tend to be round or oblong in shape.

#### **VEGETATION**

The land is covered with an organic mat of moss and peat. Local flora includes grasses, lichens, and small bushes of willows and Labrador Tea. Many small flowering plants are common in the summer months.

#### **HISTORY**

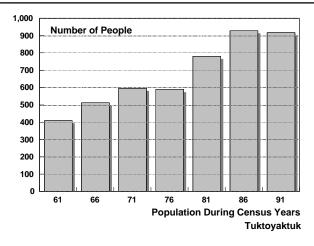
During the 19th century, many Inuit whalers lived in the vicinity of Tuktoyaktuk. Between 1890 and 1910, American whalers brought recurring epidemics of influenza, decimating the population. Many Alaskan Dene came in their place and stayed. The move of residents from Herschel Island to Tuktoyaktuk in 1928 coincided with the construction of the Hudson Bay Company Post. The Roman Catholic Mission was constructed in 1937. The Anglican Mission, a school, and an RCMP detachment came to Tuktoyaktuk by 1950. In 1955, work on the DEW-Line temporarily brought wage employment to the community. A nursing station was completed in 1956.

In 1957, the United States Army made an agreement with the Northern Transportation Company Ltd. (NTCL) to supply DEW-Line stations through the Bering Strait from Pacific ports. Six freighters were turned over to the company, which established an office at Tuk to handle the traffic.

Used as a transfer point for goods carried by barge up the Mackenzie River, Tuktoyaktuk grew to be the largest of the Western Arctic settlements on the Arctic coast. NTCL employs many in the transportation industry, while exploration companies hire local workers. Much economic growth can be attributed to the petroleum industry. Hunting and trapping still provides many families with income or seasonal income. An example of a diverse economic enterprise in the community is a privately owned reindeer herd.

Tuktoyaktuk gained Hamlet status on April 1, 1970. A traditional name for the community is "Tuktuujaqrtuuq", meaning looks like a caribou. It is said that many years ago an Inuit woman saw the reefs of Tuktoyaktuk on the horizon, which she thought to be caribou. Hudson Bay Company traders had called the place Port Brabant but the name did not become popular.

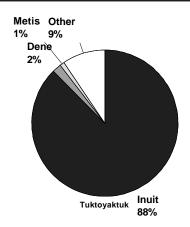
#### **POPULATION**

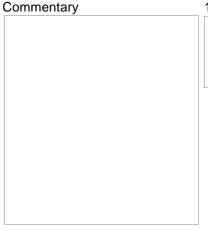




Population Statistics

## **ETHNICITY**



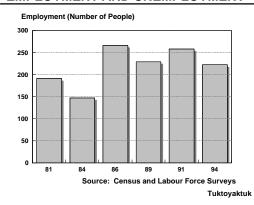


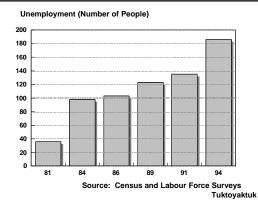
1991 Ethnicity
Inuit: 804
Dene: 18
Metis: 9

Other: 87

Source: Census

# **EMPLOYMENT AND UNEMPLOYMENT**





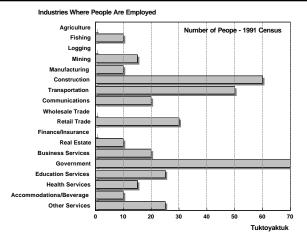
Source: 1994 Labour Force Survey, Bureau of Statistics

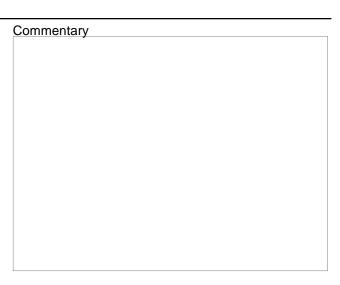
# **Employment Statistics 1994**

Over 15 Pop: 628 Abor. Employed: 128 Labour Force: 408 Unemployed: 186 Employed: 222 Ab. Unemployed: 186

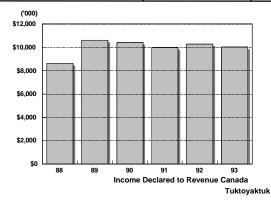
# Commentary

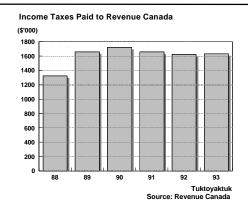
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$21,357 1992: \$21,889

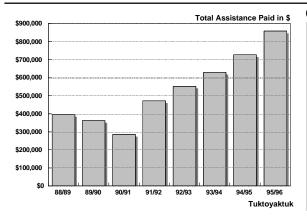
1991: \$21,670

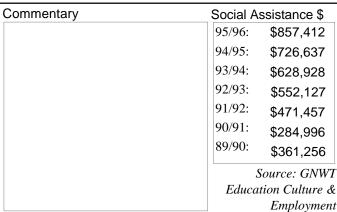
1993: 470 1992: 470 1991: 490

Source: Revenue Canada - Community Data

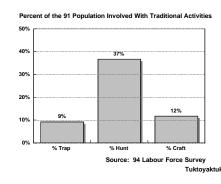
#### Commentary

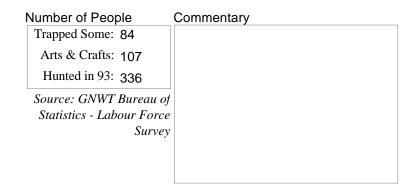
#### **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





#### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Hotel Tuk Inn accommodates 39 with private bath and meals. The Pingo Park Lodge has 24 rooms with a dining room and conference facilities.	95/96 94/95

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type	of Housing
The number of occupied private dwellings increased 20.9% between 1986 and		Units
1991. As of 1994, the Housing Corporation owned 186 housing units. The Housing	Owned:	
Assistance Program, the Alternative Housing Program, and the Government Lease-to-	Rented:	20
Own Program have accounted for 36 new homes in the community.	Band Owned:	0
	Detached:	165
	Apartment:	35
	Row House:	45
	Trailer:	10

Source: 1991 Census Data

# **COMMUNITY SERVICES**

#### Education

Mangilaluk School instructs grades K-9. Ten teachers and four classroom assistants are on staff. The Tuktoyaktuk Education Committee is the advisory authority on local education. The Adult Education Centre has one resident adult educator on staff. The Arctic College Extension Program offers continuing education opportunities.

#### Health

The health centre, built in 1989, has a medical staff of six. Facilities include three beds, one bassinet, and one crib.

### Fire

Fire protection consists of a ten-person volunteer department using a triple combination pumper truck and a tanker. Pagers and call boxes are in place for quickened response to emergency calls.

#### **Recreation Services**

The arena, which includes a meeting hall, was built in 1983. The gymnasium, located in the school, was completed in 1990. A seasonal swimming pool was completed in 1992/1993. Other facilities include a playground, a golf course, and a softball diamond. The Beluga Jamboree is held every April and the Tuk Cup Golf Tournament each July. Visitor attractions include the Tuktoyaktuk Sod House Museum. Tuktoyaktuk has an Active Recreation Committee.

# Police, Mail, Electrical and Other Services

The RCMP detachment has a staff of seven. Social services include the community office and a support staff of two. Ongoing projects include the Tuk Alcohol Centre and the senior citizens home.

Mail is delivered five times per week. NorthwesTel offers local and long distance service where the signal is transmitted via microwave towers. The local CBC radio affiliate, CFCT, is broadcast via microwave as well. CBC Television is broadcast via the Anik satellite system. VHF radio/phone service is also available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, the hamlet office, a parking garage, a maintenance garage, and the firehall.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

#### **COMMUNITY WATER**

#### Water Supply

In 1956, Ice Lake was about 3 m deep. During summer the water was slightly salty but drinkable. During the early winter, the ice froze from the surface downward excluding some of the salt, which became concentrated in the remaining water. After a month or two, this water became too salty to drink.

In winter, protected from riling by winds, tides, and waves in Kugmallit Bay, the water from the East Channel of the Mackenzie River floats above the heavier salt water. If flows along the south shore of the Bay, around the tip of the peninsula, and into Tuk Harbour. It makes a counterclockwise circuit around Tuk Island and out to sea.

The layer of fresh water would be thin, but it would gradually thicken. By the end of December, the fresh-water layer was thick enough to be dipped with a bucket, and at that point it became the winter water source. The continually flowing water ensures that any contamination from the buckets would be carried away.

During a violent storm in the summer of 1957 or 1958 salt-water from the Bay washed into Ice Lake and contaminated the supply. Water was then taken from Pikiolik Creek on the other side of the Harbour. A rough 7 km road was built to the source.

There are three sources of water currently used by the Community. Ice Lake and New Water Lake provide water for businesses and services which are high volume users, while the majority of the community uses the reservoir fed by Kudulak Lake.

# Water Storage

The community's water storage requirements are met by a unique 90,000 m3 circular reservoir (1984) located in the centre of the community. The reservoir is refilled once per year in the summer from Kudulak Lake. The reservoir's berms are 8 m above the ground, and its surface is 2.9 m above sea level. In 1987, a wind storm inflicted serious erosion damage to the reservoir, exposing the liner in some places. Sand drifts formed both inside and outside the reservoir. Repairs haulted further damage. A 200 mm diameter polyethylene pipe is in place between the lake and the reservoir. Water is distributed under private contract using a 15,890 L water truck. All water deliveries are metered.

#### Water Treatment

The raw water is chlorinated using a Wallace and Tiernan hypochlorinator kit. This includes a Series 44.113 feed pump, two 225 L polyethylene chemical tanks, and a mixer. During the annual refill the reservoir is batch fluoridated with hydrofluosilicic acid (HFSA).

A microbiological and corrosivity analysis indicates the presence of corrosion-causing and corrosion-intensifying bacteria. The water supply is moderately aggressive with respect to corrosivity.

# Water Quality

Tuktoyaktuk's supply water, for the time and locations sampled, is of good chemical quality for domestic use. The water is clear, moderately hard, well buffered, slightly alkaline, and has a moderate amount of dissolved solids. A comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

A microbiological and corrosivity analysis indicates the presence of corrosion-causing and corrosion-intensifying bacteria. The water supply is moderately aggressive with respect to corrosivity.

#### **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected by a two-person crew six times per week using a Haul-All pick-up. Dome Petroleum, the DEW-Line station, and the Northern Transportation Company Ltd.(NTCL) are responsible for hauling their own wastes.

