

# **Northern Mining: Our Past, Our Future**

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**General Manager**

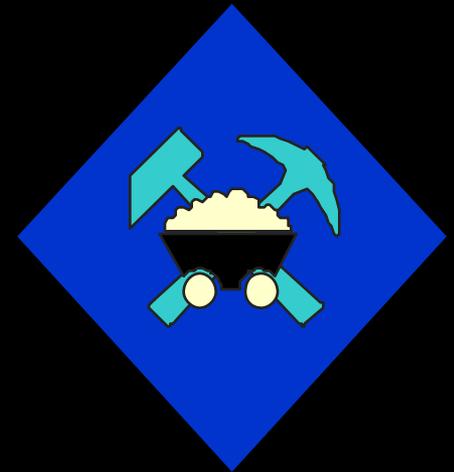
**NWT & Nunavut Chamber of Mines**

# NWT Mining History

**Mining History**

**Mining & Infrastructure**

**Mining & the Community**

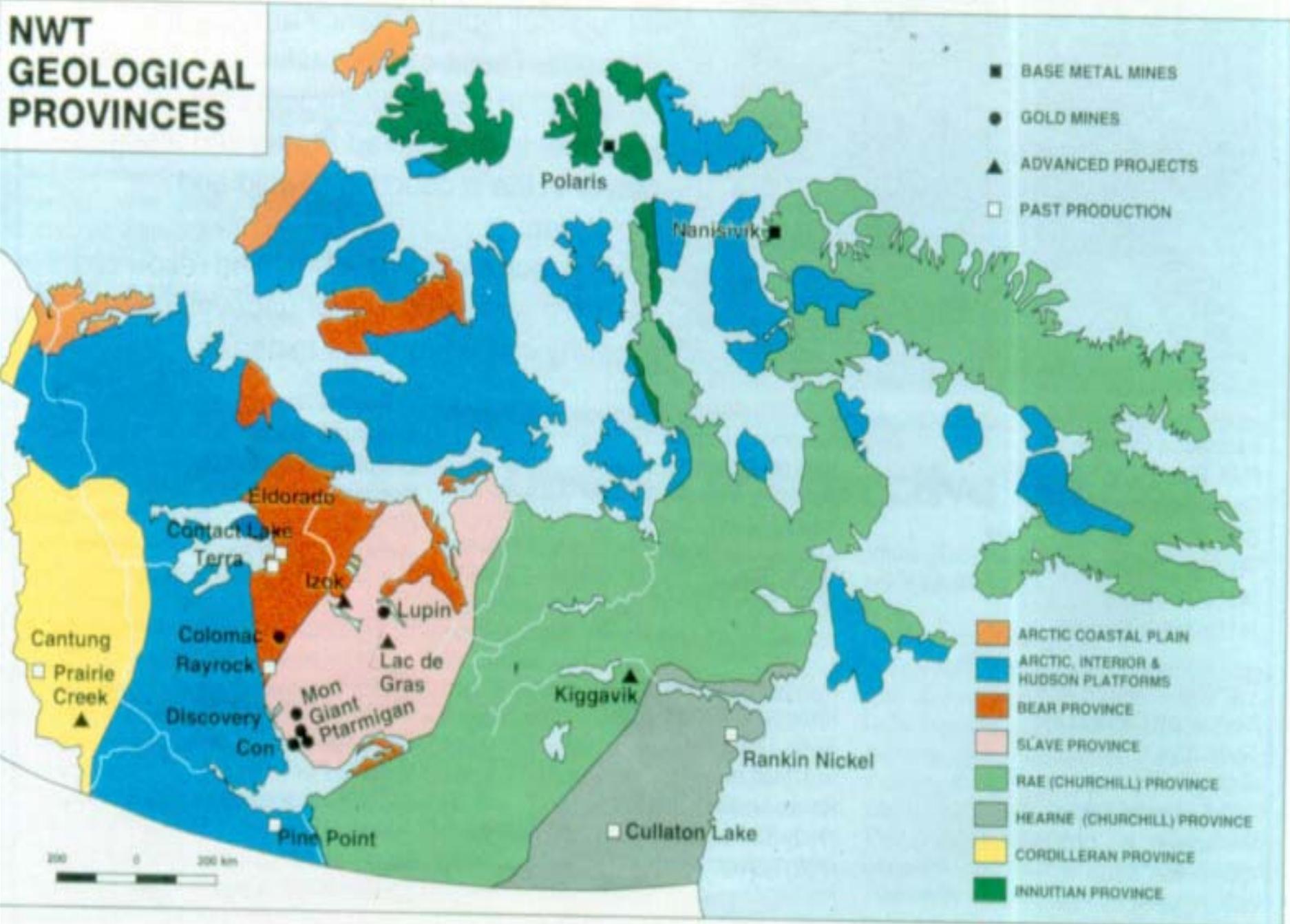


# History Overview

- **Diverse Geology**
- **Various Staking Rushes**
- **Mines Built**
- **Infrastructure Improves**
- **Communities Affected**



# NWT GEOLOGICAL PROVINCES



- BASE METAL MINES
- GOLD MINES
- ▲ ADVANCED PROJECTS
- PAST PRODUCTION

- ARCTIC COASTAL PLAIN
- ARCTIC INTERIOR & HUDSON PLATFORMS
- BEAR PROVINCE
- SLAVE PROVINCE
- RAE (CHURCHILL) PROVINCE
- HEARNE (CHURCHILL) PROVINCE
- CORDILLERAN PROVINCE
- INUITIAN PROVINCE



Cantung  
 □ Prairie Creek  
 ▲

Eldorado  
 Contact Lake  
 Terra  
 Colomac  
 Rayrock  
 Discovery  
 Con  
 Mon  
 Giant  
 Ptarmigan

Izok  
 ▲  
 Lupin  
 ●  
 Lac de Gras  
 ▲

Polaris

Nanisivik

Kiggavik

Rankin Nickel

Cullaton Lake

Pine Point

# Mining / Exploration Activity

- 1899 Pine Point Base Metal
- 1899 Treaty 8 signed
- 1921 – Norman Wells Oil
- 1922 – Treaty 11 signed
- 1930 Great Bear Uranium Rush - Eldorado
- 1938 YK Gold Rush - Rycon
- 1943 YK Gold Rush - Giant
- 1955 Ft. Rae Uranium – Rayrock
- 1962 Pine Point Lead Zinc Rush – Pine Point
- 1967 Coppermine Copper Rush
- 1970s Keewatin Uranium
- 1979 Contwoyto Gold - Lupin
- 1991 Lac de Gras Diamond Rush – BHP, Diavik



# Historical Operations

- 1930s - Eldorado uranium, Con, Negus, Rycon, Ptarmigan gold
- 1940s - Giant, Thompson-Lundmark gold
- 1950s - Rankin nickel
- 1960s - Pine Point zinc, Cantung tungsten?
- 1970s - Nanisivik zinc
- 1980s - Polaris zinc, Lupin Gold, Colomac gold
- 1990s - BHP Diamonds
- 2000s - Diavik Diamonds