The new solid waste management site is located 5 km south of the Hamlet on sloping land. The 1000 m2 site has been operational since the late-1980's. The site is partially fenced and access is controlled by a gate. Bulky and metal wastes are segregated in a 500 m2 area adjacent to the site. An equipment garage and office are on site.

The old site was covered with gravel and the access road was closed to traffic. The present site comes up to the boundaries of the old dump, and continuous landfilling will bring the level of the new site up to the old. During the summer, combustible wastes are burned daily and covered with granular material weekly.

#### Sewage Disposal

Pumpout sewage is collected from storage tanks using a 15,890 L vacuum truck. Each 2275 L insulated tank is situated under the respective building. Residences equipped with pressure water systems empty all wastes to the holding tanks.

Bagged sewage is collected six times per week from the roadside, in front of each home. Six kilometres from the hamlet, pumpout sewage is deposited onto a stretch of sloping ground and is allowed to drain into a 4 ha lagoon. Bagged sewage is deposited in the new 48 m2 trench storage area.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Tulit'a

What the name means: Where the Waters Meet Alternate Name: Tulit'a

#### **POLITICAL**

Located in the future territory of: Western Arctic

RWED Administrative Region: Sahtu

Member of the NWT Legislature: Stephen Kakfwi

Member of Parliment: Ethel Blondin

Mayor: Lorraine Doctor

Senior Administration Officer: Sheila Bassi GNWT Assigned Level of Development: Level 3 Government of Canada Administrative Region: Inuvik

NWT Legislature Riding: Sahtu Languages Spoken: North Slavey

Land Claim Area: Sahtu

# LOCATION Longitude: 125.34; Latitude: 64.54

Tulita is located on the east bank of the Great Bear River at its confluence with the Mackenzie River, at 64'54'N latitude and 125'34'W longitude. Tulita is 523 air km south-east of Inuvik and 624 km northwest of Yellowknife.

#### **CLIMATE**

Tulita receives an average of 18.6 cm of rainfall and 144.3 cm of snowfall per year. Mean annual precipitation totals 32.5 cm. July mean high and low temperatures are 22.2 C and 9.8 C. January mean high and low temperatures are -24.5 C and -32.6 C. The winds are generally southeast and annually average 12.2 km/h.

# 1981 Air Photo



#### **TRANSPORTATION**

The 914 m x 30 m gravel airstrip, taxiway and apron, air terminal building, and all facilities are operated by the Hamlet of Tulita (GNWT). Scheduled service is available from Norman Wells. Community Airport Radio Station (CARS) and regular airfield maintenance are available at the site. Unlicensed float plane access begins June 1st and ends October 5th of each year. No services are available. Barge service from Hay River is operational through a June to September window. A winter road connects Tulita to the Mackenzie Highway system. Drainage in the developed areas along the bank of the Mackenzie River is favorable due to the profile of the land. There is no system of drainage ditches in place.

#### **GEOLOGY**

The first buildings were constructed on two terraces rising from stable riverbanks, one 11 m and the other 23 m above the river. From the top of the bank inland for 250 m the ground slopes up. Beyond that point there is low ground and muskeg. The airstrip is located on a low ridge behind a wide, flat area. Tulita is within the discontinuous permafrost zone. Permafrost can be found to a depth of 50 m, with the active layer averaging between 0.6 - 1.5 m. Considerable degradation occurs upon removal of the vegetation cover, which is less than half a meter thick. The soil profile consists of layers of clay, silt, sand and some gravel in isolated pockets. Ice content is high in the surface soils.

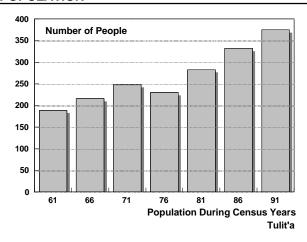
#### **VEGETATION**

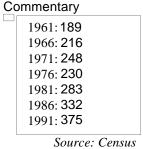
There are stands of black spruce interspersed with birch, white spruce, and alder. Trees higher than 9 m can only found near ponds and streams. Beyond the low-lying areas dominated by muskeg the area is heavily treed.

In 1810, the Northwest Company established a trading post at the junction of the Mackenzie and Great Bear Rivers. Sir John Franklin had used the site as a starting point for his expeditions. The site of the Post was changed several times but the community now occupies the original location. The settlement grew, making a name for itself as a link to the pitchblende finds at Great Bear Lake.

The economy remains based in hunting, fishing, and trapping. Oil exploration and tourism are also important. A fishing lodge attracts tourism dollars in summer, as does the sale of local arts and crafts. The original Anglican Church, built in 1860, is being restored. Local businesses include building contractors, outfitters, expediters, food and retail sales, and air transportation. Tulita achieved Hamlet status on April 1, 1984. The Hamlet changed its name from Fort Norman on January 1, 1996. Tulita means where the waters meet.

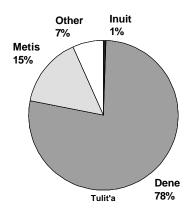
### **POPULATION**

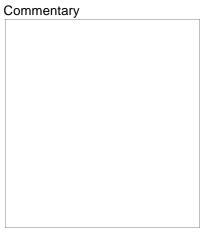




**Population Statistics** 

# **ETHNICITY**

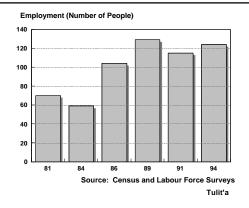


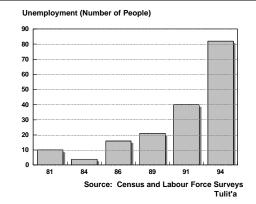


1991 Ethnicity Inuit: 2 Dene: 291 Metis: 57 Other: 25

Source: Census

# EMPLOYMENT AND UNEMPLOYMENT





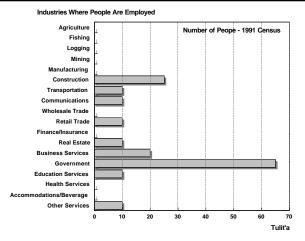
Source: 1994 Labour Force Survey, Bureau of Statistics

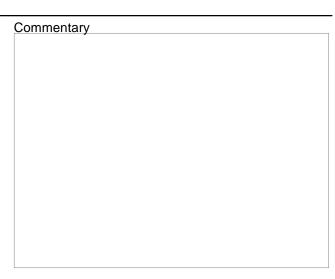
# **Employment Statistics 1994**

Over 15 Pop: 303 Abor. Employed: 113
Labour Force: 206 Unemployed: 82
Employed: 124 Ab. Unemployed: 80

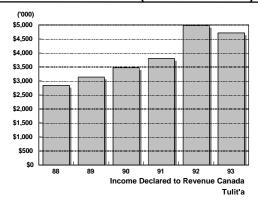
# Commentary

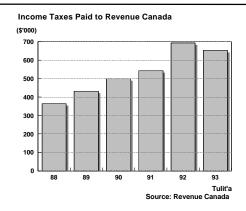
# **EMPLOYMENT PROFILE**





# **INCOME AND TAXES (Revenue Canada)**





# Average Incomes

# People Paying Inc.Tax

 1993: \$21,427
 1993: 220

 1992: \$24,875
 1992: 220

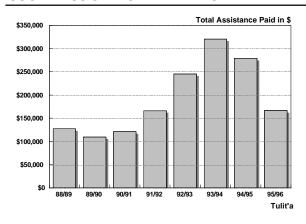
 1991: \$18,279
 1991: 190

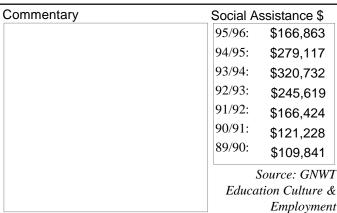
Source: Revenue Canada - Community Data

#### Commentary

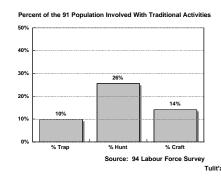


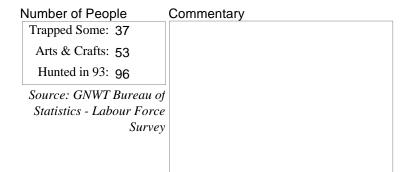
#### **SOCIAL ASSISTANCE PAYMENTS**





# TRADITIONAL ACTIVITIES





TOURISM

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Bear Lodge accommodates thirteen in seven rooms and includes shared bath facilities.	95/96 94/95 93/94 92/93
		Source: Non-Resident
		Only: RWED

#### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of	Housing
The number of occupied private dwellings remained constant between 1986 and 1991. As of 1994, the Housing Corporation owned 67 housing units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 40 new homes in the community.	Owned: 4 Rented: 7 Band Owned: 0	0
Own riogram have accounted for 40 new nomes in the community.	Detached: 9 Apartment: 0 Row House: 1	0

Source: 1991 Census Data

Trailer: 0

# **COMMUNITY SERVICES**

#### Education

Chief Albert Wright School teaches K-9. Four teachers and one classroom assistant are on staff. The Tulita Education Committee is the local education authority. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

#### Health

The health centre(427 m2) was built in 1983. It supports one bed, one bassinet, and one crib. Five medical staff are employed.

#### Fire

A five-person volunteer brigade serves the Hamlet. Equipment includes a triple combination pumper truck and the NorthwesTel Westcom 931 system, which is used to signal emergencies.

#### **Recreation Services**

The recreation complex, completed in 1991/92, holds the arena, curling rink, and hall. Tulita also has an outdoor rink, a seasonal swimming pool, and a school gymnasium. Other facilities include ski trails, the community library, playfields, and parks.

#### Police, Mail, Electrical and Other Services

The RCMP detachment staffs two officers. The Community Social Services Office has a staff of one. Facilities and services include the Fort Norman Child Development Centre, the Drop-In Centre, and the Youth Justice Committee. Mail is delivered three times per week. NorthwesTel provides local and long distance telephone service via microwave transmission. VHF radio/telephone service is also available. CBC Radio broadcasts are transmitted using a Low-Power Relay Transmitter (LPRT) and CBC Television is broadcast with the Anik satellite system. Two Cancom channels are available. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides 910 kW of diesel-generated power to the Hamlet.

Infrastructure funded by Municipal and Community Affairs programs includes staff housing, the firehall, and a parking garage. The maintenance garage and parking garage are incorporated in one complex. The Hamlet Office is leased with Community Works\* funding.

#### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Fort Norman Community Day Care

# **COMMUNITY WATER**

#### Water Supply

Until new intake facilities were built in 1976, water was pumped directly from the Mackenzie and Great Bear Rivers. Great Bear River has good quality water for year-round use but the Mackenzie was generally used during the winter due to the poor condition of the Great Bear River access road. New facilities include a pumphouse and intake on the bank of Great Bear River for a single water supply.

Located approximately 1.5 km from the community, the pumphouse and intake are located 0.8 km from the confluence of the two rivers. The pumphouse itself is about 12 m above the low water mark. Two 250 mm diameter buried intake shafts extend 52 m from the pumphouse terminating in the stream 12 m from the shore. The shafts had previously been 0.3 m above the river bottom. Problems with turbidity and water retrieval in the fall due to low water levels led to the dredging of the channel and the removal of some sand bars upstream from the community in 1989. The project was only partially successful and in 1991 the intakes were lowered to increase the intake volume during low water conditions. However, low water level problems persist intermittently.

The Schedule 80 Dupont Sclairpipe shafts are 5 m apart under water. The lower end of the polyethylene pipe is inserted into a 15 m long, 460 mm diameter galvanized corrugated metal culvert pipe which is anchored by lengths of used crawler tractor tracks and a gravel cover. Bolted on to the end of the shafts are 0.3 m lengths of stainless steel Johnson 0.5 mm slot well screen.

Each shaft contains a submersible pump near the screened inlet as well as a 75 mm insulated and heat traced supply line. A Schedule 80 HDPE Sclaircor pipe traced with 26 watts/m in a 19 mm black conduit was installed in 1989. Features include a conduit for a temperature sensor and a 50 mm backwash line. Everything is encased in a yellow jacket. Either pump may be used to backwash the other supply line. When the pumps shut down, the lines drain to the river to prevent freezing.

A winch and cable arrangement is used to withdraw the pump and supply line. The winch is a Bulldog Junior Model one-ton hoist with a drum capacity of 152 m of a 6 mm cable. The pump used is a 3 phase, 60 Hz, 3600 rpm Flygt Model B-2070 electric with 5.7 L/s @ 269 kPa TDH capacity.

#### Water Storage

The 5450 L water truck delivers eight full loads per day to the community. The truck is equipped with a 2.2 kW Briggs and Stratton pump and a Neptune meter. Houses are equipped with 1140 L water tanks for storage, and delivery is contracted to a private contractor. The access road was upgraded and widened in 1986 to provide better access to the intakes. All water deliveries are metered.

#### Water Treatment

Water is chlorinated when filling the water delivery truck. The hypochlorinator, located in the pumphouse (4.6 m2) is a Precision Control Products Model 8311-11, calibrated for only one pump running. The truckfill facilities were upgraded in 1991 to provide a flow rate of 900 L/min.

# Water Quality

Tulita's water supply is of good chemical quality for domestic use. Comparison of the chemical analysis for the raw and treated water to the Guidelines for Canadian Drinking Water Quality (1987) shows those parameters tested as below the recommended maximum limits. The level of mercury, lead, cadmium, aluminum, arsenic, zinc, and copper were all well below the recommended maximum limits.

# **COMMUNITY WASTE**

#### Solid Waste

Solid waste is collected at least twice per week by a crew operating a Ford F-700 truck. Garbage is set out in oil drums in front of the residences, and bulky waste disposal is the responsibility of the resident.

The old solid waste site was located at the east end of the airstrip near the old lagoon, 1.4 km from the community. A new solid waste management site was established in 1987, 3 km south-east of the community. The site slopes down toward the river, 1 km away. The flat area, approximately 40 m x 20 m x 1.5 m, is partially fenced. Used oil and bulky wastes are stored in a separate (400 m2) site. Combustible wastes are burned and compacted once each month and covered with excavated material two or three times per year.

#### Sewage Disposal

All buildings are now equipped with pumpout tanks, installed either above or below ground. Newer homes have underground 1360 L steel tanks, while older homes have tanks of up to 18,200 L. The wastes are pumped and hauled twice per week with a 2270 L truck.

Sewage pumpout had been previously treated in a lagoon beside the airport. Expansion of airport facilities caused the treatment area to be relocated. Taylor Lake, 3 km north-east of the community, was upgraded to a lake-lagoon. The 5 ha lake, which has an average depth of 3 m, has an outlet to the Mackenzie River upstream from the community.

#### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Wha Ti

What the name means; Martin Lake Alternate Name: Wha Ti

#### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: North Slave Member of the NWT Legislature: James Rabesca

Member of Parliment: Ethel Blondin

Mayor: Mike Nitsiza

Senior Administration Officer: Thomas Matus GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Yellowknife

NWT Legislature Riding: North Slave

Languages Spoken: Dogrib Land Claim Area: Dogrib

#### **LOCATION** *Longitude: 117.16; Latitude: 63.08*

Wha Ti is located 164 air km north-west of Yellowknife at 63'08'N latitude, 117'06'W longitude. The Community is situated on Lac La Martre, which is 80 km x 56 km in size.

#### **CLIMATE**

Wha Ti receives and average of 12.7 cm of rainfall and 111.8 cm of snowfall per year. Mean annual precipitation totals 22.9 cm. July high and low temperatures are 25.6 C and 12.2 C. January high and low temperatures are -23 C and -32.7 C. Winds are generally from the east and annually average  $16.1 \, \text{km/h}$ .

# <u> 1981 Air Photo</u>



# **TRANSPORTATION**

The Hamlet of Wha Ti operates the unlicensed 671 m x 18 m gravel run way, apron, and taxiway. Other services and facilities include navaid, portable lights, and a wind sock. There is no passenger shelter. Limited airfield maintenance is available. An unlicensed water/ice aerodrome is available but there are no services. A winter road provides a connecting point to the Mackenzie Highway at Rae. Rough dirt roads in the community become muddy in inclement weather. Permeability of the soils in the cleared site is good and drainage is not a major problem.

#### **GEOLOGY**

Located within the discontinuous permafrost zone, the active layer may vary between 0.5 m - 1.8 m. Buildings have been constructed on level lowland 2.5 m - 4 m above the shoreline. Marshy terrain predominates to the north, east, and south of the community. Surface material consists of glacial or alluvial sand and silt, while the sedimentary bedrock is of the Palaeozoic-Ordovician period. While having substantial sand deposits, the settlement has limited gravel resources.

#### **VEGETATION**

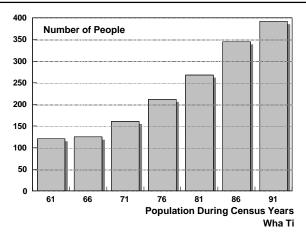
Ground cover consists of various grasses which prefer the growth areas between buildings. Forest species include poplar, birch, willow, black spruce, and tamarack varieties of trees as well as numerous bushes, grasses, and mosses.

#### **HISTORY**

A traditional hunting site of the Dogrib tribe, Wha Ti is an area rich in wildlife. Although the Northwest Company established a permanent post at the site in 1793, trade continued at the larger and more established posts at Rae and Wrigley. A federal school was built in 1955. The Dogrib Dene maintain a traditional lifestyle and economy despite attempts to open a commercial fishery.

The economy is almost exclusively based on trapping, hunting, and fishing. Local business includes a hotel, outfitters, and a restaurant. Wha Ti gained Hamlet status on April 1, 1986. Its name changed from Lac La Martre on January 1, 1996. Lac La Martre may have stemmed from "Lac de la Mort", named for an epidemic of scarlet fever which decimated a large band of Yellowknife Indians in the 1850's. Wha Ti, which means marten lake, has other traditional names. "Tsoti/Choti" means fouled water lake and "Mine Ko Gola" means net fishing with houses.

### **POPULATION**



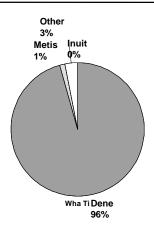
### Commentary

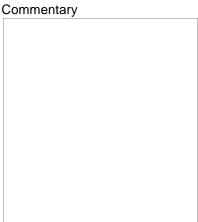
1961:121 1966: 125 1971: 161 1976: 212 1981: 268 1986: 345 1991: 392

Source: Census

**Population Statistics** 

## **ETHNICITY**



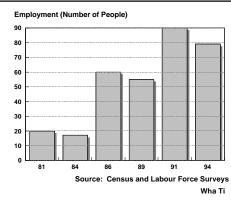


### 1991 Ethnicity

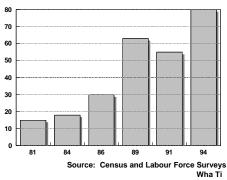
Inuit: 0 Dene: 375 Metis: 5 Other: 12

Source: Census

### **EMPLOYMENT AND UNEMPLOYMENT**



### **Unemployment (Number of People)**



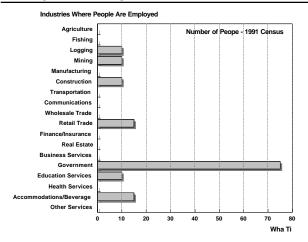
Source: 1994 Labour Force Survey, Bureau of Statistics

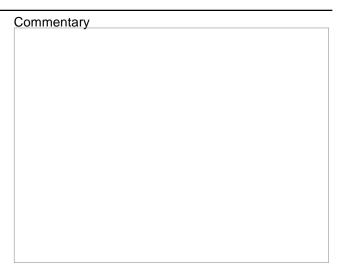
### **Employment Statistics 1994**

Over 15 Pop:	261	Abor. Employed: 70	
Labour Force:	158	Unemployed: 79	
Employed:	79	Ab. Unemployed: 78	

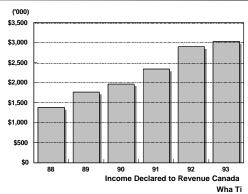
### Commentary

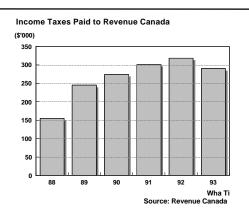
### **EMPLOYMENT PROFILE**





### **INCOME AND TAXES (Revenue Canada)**





# Average Incomes People Paying Inc.Tax

 1993: \$15,130
 1993: 200

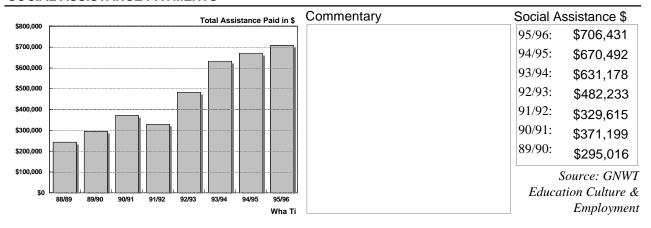
 1992: \$15,600
 1992: 200

 1991: \$12,989
 1991: 180

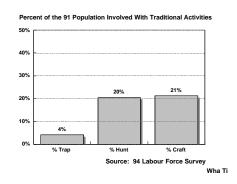
Source: Revenue Canada - Community Data

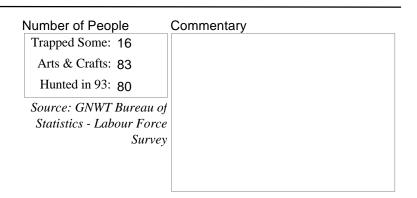
Commentary

### **SOCIAL ASSISTANCE PAYMENTS**



### TRADITIONAL ACTIVITIES





### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Meni Khon Hotel accommodates eight in four rooms with shared bath. The Hotel includes a coffee shop.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED

### HOUSING AND HOME OWNERSHIP

# Commentary The number of occupied private dwellings increased 28.8% between 1986 and 1991. As of 1994, the Housing Corporation owned 6 housing units. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 49 new homes in the community. Detached: 65 Apartment: 0 Row House: 0 Trailer: 5

Source: 1991 Census Data

### **COMMUNITY SERVICES**

### Education

Mezi Community School opened in 1983 instructs grades K-7. Six teachers and two classroom assistants are on staff. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

### Health

The health centre (915 m2), which holds two beds and one crib, was built in 1986. The facility has a medical staff of three.