**Gilbert Labine et al., Radium at Great Bear Lake,**



**Yellowknife Johnny - Burwash Gold Mine, 1934**



**Con Gold Mine, 1936-today**



**Giant Gold Mine, 1948**



**Rankin Nickel Mine, 1950s**

**Pine Point Zinc-Lead Mine, 1964-  
1990**





**Nanisivik Zinc-Lead Mine, 1976 - today**



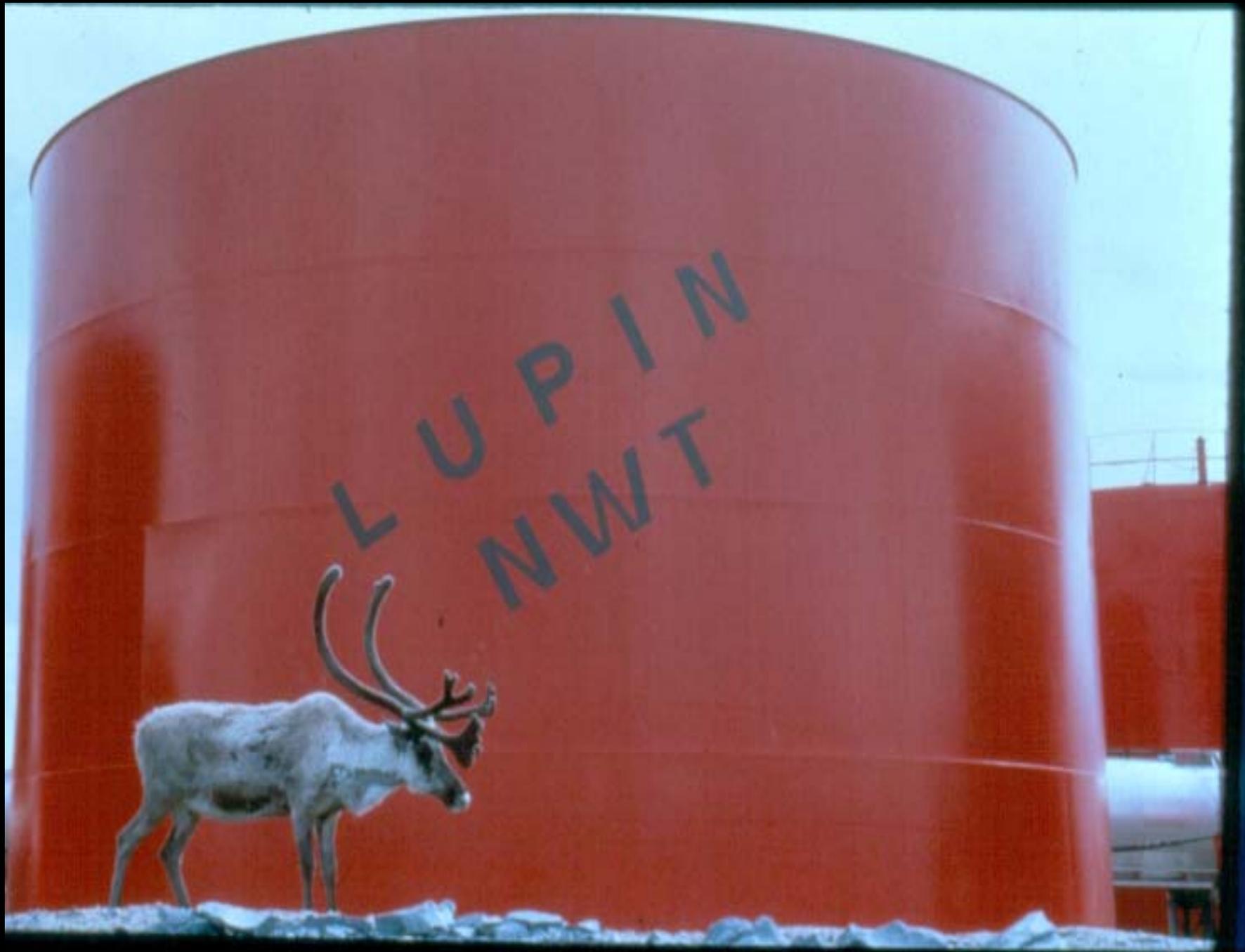
**Nanisivik Zinc-Lead Mine, 1976 - today**



**Polaris Zinc-Lead Mine, 1982 - today**



**Polaris Zinc-Lead Mine, 1982 - today**



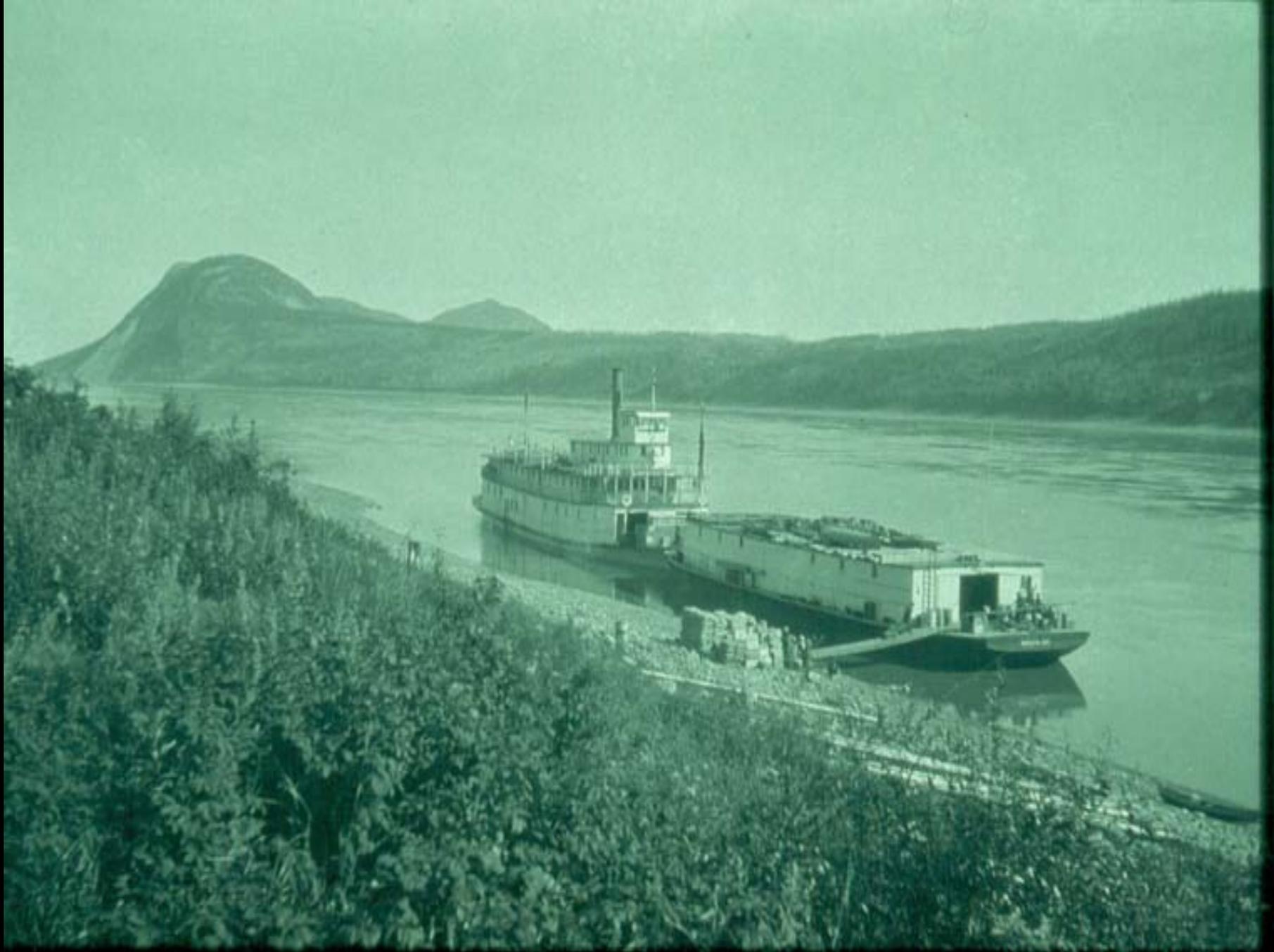
Lupin Gold Mine, 1982 - today



Lupin Gold Mine, 1982 - today

# Mining & Infrastructure

- **Infrastructure Assisted Mining**
  - River Boat
  - Bush plane
  - Cat Train
  - Ice Road