### Fire

A volunteer fire department uses a 1985 4540 L, 625 g/min. triple combination pumper to fight fires. A telephone paging system is in place for quickened response to calls. Trucked water is used to fight fires. A new two-bay firehall will be completed in 1996.

### Recreation Services

Recreational facilities in Wha Ti include a gymnasium (1983) and a small, log community hall (1975). Group feasts and tea dances are often held as a Hamlet. Other facilities include a skating rink, baseball diamonds, a playground, and a beach area.

### Police, Mail, Electrical and Other Services

The RCMP detachment staffs one officer. Social services are available from Rae-Edzo. Mail is delivered three times per week. NorthwesTel local and long distance telephone service is available. Community radio broadcasts are performed regularly. CBC Radio and Television are available via the Anik satellite system. The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides 760 kW of diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes the new hamlet office (1993 - 305 m2), the two-bay maintenance garage (1988), which had an office added in 1995, the two-bay parking garage (1988), and two sets of staff housing, one built in 1980 (115 m2), and the other in 1985 (158 m2).

### DAY CARE SERVICES - NONE REGISTERED IF BLANK

### **COMMUNITY WATER**

### Water Supply

In the past, water was drawn from one of two sources. The first was a small lake approximately 2.5 km east of the settlement, the other was Lac La Martre. Water from Lac La Martre was taken from the dock directly in front of the community. A gasoline driven 50 mm pump was used to fill the 4500 L delivery truck tank.

The current water supply system (1996) consists of a 3 water wells, a pumphouse, and a truckfill building with a truck turnaround area. The truckfill station is designed to provide a fill rate of 1000 L/min. This flow rate can be achieved either by flow directly from the well or by a combination flow from the well and from storage.

The site is located at the west end of the settlement near the main dock. The wells, one located inside and two located outside, are equipped with submersible turbine pumps.

### Water Storage

There are no water storage facilities in the Hamlet.

### Water Treatment

In the past, water was drawn from one of two sources. The first was a small lake approximately 2.5 km east of the settlement, the other was Lac La Martre. Water from Lac La Martre was taken from the dock directly in front of the community. A gasoline driven 50 mm pump was used to fill the 4500 L delivery truck tank.

The current water supply system (1996) consists of a 3 water wells, a pumphouse, and a truckfill building with a truck turnaround area. The truckfill station is designed to provide a fill rate of 1000 L/min. This flow rate can be achieved either by flow directly from the well or by a combination flow from the well and from storage.

The site is located at the west end of the settlement near the main dock. The wells, one located inside and two located outside, are equipped with submersible turbine pumps.

### Water Quality

### **COMMUNITY WASTE**

### Solid Waste

Solid waste is collected at least twice per week by a two-person crew using a 1989 one-ton F-350 packer truck. The school burns waste regularly prior to collection. Each year the community organizes a spring clean-up.

The solid waste management site (2500 m2) is located 5 km north-east of the settlement on flat land. The fully-fenced site was commissioned in 1985. A separate 75 m x 75 m area has been cleared for bulky waste disposal. Sandy soil is readily available at the site and is used to cover the wastes.

### Sewage Disposal

Most homes are equipped with outdoor privies, although the school has a pumpout sewage tank. The government buildings are equipped with septic tanks. The 9080 L pumpout (1995) truck disposes of sewage at a shallow pit located approximately 4.7 km east of the hamlet. A 100 m2 site adjacent to the solid waste site is being used for honeybag disposal. A new cell was completed in 1994. Using the same collection vehicle as for solid waste collection but kept separated from the other wastes, bagged sewage is collected twice per week.

### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Whale Cove

What the name means: Where Many People Arrive

Alternate Name: Tikirarjuaq

### **POLITICAL**

Located in the future territory of: Nunavut RWED Administrative Region: Keewatin

Member of the NWT Legislature: Kevin J. O'Brien

Member of Parliment: Jack Anawak

Mayor: Jack Angoo

Senior Administration Officer: Mike Courtney GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Keewatin

NWT Legislature Riding: Kivalivik Languages Spoken: Inuktitut Land Claim Area: TFN - Keewatin

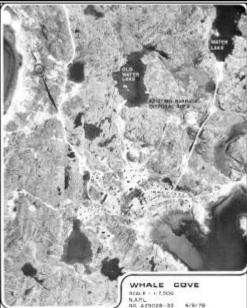
### **LOCATION** *Longitude:* 92.36; *Latitude:* 62.10

Whale Cove is located at the tip of Term Point on the west coast of Hudson Bay at 62'10'N, 92'36'W. It is 80 air km south of Rankin Inlet and 1,139 km east of Yellowknife.

### **CLIMATE**

Whale Cove receives an average of  $16.0\,\mathrm{cm}$  of rainfall and  $118.1\,\mathrm{cm}$  of snowfall per year. Mean annual precipitation totals  $27.8\,\mathrm{cm}$ . July mean high and low temperatures are  $12.5\,\mathrm{C}$  and  $4.2\,\mathrm{C}$ . January mean high and low temperatures are  $-28.0\,\mathrm{C}$  and  $-34.7\,\mathrm{C}$ . Winds are generally north-west and average  $24\,\mathrm{km/h}$  annually.

### 1981 Air Photo



### **TRANSPORTATION**

The GNWT and the Hamlet jointly operate a 1,219 m x 30 m certified Arctic C gravel runway. Facilities and services include a terminal building, weather/communications equipment, and navigational aids. Scheduled flight service is available through Calm Air via Rankin Inlet/Churchill and by Skyward Aviation to Rankin Inlet. There is an unlicensed water aerodrome which provides float plane access in the summer months.

Marine transportation is provided by the Northern Transportation Company Ltd. barge service from Churchill. Facilities include a beach landing and a gravel pushout, which is rebuilt annually by the Department of Public Works and Services. There is no direct road access to Whale Cove. Within the community there are approximately 12.4 km of gravel surface roads. Calcium chloride is applied annually to 5 km of road to act as a dust suppressant and surface stabilizing agent.

### **GEOLOGY**

Whale Cove is a sheltered bay which faces southward. The Community is situated on a grassy, boulder-strewn area which gently slopes upward from the sea. The overburden of coarse gravel and sands reaches up to 1 m in depth. A ridge of Precambrian rock 15 to 20 m in height surrounds the community; rocky outcrops are common. The active layer of permafrost extends to about 1 m. Annual thaw in the summer is negligible.

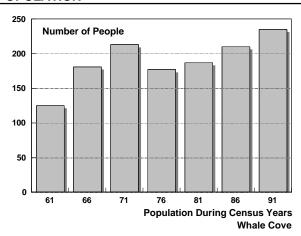
### **VEGETATION**

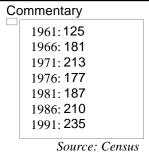
A thin layer of organic material supports mosses and lichens along the rocky coast and low hills.

The first Europeans to explore the Whale Cove area were Captain Thomas Button in 1613 and Captain Luke Foxe in 1631. The Hudson Bay Company began trading with people of the area during the 18th century. At the same time, European interest in mineral exploration developed. Whale Cove was officially established in 1959 by the Department of Northern Affairs. Starvation had stricken outlying camps the year before when the caribou herd failed to return. The Department of Northern Affairs believed that the Inuit could adapt their technologies to the use of coastal resources.

The Whale Cove area has abundant game resources. Hunting, fishing and trapping are the major economic activities of the Hamlet. Local businesses include meat product sales, cartage, general retail, food sales, hotels, outfitting, restaurants, amusement centres, and vehicle rentals. Whale Cove gained Hamlet status on July 1, 1976. A traditional name for the Community is "Tikirarjuaq", meaning where many people arrive.

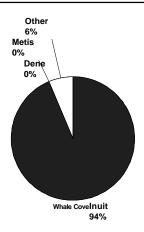
### **POPULATION**





Population Statistics

### **ETHNICITY**

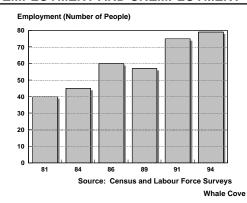


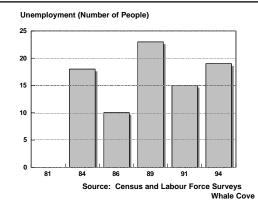


Inuit: 220
Dene: 0
Metis: 0
Other: 15

Source: Census

### **EMPLOYMENT AND UNEMPLOYMENT**





Source: 1994 Labour Force Survey, Bureau of Statistics

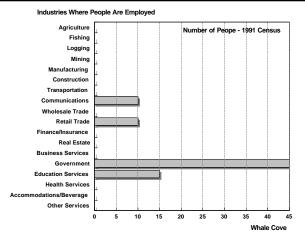
Whale Cove Page 3

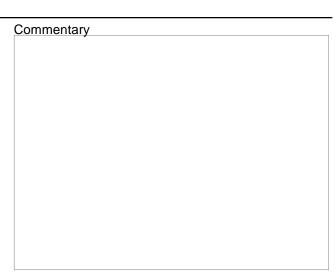
### **Employment Statistics 1994**

Over 15 Pop: 161 Abor. Employed: 62
Labour Force: 98 Unemployed: 19
Employed: 79 Ab. Unemployed: 18

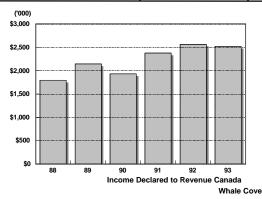
### Commentary

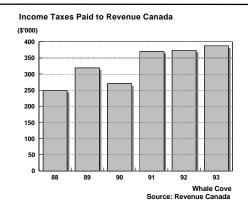
### **EMPLOYMENT PROFILE**





### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$21,017 1992: \$21,383 1993: 120 1992: 120

1991: \$18,817

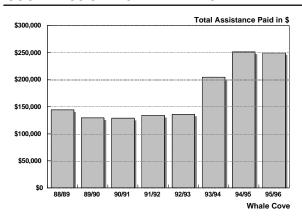
1991: 120

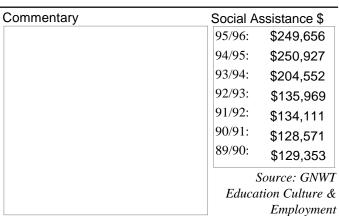
Source: Revenue Canada - Community Data

### Commentary

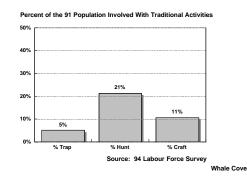
### Commonary

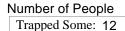
### **SOCIAL ASSISTANCE PAYMENTS**





### TRADITIONAL ACTIVITIES





Arts & Crafts: 25

Hunted in 93: 50

Source: GNWT Bureau of Statistics - Labour Force Survey

Commentary

### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Issatik Co-op Hotel accommodates six guests.	95/96 94/95 93/94 92/93 Source: Non-Resident Only: RWED

### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type	of Housing
The number of private occupied dwellings increased 43.9% between 1986 and		Units
1991. As of 1994, the Housing Corporation owned 50 housing units. The Housing	Owned:	5
Assistance Program, the Alternative Housing Program, and Government Lease-to-Own	Rented:	50
units have accounted for 19 new homes in the community.	Band Owned:	0
	Detached:	45
	Apartment:	0
	Row House:	10
	Trailer:	0

Source: 1991 Census Data

### **COMMUNITY SERVICES**

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The Inullak School teaches grades K-9. Six teachers and four language specialists are on staff.

### Health

The Whale Cove Health Centre was built in 1987. The facility is 866 m<sup>2</sup> in area and contains one medical bed, one bassinet and one crib. One nurse and one community health representative are on staff.

### Fire

Fire protection consists of a eight-person volunteer fire brigade. Equipment includes a 1987, 625 g/min. triple combination pumper and a telephone alarm system. The community's firehall is 149 m2 in area.

### Recreation Services

Whale Cove's gymnasium was built in 1986. The Hamlet also has a playground, a playfield, and an outdoor rink. A new arena was opened in 1995.

### Police, Mail, Electrical and Other Services

RCMP services are available from Rankin Inlet. Social services include one social services field officer. Mail is delivered three times per week. NorthwesTel local and long telephone service and CBC Radio are available through the Anik satellite system. There is also a community FM radio station and CBC-TV east and west channels. NWTPC provides 620 kW capacity diesel-generated power to the Hamlet.

Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, a 269 m2 Hamlet office, a two-bay maintenance garage (180 m2), and two two-bay parking garages (190 m2 and 226 m2).

### DAY CARE SERVICES - NONE REGISTERED IF BLANK

### **COMMUNITY WATER**

### Water Supply

The community currently obtains its potable water from Fish Lake, located approximately 3.5 km north of the community. This source has been used since about 1982. The former source was Water Lake, 1 km north of the community. A new access road and truck turnaround pad were constructed at Fish Lake in 1986, allowing improved year-round access to the lake.

### Water Storage

The recharge potential of Fish Lake includes 37.4 ha of adjacent watershed, the discharge from two lakes to the South, and additional discharge from the North. Nearly 93,000 m2 of water per year is available as recharge for the lake, compared with the present annual consumption of 9,000 m3. Winter storage capacity of 97,000 m2 was calculated based on an assumption that 50% of the total volume of the lake was occupied by ice cover.

A 4540 L 1976 water truck and a 4540 L 1993 water truck are used for water distribution. Water is pumped directly into the truck tank using a truck mounted pump. The water is trucked approximately 4.0 km from the source. All water deliveries are metered.

### Water Treatment

Water for the hypochlorite mixing tank is supplied from the discharge line. The hypochlorite feed pump is controlled by the rate of water supplied to the water trucks by means of a flow sensing meter mounted on the discharge line. The chlorine is supplied to the main line by a tube and chlorine injector. The design flow rate of the injection system provides 0.5 mg/L residual chlorine. The dosage rate at the pumphouse allows for consumption and volatilization during delivery and residential storage. Estimated chlorine residual concentration at the point of domestic supply is 0.2 mg/L for a typical truck delivery system.

Until completion of the new intake/truckfill in 1991, water was drawn directly from the lake by the water truck. In winter, an ice auger was used to obtain access. The water was disinfected by adding chlorine bleach to the tank of the delivery truck.

### Water Quality

### **COMMUNITY WASTE**

### Solid Waste

Solid waste is collected daily by a two-person crew using a 1991 Ford F-350 compactor with a 9 m2 capacity. Residents do not burn wastes in oil drums at home. Bulky waste disposal is the responsibility of the individual. An annual spring cleanup takes place in July.

Solid waste is deposited 1.1 km north-west of the community in a 40,000 m2 modified landfill. A separate bulky waste disposal area has been set aside for disposal of used vehicles, large appliances and other large metal items. Used oil wastes are placed in 205 L oil drums. Coarse gravel is readily available for covering the disposal site.

### Sewage Disposal

Bagged sewage is collected by the Hamlet garbage truck but is separated from the domestic solid waste. Only a very few homes are still on the bagged sewage system. Bagged sewage is deposited in a pit at the modified landfill site 1.1 km west of the community. The pit is surrounded by a fence and separated from the rest of the solid waste.

Sewage collection is provided by the Hamlet. Those buildings with sewage holding tanks are serviced by a Ford model F-800 8172 L capacity sewage pumpout truck. Pumpout sewage is treated at the community lagoon 0.7 km southwest of the community; this lagoon covers an area of 15,000 m2. Effluent from the lagoon is further treated in a natural wetlands area, 700 m in length, before it flows into Hudson Bay.

Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment.

### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.



Alternate Name: Pedzeh Ki

### **POLITICAL**

Located in the future territory of: Western Arctic RWED Administrative Region: Deh Cho Member of the NWT Legislature: James Antoine

Member of Parliment: Ethel Blondin

Mayor: Tim Lennie

Senior Administration Officer: Charlie Gaudet GNWT Assigned Level of Development: Level 3

Government of Canada Administrative Region: Fort Simpson

NWT Legislature Riding: Nahendeh Languages Spoken: South Slavey Land Claim Area: Treaty 11 - Deh Cho

**LOCATION** *Longitude: 123.28; Latitude: 63.14* 

Wrigley is located 193 air km north of Fort Simpson and 466 air km north-west of Yellowknife, at 63'14'N latitude and 123'28'W longitude. The Community is on the east bank of the Mackenzie River below its junction with the Wrigley River.

### **CLIMATE**

Wrigley receives an average of 20.0 cm of rainfall and 137 cm of snowfall per year. Mean annual precipitation totals 33.5 cm. July mean high and low are 22.8 C and 9.8 C. January mean high and low are -25.1 C and -33.4 C. The winds are generally south-east and annually average 10.3 km/h.

### 1981 Air Photo



### **TRANSPORTATION**

The GNWT operates the licensed 1067 m x 30 m gravel airstrip. Facilities include runway lighting, navigational and communications equipment, and the air terminal building. Scheduled service is available with Simpson Air via Fort Simpson/Yellowknife. There is also an unlicensed water aerodrome, with docking facilities for float plane access. The Northern Transportation Company Ltd. operates a barge service based from Hay River which runs from June to September. There is a winter access road from Fort Simpson.

### **GEOLOGY**

The settlement is situated on a terrace of sandy silt. The two physiographic sub-regions in the area are the Mackenzie Plain, and the Franklin Mountains to the east. Glaciation has resulted in a flat and sometimes gently rolling topography. High terraces and sloping ground are covered by a shallow organic soil layer while low and poorly drained terrain contains a thicker organic section and scattered muskeg bogs.

The main landforms include major faults and highly mineralized thermal springs. These can be found at Mount Gaudet and Roche Qui Trempe a L'eau. Wrigley is within the discontinuous permafrost zone. Excess ice is fairly common in fine-grained, poorly drained glaciolacustrine and glaciofluvial deposits whereas little or no excess ice exists in coarse and well-drained deposits. The depth of thaw in the seasonal freezing and thawing cycles is roughly  $0.5\ m-2\ m$ .

### **VEGETATION**

The dominant tree species are black and white spruce, tamarack, birch, poplar, and pine. Ground cover is predominantly made up of mosses, lichens, sedges, herbs, and shrubs.

Thursday, July 20, 1995

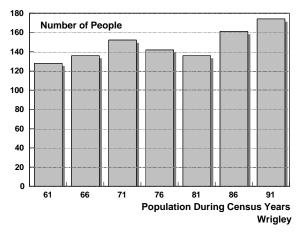
### **HISTORY**

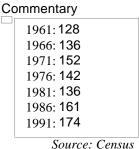
Fort Alexander, a trading post operated by the Northwest Trading Company from 1817 to 1821, was located 3.4 km from the Willowlake and Mackenzie Rivers. When the post closed, the Slavey Dene settled at Old Fort Island, an area 32 km north of the present site of Wrigley. A Hudson Bay Company trading post was established in 1870. Population figures from the era are estimated at 300. Between 1900 and 1905, 101 Dene died of famine and tuberculosis, and many moved to Fort Wrigley where the Slavey continued their nomadic lifestyle.

A power plant, school and teacher's residence were built in the late-1950's. The population increased to 128 by 1960. In 1965, due to wet ground and overall poor living conditions, the settlement moved to Hodgson Creek, the present site of Wrigley. Hodgson Creek had the advantage of having had a well-maintained wartime airstrip constructed by the U.S. military for the Canol Project, making accessibility to the new settlement much easier. The Hudson Bay Company store, warehouse, the school, and the teacher's residence were moved by barge down the Mackenzie River to the new site in 1965, joining the fifteen new houses which had been built that year.