**River boats used large rivers as highways**

C. ADP  
FIRST PLANE TO FLY TO THE  
FORT NORMAN OIL WELLS 1920



Post WW I, aircraft provided new opportunities – oil discovery, Norman Wells

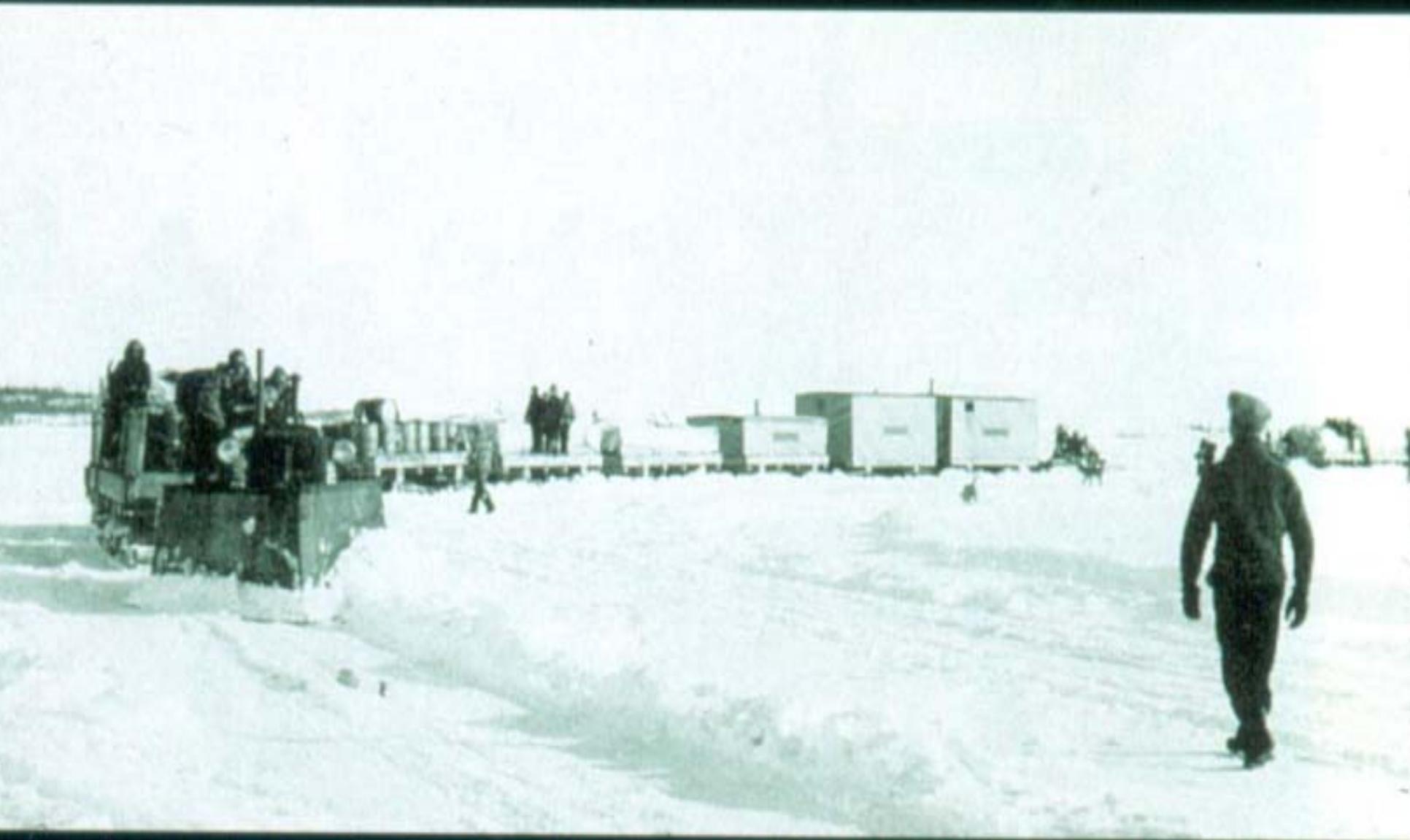


**Bush planes opened new, previously inaccessible areas**





**Early scheduled flights, flew ore & passengers - Port Radium to Alberta, 1930s**

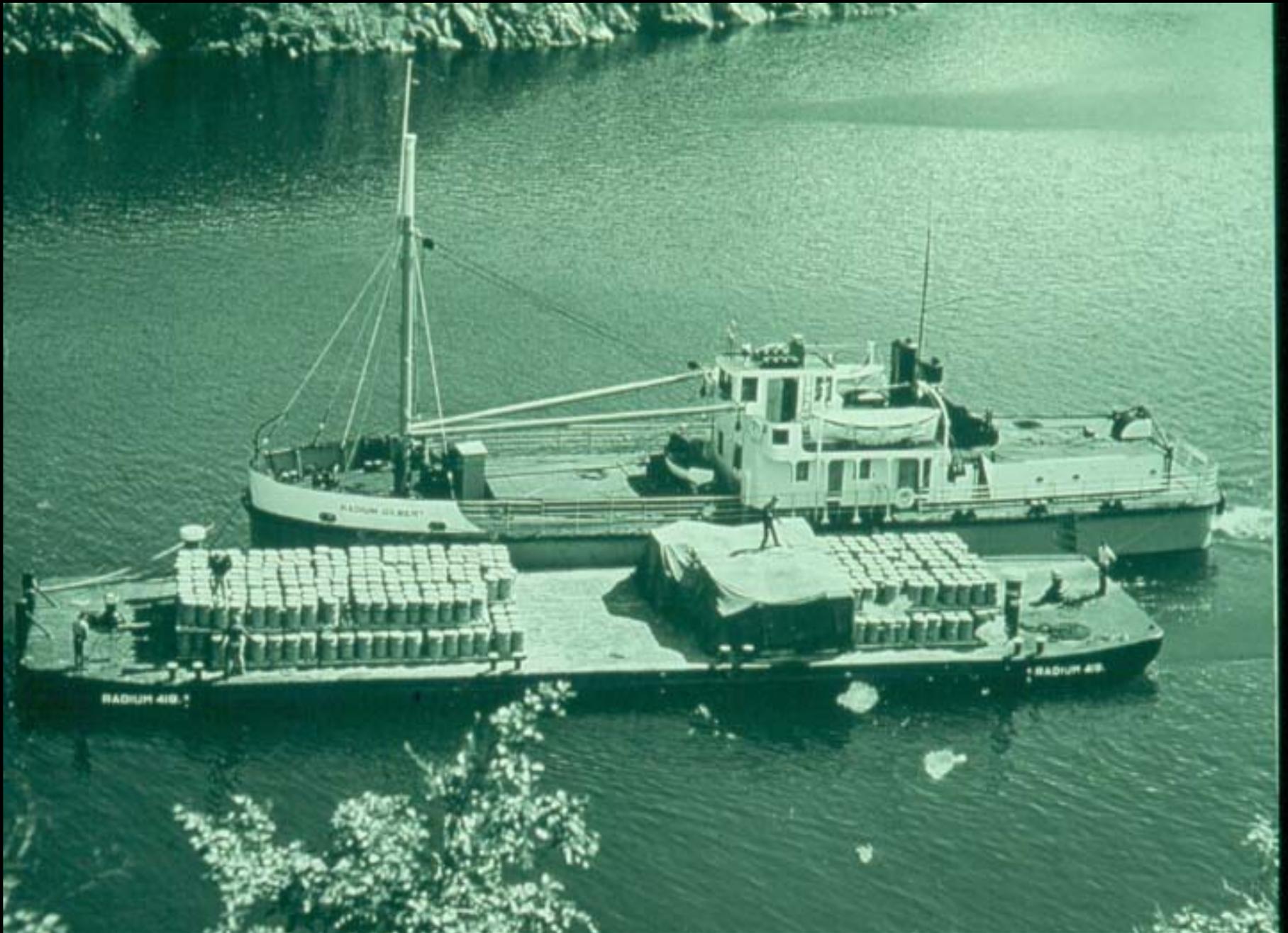


**“Cat Trains” created early ice roads**

# Mining Supplied Infrastructure

- **NTCL & Eldorado**
- **Imperial Oil Refinery**
- **Yellowknife Highway**
- **Ice Road to Echo Bay**
- **Scheduled Aircraft**
- **Hydro-power - Con, Snare, Taltson**
- **Railway to Pine Point**
- **Nanisivik Marine Shipping - MV Arctic**





**NTCL "Radium Gilbert" Supply Boat – Eldorado Mine**



"RADIUM KING ENTERING YELLOWKNIFE  
SUTHERLAND'S FOTO.



**Con Hydro Dam – Con Mine**



**Eldorado DC-4 – 1960s**



**Talston River Hydro Dam – Pine Point Mine**



**Pine Point Railway – 1960s - today**



**MV Arctic, Cargo/Ice breaker**

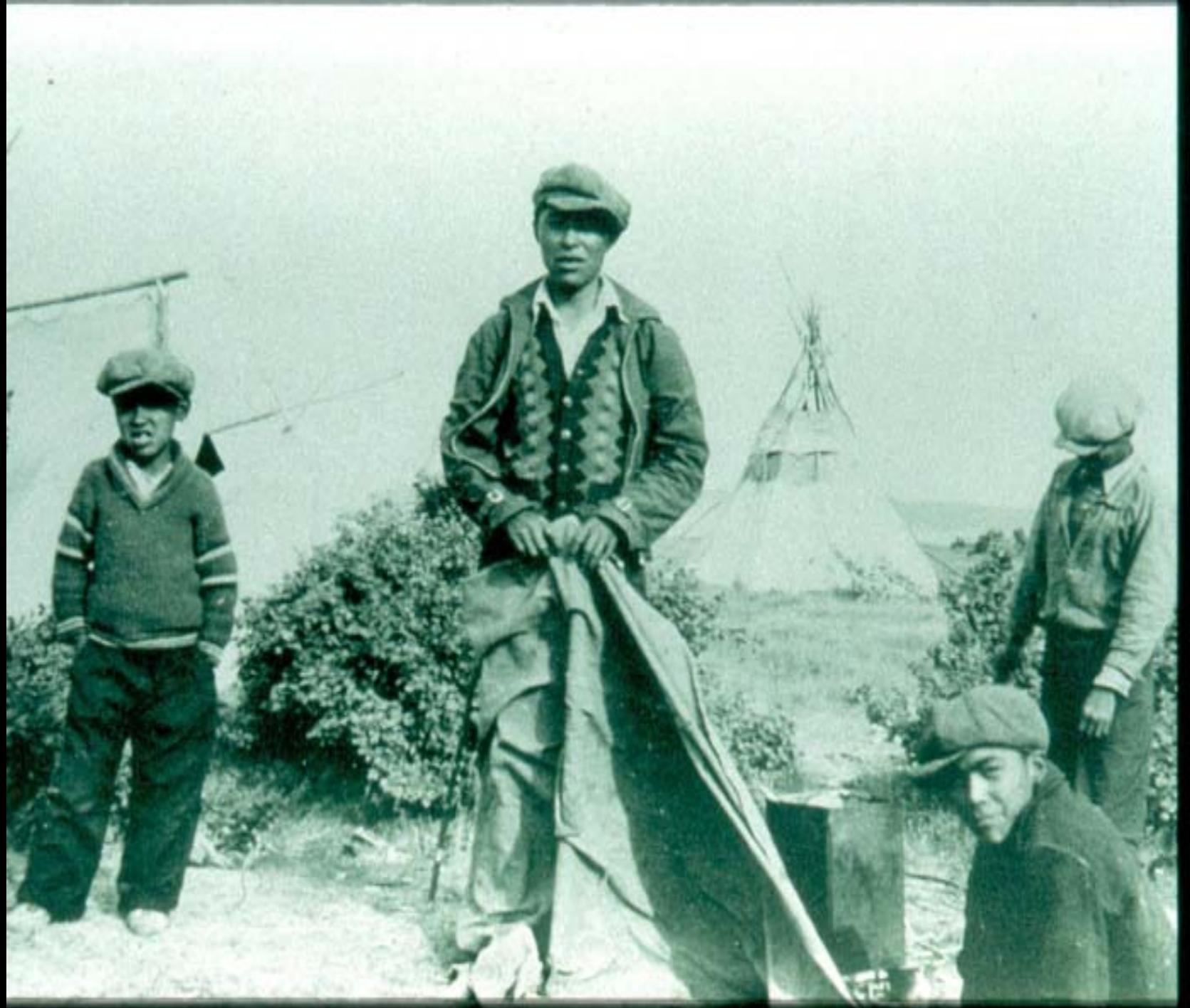


**Ice Roads are lifelines**

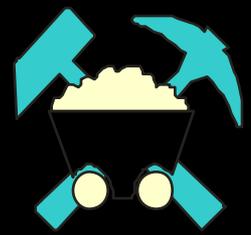
# Mining & the Community

- **Early Days - pre-1939**
  - **Some Aboriginal People Benefited**
  - **Aboriginal People Helped Newcomers**
    - Burwash dock
    - wood cutters
    - meat suppliers









# Mining & the Community

- **1939 - 1989**

- **Influx of Outsiders**

- **Transportation Services Improve (scheduled flights, all-weather roads)**
- **Government Services Improve - schools, hospitals**
- **Communities Grow**

- **Newcomers become self-sufficient**

- **Aboriginal People Largely Forgotten**

- **Some Aboriginal Training (Sir John, Rankin Nickel, Nanisivik)**







**Yellowknife Town Council – 1960s**

# Mining & the Community

- **1990 - Future**
  - **Legislation Recognizes Aboriginal Rights**
    - Land Claims provide subsurface/surface lands
  - **Companies Recognize Aboriginal People**
    - Colomac, BHP, Diavik