A traditional hunting and trapping lifestyle continues. The main economic activities in the area are hunting, trapping, and fishing. Local business includes building contracting, general retail, food sales, hotels, and restaurants. Wrigley has no legal municipal status and is considered unorganized. A traditional name for the community is "Pedzeh Ki", meaning clay place.

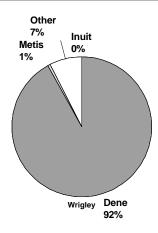
### **POPULATION**

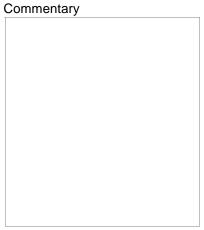




Population Statistics

### **ETHNICITY**

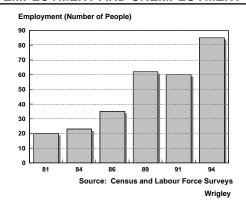


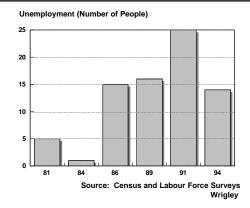


1991 Ethnicity Inuit: 0 Dene: 160 Metis: 1 Other: 13

Source: Census

# EMPLOYMENT AND UNEMPLOYMENT





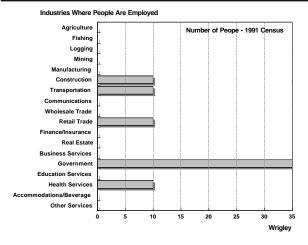
Source: 1994 Labour Force Survey, Bureau of Statistics

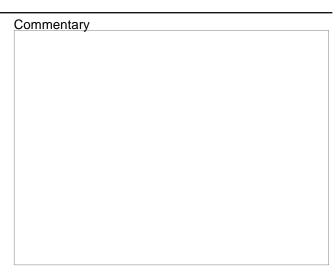
### **Employment Statistics 1994**

Over 15 Pop:	146	Abor. Employed: 76	
Labour Force:	99	Unemployed: 14	
Employed:	85	Ab. Unemployed:	

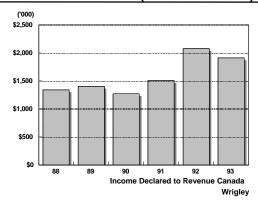
### Commentary

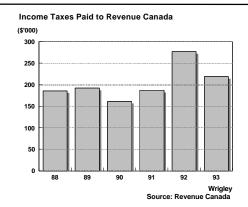
### **EMPLOYMENT PROFILE**





### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

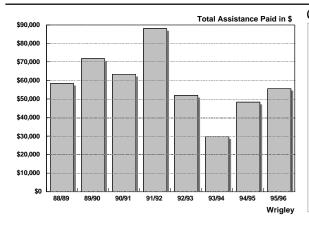
1993: \$17,373 1992: \$20,780 1991: \$16,711 1993: 110 1992: 110 1991: 90

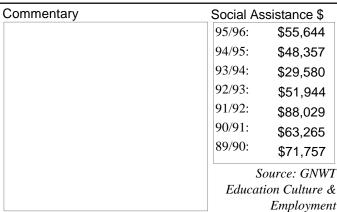
Source: Revenue Canada - Community Data

### Commentary

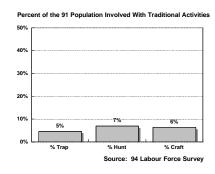


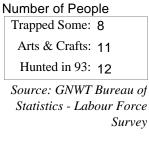
### **SOCIAL ASSISTANCE PAYMENTS**





### TRADITIONAL ACTIVITIES





Wrigley



### **TOURISM**

Community Tourism Resources & Markets	Commercial Accommodations	Visitor Center Signings
	The Petanea Co-op Hotel accommodates 20 in a cabin-style building.	95/96 94/95 93/94 92/93
		Source: Non-Resident Only: RWED
		5 <b>,</b>

### HOUSING AND HOME OWNERSHIP

Commentary	Ownership/Type of Housing
Occupied private dwellings increased 37.8% between 1986 and 1991. As of 1994, the Housing Corporation owned 4 housing units in the community. The Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 32 new homes in the community.	Owned: 35 Rented: 15 Band Owned: 0
	Detached: 45
	Apartment: 0 Row House: 0

Source: 1991 Census Data

Trailer: 5

### **COMMUNITY SERVICES**

### Education

Chief Julian Yendo School teaches grades K-9. Two teachers are on staff. Vocational and continuing education opportunities are available through the Arctic College Extension Program.

### Health

Health services include a four person medical staff. The health centre (454 m2) was built in 1984. The facility contains two beds, one crib, and one bassinet.

### Fire

Wrigley has a volunteer fire brigade. Equipment includes a triple combination pumper and a telephone alarm system. The community has a firehall.

### **Recreation Services**

Wrigley's community complex, built in 1988, includes a gym and office, and a community hall. Other facilities include a playground and a playfield. Events include the annual Moccasin Carnival, held each March.

### Police, Mail, Electrical and Other Services

A satellite RCMP detachment with one officer serves Wrigley. Social services are available from Fort Simpson. Mail is delivered once per week. NorthwesTel local and long distance telephone service is transmitted by microwave. VHF radio/phone service is also available. CBC Radio is transmitted by low-powered relay transmitter. CBC Television and FM radio are broadcast via the Anik satellite system.

The News/North weekly newspaper, produced in Yellowknife, is distributed throughout the Northwest Territories. NWTPC provides 430 kW of diesel-generated power to the community. Infrastructure funded by Municipal and Community Affairs programs includes staff housing, a community office, and a parking/maintenance garage complex.

### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Thursday, July 20, 1995

### **COMMUNITY WATER**

### Water Supply

Before water supply facilities went into operation in 1975, the community obtained water directly from several sources. Water from Hodgsons Creek was used in the winter. Pumps were set in the ice at the creek's mouth near the bank of the Mackenzie. When the ice retreated in spring, the water at that point became highly turbid.

Beginning in 1966, a well was used intermittently as a summer water source. It was abandoned in 1973. A spring near the airport road then became the primary source, though inadequate as a summer supply. A storage tank was installed next to the spring when the well failed. Eventually two new wells were drilled.

A pumphouse was built in 1975, housing a new storage tank beside the relocated old one. Based on a trucked distribution system, the wells produce a year-round water supply adequate for a population of 500. In 1993, a new pumphouse and increased storage capacity were added to the system.

The existing water supply system consists of two wells, one active and one as backup, which pump water into two storage tanks which have a total capacity of 38,500 L. The single truckfill transfer pump is activated by a remote switch operated by the water truck driver, which pumps the water from the storage tanks through an overhead fill line into the truck.

### Water Storage

Water is stored in two steel tanks (22,730 L and 15,910 L) in the old pumphouse building and two 13,638 L tanks in the new pumphouse building. Most houses have 1,135 L storage tanks. Only a few buildings have pressure water systems. Water delivery is contracted. Delivery is performed using a 6,800 L delivery truck. All water deliveries are metered.

### Water Treatment

Treatment of the water is carried out by a Wallace and Tiernan chlorinator with a chemical feed pump.

### Water Quality

Wrigley's supply water, for the time and locations sampled, is of acceptable chemical quality for domestic use. Based on the water quality results, the water is hard, highly buffered, slightly alkaline, and high in dissolved solids and manganese. Wrigley has the only source of water in the Northwest Territories which is naturally fluoridated to a concentration (0.8 mg/L) that would assist in the prevention of tooth decay.

### **COMMUNITY WASTE**

### Solid Waste

Solid waste is collected by a two-person crew, once per week, using a one ton stake truck. An annual spring clean-up is scheduled for each May. The solid waste site (10,000 m2) is located 5 km north-east of the community on flat land. The site was commissioned in 1985. Bulky, metallic wastes, and used oil wastes are kept separate from the domestic waste. Excavated material is occasionally used to cover the site.

### Sewage Disposal

Government and institutional buildings have their own cesspools, while remaining residences have pit privies. In 1990, a new sewage sump pit was built outside the community for disposal of pumpout wastes. Bagged sewage service is not required.

### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.

# Yellowknife

What the name means: Money Place Alternate Name: S'ombak'e'

**POLITICAL** 

Located in the future territory of: Western Arctic RWED Administrative Region: Yellowknife

Member of the NWT Legislature: Charles Dent, Jake Ootes, Roy

Erasmus, Seamus Henry

Member of Parliment: Ethel Blondin

Mayor: Dave Lovell

Senior Administration Officer: Douglas Lagore GNWT Assigned Level of Development: Level 1

Government of Canada Administrative Region: Yellowknife

NWT Legislature Riding: Yellowknife Frame Lake, Centre, North &

South

Languages Spoken: Chipewyan/Dogrib Land Claim Area: Yellowknife Area

LOCATION Longitude: 114.22; Latitude: 62.27

Yellowknife is located at 62'276N latitude and 114'226W longitude, 201 air km north-east of Hay River. The capital of the Northwest Territories, Yellowknife sits on the west shore of Yellowknife Bay on the North Arm of Great Slave Lake.

### **CLIMATE**

Yellowknife receives an average of  $15.0~\rm cm$  of rainfall and  $135~\rm cm$  of snowfall per year. Mean annual precipitation totals  $26.7~\rm cm$ . July mean high and low temperatures are  $20.7~\rm C$  and  $11.8~\rm C$ . January mean high and low temperatures are  $-24.7~\rm C$  and  $-33.0~\rm C$ . Winds are generally east and annually average  $15.5~\rm km/h$ .

### 1981 Air Photo



### **TRANSPORTATION**

The GNWT operates both licensed 2286 m x 46 m and 1524 m x 46 m asphalt runways, taxiways, and aprons at the Yellowknife Airport. The terminal building has modern service and security features. Services include the Flight Service Station (FSS), weather/communications equipment, scheduled airfield maintenance, crash firefighting and rescue services, and aircraft parking plugs. Aircraft storage and servicing is available.

Scheduled service includes flights to/from Edmonton, Calgary, Inuvik, Winnipeg, Iqaluit, Whitehorse, Fort Simpson, Snare Lakes, Hay River, and Fort Smith. Charter service is available by both plane and helicopter. A licensed, private aerodrome operates at the Float Base in Old Town. Back Bay and East Bay of Yellowknife Bay are used as takeoff/landing areas. There are some services. Break-up averages June 15th and freeze-up, November 1st of each year.