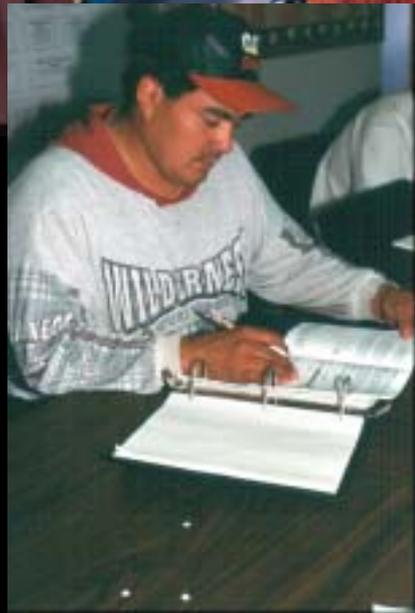


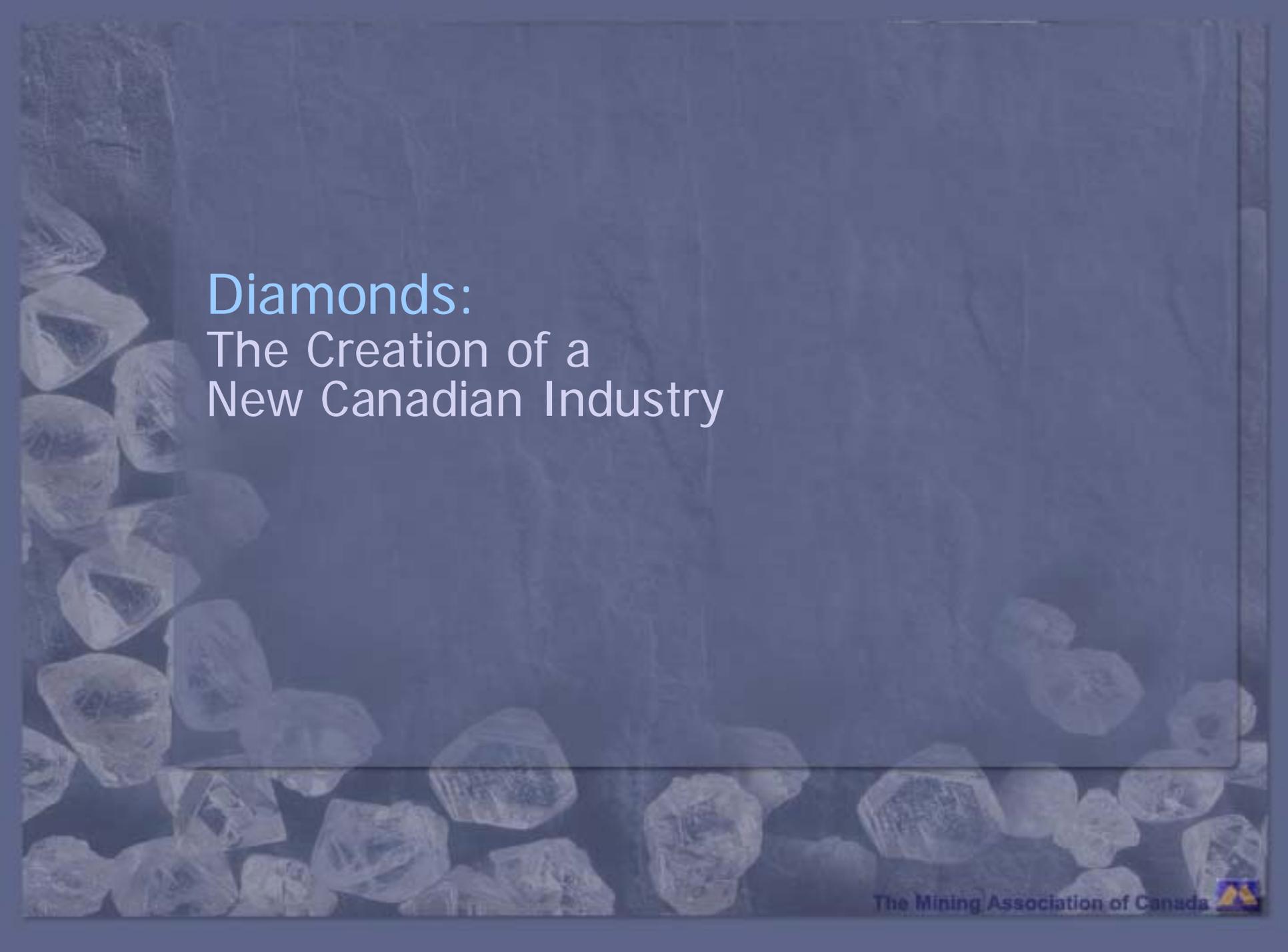
Nanisivik – 1980s



Colomac – 1990s

# Diavik Training Programs, 2000





Diamonds:  
The Creation of a  
New Canadian Industry



**Ekati Diamond Mine, 1998 - today**

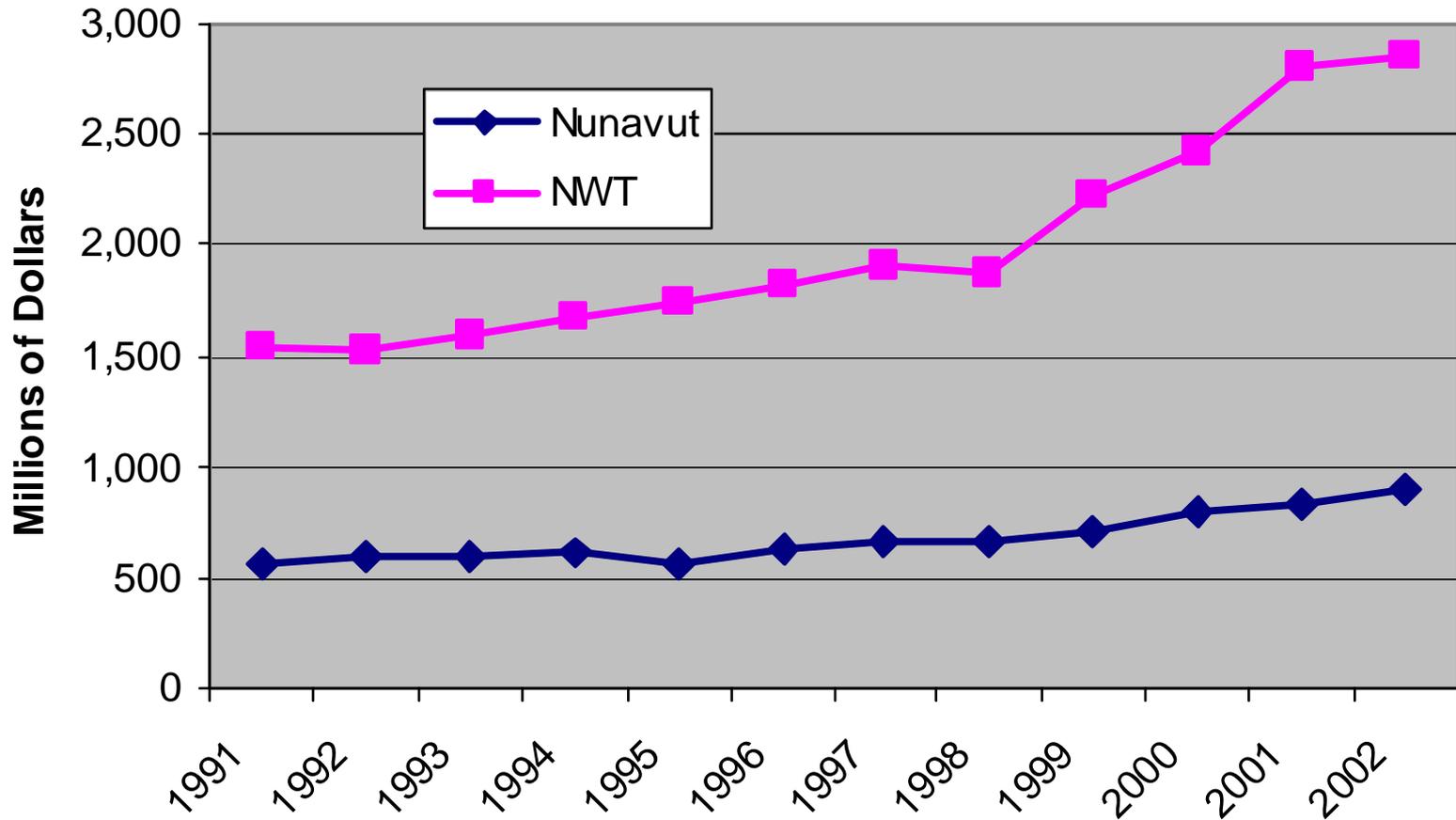


**Diavik Diamond Mine, 2003 - 2022**



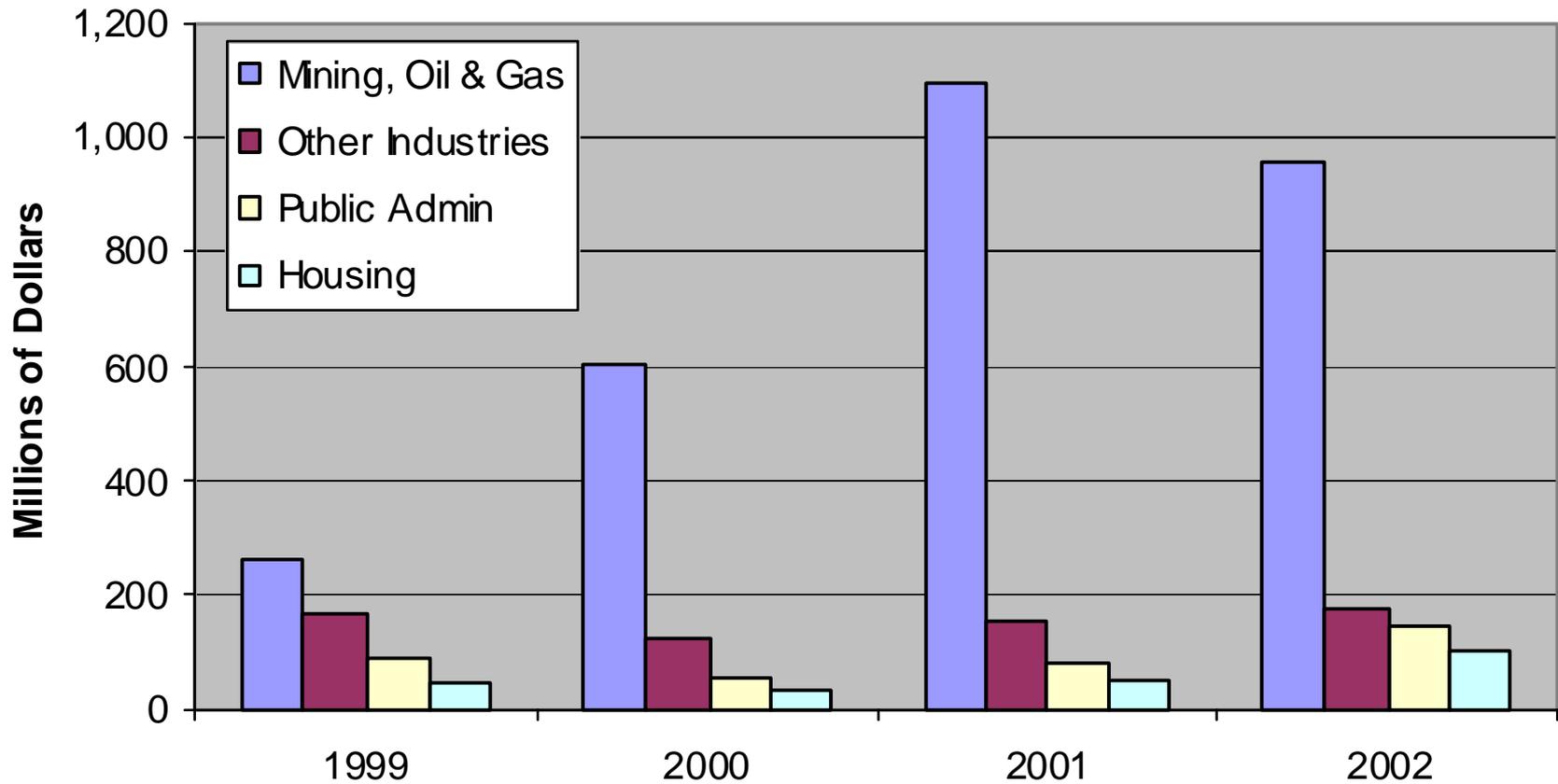