The Northern Transportation Company Ltd. barge service operates from June to September via Hay River. Road access is via the Mackenzie Highway (Highway 3) to destinations in Alberta and British Columbia. Access to the Yukon is via Dawson Creek, British Columbia. There are local trucking, taxi, bus, and car rental services in the city.

### **GEOLOGY**

Yellowknife sits on the edge of the Canadian Shield. Granites, volcanics, sediments, and late intrusion rocks can be found in the area. The topography is generally flat with many outcrops, small rocky hills, numerous lakes, ponds, and muskeg cover. Permafrost is sporadic and may be found 0.5 m below moss or muskeg and 3.0 m or more below sandy-soiled surfaces.

### **VEGETATION**

Trees species include black and white spruce, jackpine, birch, poplar, aspen, and tamarack. Mosses, lichens, juniper, and small flowering plants are also common.

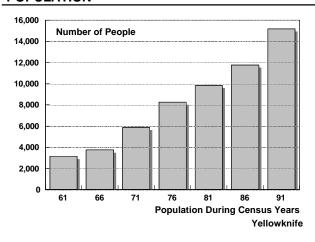
The name Yellowknife originates from the copper-wielding Chipewyan tribe which fought the Dene for many years. Organized gold mining did not begin in the area until the mid-1930's when Consolidated Mining and Smelting began operations at the present Miramar Con Mine site. Yellowknife's boom took place in what is now called Old Town. Plywood shacks and shanties littered Latham Island, Peace River Flats, and Willow Flats before the start of the Second World War. The few original buildings that remain show the no-frills approach to construction. By 1942, with its population of 1000 dwindling and two of the six local mines closing, the steam had been taken out of the industry. Gold had been deemed a non-strategic metal during wartime. By 1944, all of the mines had closed.

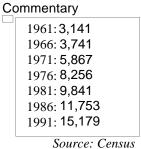
Giant Yellowknife Mines began the Gold Mining revival following the War. Construction of the Snare River power station in 1948 alleviated the stress placed on the now densely-packed town and allowed room for expansion up the hill to the New Town. The Gold Mines hit their production stride and the town kept growing, becoming a municipal district in 1953.

Territorial, Federal and Municipal government remains the largest employer in the capital. Royal Oak Mines Inc. and Miramar Con Mine Ltd., both high volume gold mines, remain as the foundation of the local industrial economy. The city has become a beacon for tourism, whether it be local or to points northward. Camping, sport fishing, canoeing, kayaking, and rock climbing are just a few of the activities available in the City or along the Ingraham Trail, a 70 km road which allows access to many lakes and trails. Walking tours of Old Town show the origins of the City.

In 1967, Yellowknife became the capital of the Northwest Territories. By 1970 it had become the first city. A traditional name for the City is "Sombak'e", which means money place.

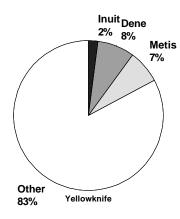
### **POPULATION**

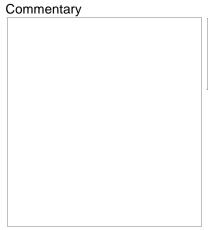




**Population Statistics** 

### **ETHNICITY**

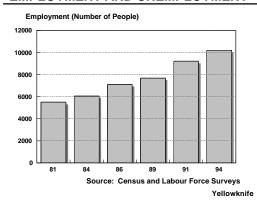


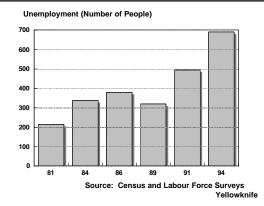


1991 Ethnicity Inuit: 310 Dene: 1,213 Metis: 1,084 Other: 12,572

Source: Census

### **EMPLOYMENT AND UNEMPLOYMENT**





Source: 1994 Labour Force Survey, Bureau of Statistics

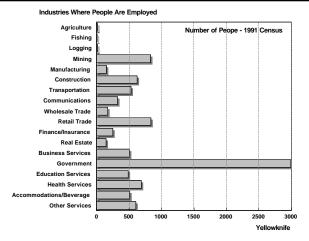
Yellowknife Page 3

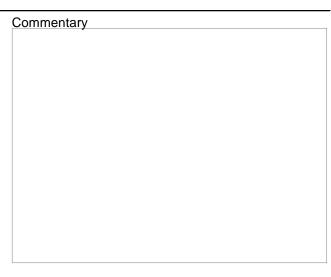
### **Employment Statistics 1994**

Over 15 Pop: 12,519 Abor. Employed: 1,157 Labour Force: 10,948 Unemployed: 747 Employed: 10,201 Ab. Unemployed: 240

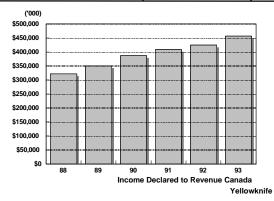
### Commentary

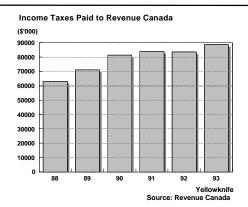
### **EMPLOYMENT PROFILE**





### **INCOME AND TAXES (Revenue Canada)**





Average Incomes

People Paying Inc.Tax

1993: \$39,705 1992: \$40,132

1991: \$39,634

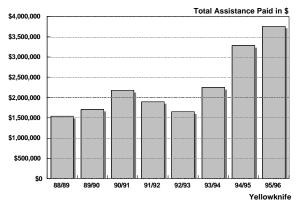
1992: 11,500 1991: 10,310

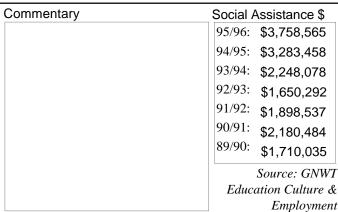
1993: 11,500

Source: Revenue Canada - Community Data

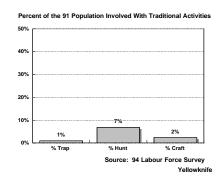
### Commentary

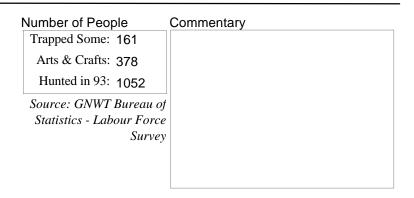
### **SOCIAL ASSISTANCE PAYMENTS**





### TRADITIONAL ACTIVITIES





### **TOURISM**

Visitor Center Signings Community Tourism Resources & Markets Commercial Accommodations The Explorer Hotel 95/96 94/95 accommodates 220 in 110 rooms. 93/94 Facilities include banquet and 92/93 conference rooms, licensed dining room, lounge, tavern, restaurant, gift Source: Non-Resident shop, sauna, jacuzzi, television, and Only: RWED telephones. The Igloo Inn's 44 rooms can accommodate 100. Facilities

include kitchenettes in many units, telephone, television, radio, restaurant, and two conference rooms. The Yellowknife Inn accommodates 129 in 132 rooms. Some rooms are adjoined for additional meeting space. Telephones, television, radio, lounge, licensed dining room, and banquet facilities are some of the services provided. The Discovery Inn accommodates 82 in 41 rooms. Convention facilities and a convenient restaurant are some services available. The Executive has suites for rent on a weekly and monthly basis. Facilities include hot tub, sauna, fully-equipped gym, and weight room.

Located 32 km east of Yellowknife, Prelude Lake Lodge offers rental cabins at scenic Prelude Lake during their summer months. Rates are daily and weekly. Additionally, campsites are available for rent at Prelude Lake. The site is run on a first come, first serve basis. There are some local Bed and Breakfast establishments, most located in historic Old Town. Fred Henne Park is a campground located within city limits; many facilities are available.

### HOUSING AND HOME OWNERSHIP

Thursday, July 20, 1995

### Commentary

Housing in Yellowknife is primarily privately owned. This is a result of government privatization of residential homes in the late 1980's and continued economic growth in the community. Between 1984 and 1995, there were an average of 120 development permits each year issued for new housing stock.

Since 1991, the city has seen an average annual growth rate for single family dwellings of 3%. As of 1994, the Housing Corporation owned 259 housing units. The GNWT Housing Assistance Program, the Alternative Housing Program, and the Government Lease-to-Own Program have accounted for 14 new homes in the community.

Ownership/Type of Housing

Units Owned: 2,055 Rented: 2.875 Band Owned: 0

Yellowknife Page 6

Detached: 2,500 Apartment: 1,655 Row House: 730 Trailer: 70

Source: 1991 Census Data

### **COMMUNITY SERVICES**

### Education

Yellowknife schools include N.J. Macpherson (K-5), Mildred Hall (K-8), St. Patrick's Elementary (K-8), J.H. Sissons (K-5), St. Joseph's Elementary (K-8), Range Lake North School (K-8), William McDonald Junior High (6-8), St. Patrick's High School (9-12), and Sir John Franklin High School (9-12). Rainbow Valley School is located in Ndilo on Latham Island. Local education is monitored by the Yellowknife Boards of Education, School Districts Numbers 1 and 2. Adult education is offered through the Aurora Campus of Arctic College and the Tree of Peace Friendship Centre. Evening courses are available.

### Health

The new Stanton Yellowknife Hospital was built in 1988. Facilities include 135 beds and 18 bassinets. Additional health services include the Public Health Unit. medical clinics, and dental clinics.

### Fire

Fire protection consists of both staff and volunteer crews. A hydrant system on piped water is networked through all of the new developments. Three triple combination pumpers, an aerial ladder truck, two ambulances, a four-wheel drive rescue unit, and a tanker are some of the emergency vehicles used. The department added the Hazmat hazardous materials truck to deal with poisonous substances and chemical spills. A telephone and paging system is in place to speed response to calls. The present firehall, which is larger and more technologically advanced than the old building, is centrally located.

### Recreation Services

Recreational facilities include two arenas and a curling rink. The Ruth Inch Memorial Pool was completed in 1988/1989. Other facilities include a golf course, a bowling alley, pool halls, amusement centres, fitness centres, a racquet club, school gyms, softball and fastball fields, camping grounds, beach areas, ski trails, parks and playgrounds, tennis courts, recreation halls, and a movie theatre. Attractions and events include the Prince of Wales Northern Heritage Centre, the Northern Arts and Cultural Centre (NACC), Caribou Carnival, Festival of the Midnight Sun, Folk on the Rocks, the Midnight Sun Golf Tournament, and Canada Day celebrations.

### Police, Mail, Electrical and Other Services

The RCMP detachment has a staff of 27. The City of Yellowknife staffs municipal by-law enforcement officers. The Yellowknife Correctional Centre is an all-male facility designed to serve the North Slave area and points northward. Other social service facilities include the Children's Receiving Home, the Children's Group Home, the Group Home for Mentally Handicapped Adults, the Group Home for returning psychiatric patients, and the Yellowknife District Social Services Office, which staffs 13 people.

Community-based social services include Arctic House (a halfway house for ex-convicts), and a home care program. Organizations include Northern Addiction Services, NWT Mental Health, Yellowknife Association for the Mentally Handicapped, Yellowknife Family Counselling Service, NWT Council for Disabled Persons, Yellowknife Day Care Association, and the Tree of Peace Friendship Centre.

Mail is delivered five times per week. NorthwesTel provides local and long distance telephone service, while CBC Radio and Television production facilities are within the city. CJCD is a local AM radio station and CKLB is the local FM station. Local publications include the Yellowknifer, a semi-weekly newspaper; News/North a weekly newspaper; LAquilon, a french language publication; Up here, a bi-monthly magazine; and Native Press, which is bi-weekly.

Power is provided by the NWTPC Yellowknife Area Office location at Jackfish Lake and distributed by Northland Utilities within the city. Other infrastructure funded by Municipal and Community Affairs programs includes staff housing, community offices, and a parking/maintenance garage complex.

### DAY CARE SERVICES - NONE REGISTERED IF BLANK

Amy Joe Stapleton

Annes Place Family Day Care Home

Anu Wilson Day Home

Daniels Court Day Home

Doogies Day Home

Enchanted Living Family Day Home

First Friends Family Day Home

Garderie Plein Soleil

Karleens Playmates Day Home

Kids First Child Development Centre

Little Friends Day Home

Montesori School

Neshda

Pam Malmsten Family Day Home

Precious Times Family Day Home

Recess at Rick's

Safety and Security Family Day Home

Sherry's Family Day Home

Small Explorers Family Day Home

Time For Tots Family Day Home

Tiny Tots Family Day Home

Yellowknife Day Care

Yellowknife Playschool

Y.W.C.A. - St Pats High

Y.W.C.A. - Afterschool

### **COMMUNITY WATER**

### Water Supply

Thursday, July 20, 1995

Prior to 1969, water was drawn from Yellowknife Bay at Lake Pumphouse (#1). Deteriorating water quality caused by unchecked dumping of mine tailings and other pollutants into Yellowknife Bay led to the construction of the River Pumphouse (#2) and supply pipeline in 1969. Since then, water has been drawn from the mouth of the Yellowknife River.

The supply pipeline was installed while working off the winter ice. Once the butt-welded field joints and heat shrink sleeves were in place, the pipe was lowered into a pre-cut trench. The steel pipe meets ASA B16.9, ASTM A234, and Grade API 5LX42 specification, and has a wall thickness of 6.35 mm. The pipe was factory-coated with Shaw Pipe Yellowjacket extruded polyethylene on the exterior, and Mobile epoxy paint coating on the interior.

The pipeline contains a 200 mm diameter, 1,792 m long branch which extends west from the supply line between the River Pumphouse and the Lake Pumphouse to supply Giant Mine. The pipeline also contains a 150 mm diameter, 1,230 m long branch at the Lake Pumphouse extending further south along Yellowknife Bay to supply Con Mine.

The pipeline has operated satisfactorily since being placed in service in 1969. A break at a Dresser Coupling type joint location at Station 230+00 (23,000 feet from the pumphouse) in 1984 and a longitudinal split in the pipe near Station 14+00 in 1986 are two of the failures. The pipe was repaired in 1987 using a 1,525 mm long, full circle Robar Style 2 15.80-2 stainless steel/rubber gasket pipe repair clamp with a double set of stainless steel bolts at 75 mm centres for the full length of the clamp. Other maintenance work on the pipeline took place in 1993 which included the removal of old air release valves.

The steel pipeline is protected against corrosion by an external coating and cathodic protection system which appears to have provided adequate external protection. Yellowknife Bay, now considerably cleaner, does provide a warmer and less expensive water source even though it is only used as an emergency water source.

### Water Storage

### Storage

Reservoir Volume Serves

Pumphouse #1 6 000 000 L Central Business District, School Draw, Pumphouse #3 and Pumphouse #4
Pumphouse #3 2 273 000 L Matonabbee, the Aven Senior Centre, the Yellowknife Correctional Centre, and

Northland Trailer Park, Pumphouse #4

Pumphouse #4 5 683 000 L Frame Lake South & Range Lake North

### Water Treatment

Yellowknife's supply water, for the time and locations sampled, is of good to excellent chemical quality for domestic use. Based on the chemical analysis the water is clear, very soft, poorly buffered, slightly acidic, and low in dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

Microbiological analysis of the water samples indicates the presence of low concentrations of corrosion causing and corrosion intensifying bacteria. Treated water showed a less diverse, lower population of microflora when compared to the raw water sample. Chemical feed equipment at Pumphouse #2 allows for the treatment of water with chlorine and fluoride. The chemical feed equipment was upgraded in 1990 to include a gas chlorination system

### Water Quality

Yellowknife's supply water, for the time and locations sampled, is of good to excellent chemical quality for domestic use. Based on the chemical analysis the water is clear, very soft, poorly buffered, slightly acidic, and low in dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the Guidelines for Canadian Drinking Water Quality showed those parameters tested as below the recommended maximum limits.

### **COMMUNITY WASTE**

### Solid Waste

Domestic residential garbage is collected by a private contractor once per week using a number of back-loading type, 22.5 m2 capacity packer trucks and some older models. Construction wastes are hauled to the dump by private firms and individuals. Once per year the city organizes a spring clean-up. Bagged sewage is collected once per week by a private contractor and is transported to Fiddlers Lake treatment area.

The Yellowknife Municipal Landfill Site is located 2 km north of the city. It occupies 10 ha of a 38 ha natural depression surrounded by low rock outcrops. Bulky wastes are segregated from the rest of the solid wastes and placed in a separate  $100 \text{ m} \times 35 \text{ m}$  area of the site. Waste oil and car batteries may be dropped off at the entryway to the site. An attendant is on duty at the site between the hours of 10:00 a.m. to 10:00 p.m. and the access gate is locked after working hours.

The Yellowknife Solid Waste Facility (1994) uses a municipal solid waste baler system. The baler is located on the lower level of a heated building. Wastes are dumped from the truck onto a heated concrete "tipping" floor. Following manual sorting, the remaining wastes are pushed into the baler. The baler then compacts, compresses, and wire ties the waste into 1.7 m3 bales with an average weight of 900 kgs. The now wire tied bales are loaded onto a flatbed truck for disposal in the landfill. The Yellowknife Solid Waste Facility is the first of its kind in the NWT and provides a model for other communities.

### Sewage Disposal

Most of Yellowknife's older collection system is corrugated metal sewers, mostly 200 mm in diameter. New ductile iron sewer pipes are now used. Manholes are of precast concrete construction and are provided with "frost covers" to help prevent heat loss from the system and subsequent freezing.

The sewer system contains nine lift stations and several gravity sub-systems.

Lift Station Location

LS #1 School Draw

LS #2 Albatross Court

LS #3 Matonabbee Street

LS #4 Rycon Drive

LS #5 Kam Lake (City Garage)

LS #6 Basil Crescent

LS #7 49th Street/52nd Avenue

LS #8 Rivett Crescent

LS #9 Borden Drive

LS #5 and LS #6 are the two lift stations which discharge to the 8 km forcemain to Fiddler's Lake treatment area. The insulated HDPE forcemain (550 mm to 450 mm diameter) is installed in a shallow-bury trench. The trench is covered by a native peat material which provides additional insulation. The entire line has been designed to provide 18 hours of freeze protection, in the unlikely event of extended power failure or line breakage.

Trucked System: About 560 residences, are equipped with holding tanks and are on regular sewage pump-out service, contracted locally. About 20 residences in Old Town remain on bagged sewage pick-up service. Bagged sewage is deposited at the Fiddlers Lagoon area in a 16 m x 8 m x 2.5 m trench.

Sewage Treatment: Sewage treatment began in 1948 with the construction of a primary mechanical treatment plant which permitted the settling and digestion of solids. This facility was located at the south end of 52nd Ave. and 44th St. Waste was discharged to Niven Lake, a small, shallow lake (7.9 ha) which inturn, discharged to Yellowknife Bay. In 1962, use of the plant was discontinued and Niven Lake was used as a facultative lagoon. In 1964, a primary short detention pond was added to the lake to help overcome treatment inadequacy providing 99 day retention time and BOD5 removal rates of 77% were observed that summer.

As the population of Yellowknife increased, the removal efficiency of Niven Lake decreased and alternate methods were explored. In the late 1970's, the sewage was discharged into Kam Lake, in the present industrial subdivision. Due to City expansion toward the Kam Lake area and the desire to preserve the water quality in the lake for possible future use, it was decided to pump all of the sewage for treatment to a west of the City known as Fiddler's Lake.

All sewage flows to Niven and Kam Lakes were stopped in November, 1981, when the Kam Lake lift station and forcemain were activated, beginning the diversion to Fiddler's Lake. Fiddler's Lake is a actually a series of eight small lakes, ponds and wetlands. The first three small lakes in the series were converted to a long retention lake-lagoon (1981) with earthen-fill dam structures. Dams were also constructed to divert the flow from Trapper's Lake, which recharges Fiddler's Lake, into the Kam Lake Drainage Area.

Following the lagoon, treated effluent is directed through the remaining ponds and wetlands, thus, obtaining additional treatment. Wetlands treatment is a web of complex physical and biological processes. Sedimentation, absorption of pollutants in the surface soils, nutrient uptake by plants, and the oxidation of compounds by micro-organisms are some of the processes which effect the treatment. The water from the system is discharged finally to the Great Slave Lake.

### NOTES AND COMMENTS

The design of these profiles and the database were Strategic Planning, RWED, GNWT, (403-873-7394) and the Funding and Program Services Division of Indian and Inuit Services, (403-669-2626). Much of the material on community infrastructure was derived from earlier profiles developed by the GNWT Department of Municipal and Community Affairs.; a special thanks to the Department. All reports and data are in Paradox 7 format. Charts and data editing completed by Mr. Arlin Carpenter of Sachs Harbour, NWT; data is in Excel with charts being completed in Harvart Chart XL. Other assistance was provided by the staff RWED, GNWT, especially Patricia Colosomo. Data entry assistance was provided by Mr. Ken Chamberlin of Cambridge Bay, GNWT.