# GDP at Basic Prices

Chart 1: GDP at Basic Prices



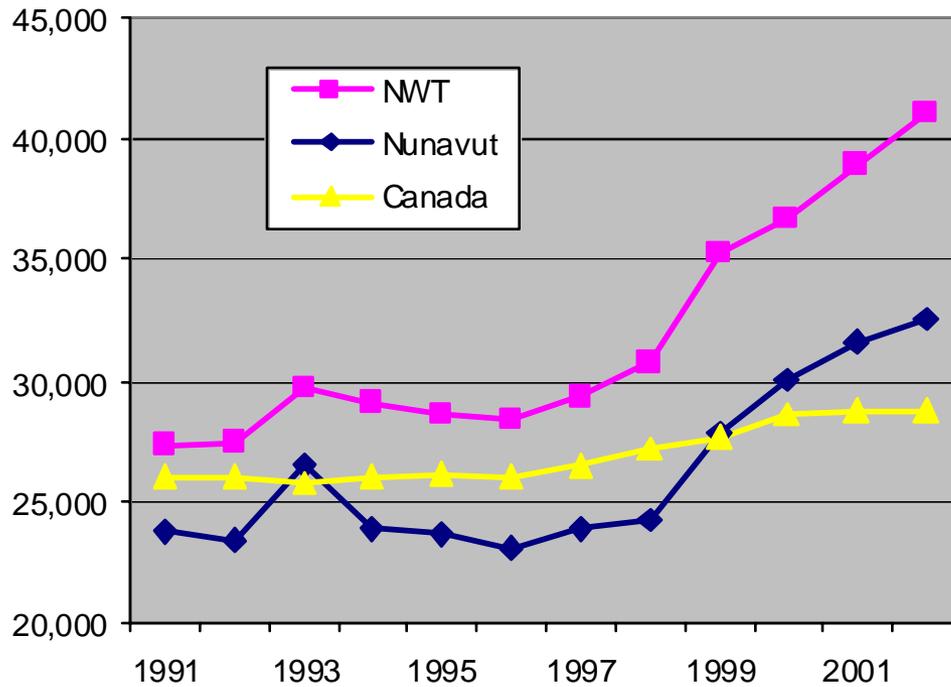
# New Capital Investment in the NWT

Chart 3: New Capital Investment in the NWT



# Real Personal Income Per Person

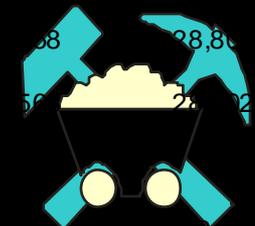
Chart 4: Real Personal Income per Person



Real Personal Income per Person

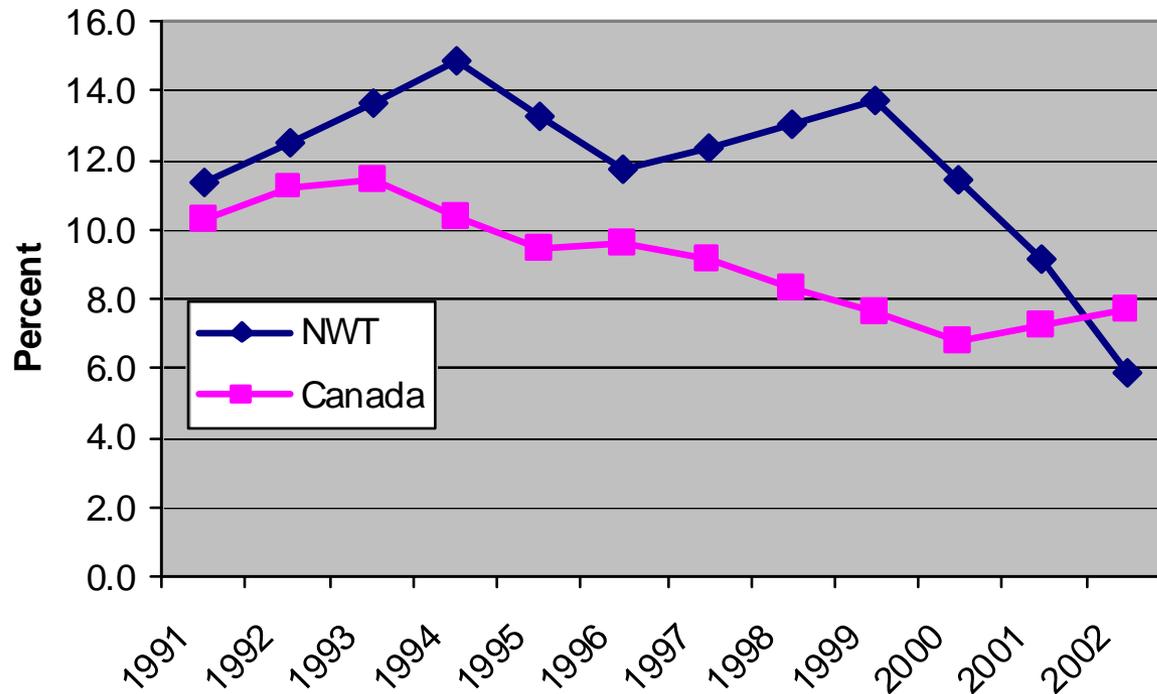
Constant 2002 Dollars

	NWT	Nunavut	Canada
1991	27,376	23,733	26,089
1992	27,495	23,399	26,037
1993	29,766	26,499	25,801
1994	29,126	23,959	26,003
1995	28,617	23,662	26,195
1996	28,384	23,096	26,079
1997	29,400	23,944	26,459
1998	30,806	24,216	27,190
1999	35,308	27,809	27,736



# NWT and Canada Unemployment Rates

**Chart 5: NWT and Canada Unemployment Rates  
1991-2002**



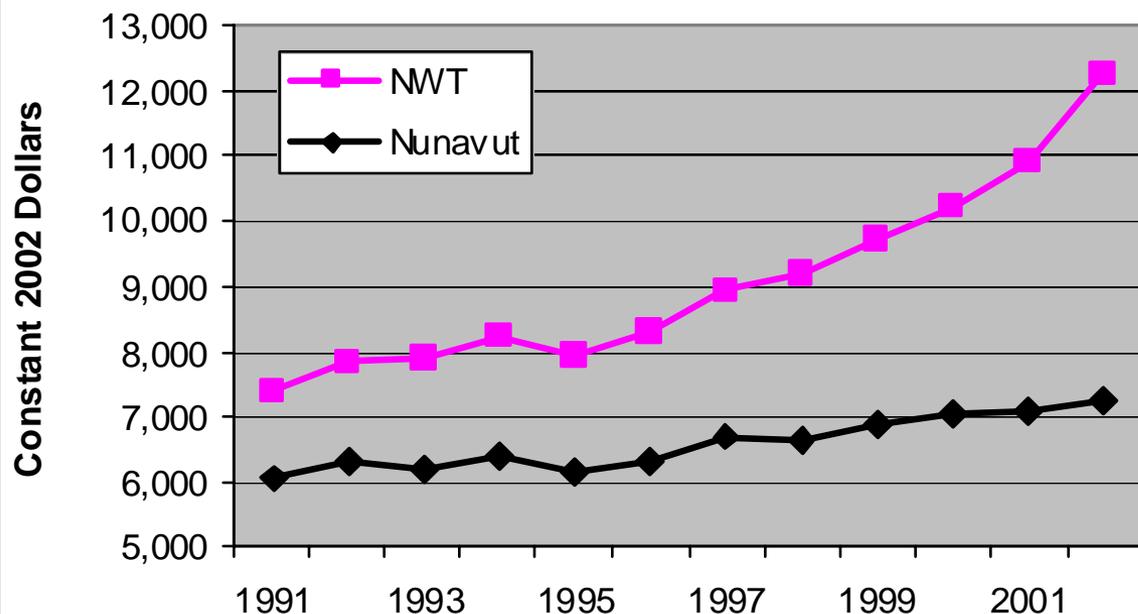
**Unemployment Rates  
(Percent)**

	<b>NWT</b>	<b>Canada</b>
<b>1991</b>	11.3	10.3
<b>1992</b>	12.5	11.2
<b>1993</b>	13.6	11.4
<b>1994</b>	14.8	10.4
<b>1995</b>	13.3	9.4
<b>1996</b>	11.7	9.6
<b>1997</b>	12.4	9.1
<b>1998</b>	13.0	8.3
<b>1999</b>	13.7	7.6
<b>2000</b>	11.4	6.8
<b>2001</b>	9.1	7.2
<b>2002</b>	5.9	7.7



# Real Retail Sales Per Person

Chart 6: Real Retail Sales Per Person



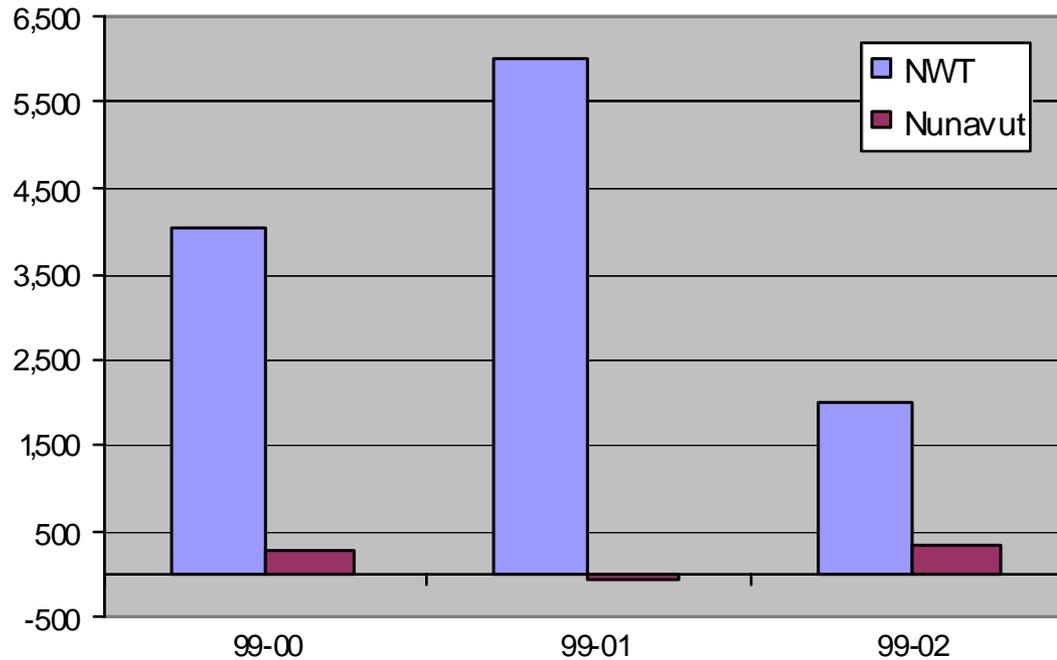
Real Retail Sales Per Person  
Constant 2002 Dollars

	NWT	Nunavut
1991	7,370	6,022
1992	7,839	6,313
1993	7,864	6,214
1994	8,232	6,399
1995	7,927	6,148
1996	8,293	6,309
1997	8,919	6,711
1998	9,169	6,637
1999	9,710	6,884
2000	10,197	7,023
2001	10,930	7,066
2002	12,260	7,251
<b>Change</b>		
91-96	924	287
96-02	3,967	942



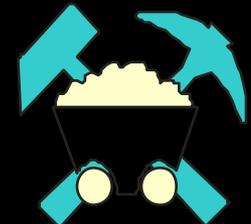
# Annual Changes in Gov't Revenues

**Chart 10: Annual Changes in Government Revenues per person From the Base Year 1999**



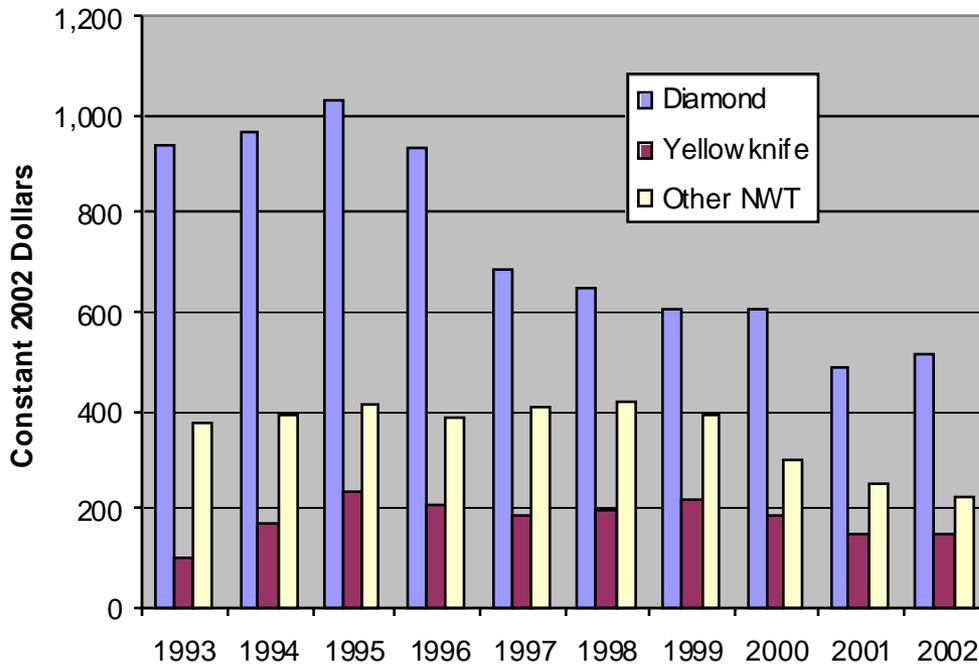
**Total Real Territorial Government Revenues Per Person (Constant 2002 Dollars)**

	<b>NWT</b>	<b>Nunavut</b>
<b>1999</b>	21,541	33,006
<b>2000</b>	25,566	33,277
<b>2001</b>	27,557	32,939
<b>2002</b>	23,556	33,368
<b>Change</b>		
<b>99-00</b>	4,026	272
<b>99-01</b>	6,016	-67
<b>99-02</b>	2,015	362



# Real Social Assistance Payment Per Person

Chart 11: Real Social Assistance Payments Per Person



Real Social Assistance Payments Per Person (Constant 2002 Dollars)

	Diamond Other NWT	Yellow- knife	
1993	938	100	378
1994	966	168	391
1995	1,031	233	415
1996	935	205	387
1997	683	183	409
1998	649	199	420
1999	607	216	391
2000	604	187	298
2001	487	150	248
2002	515	149	223

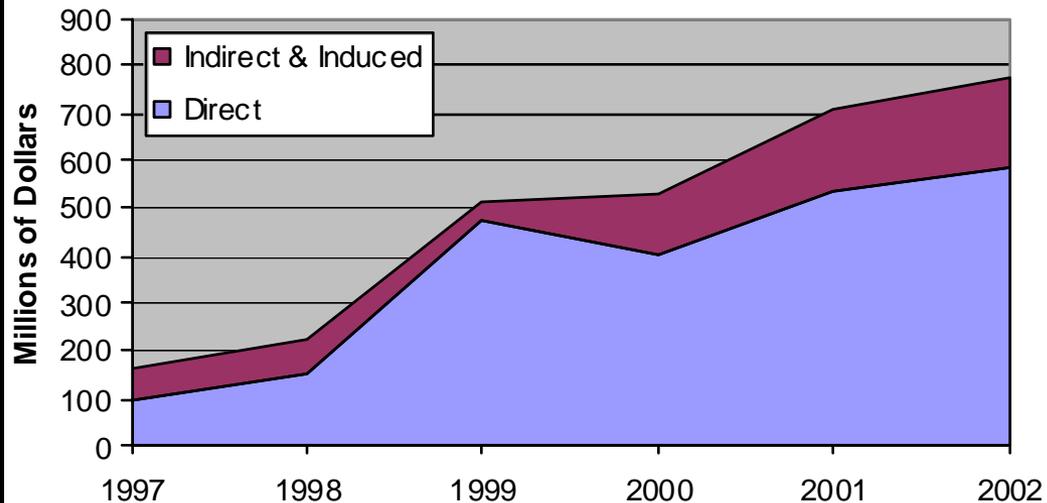
**Change**

93-96	-4	105	8
96-02	-419	-57	-163



# Total Impact of Diamond Mining on NWT

Chart 17: Total Impact of Diamond Mining on NWT  
GDP at Basic Prices



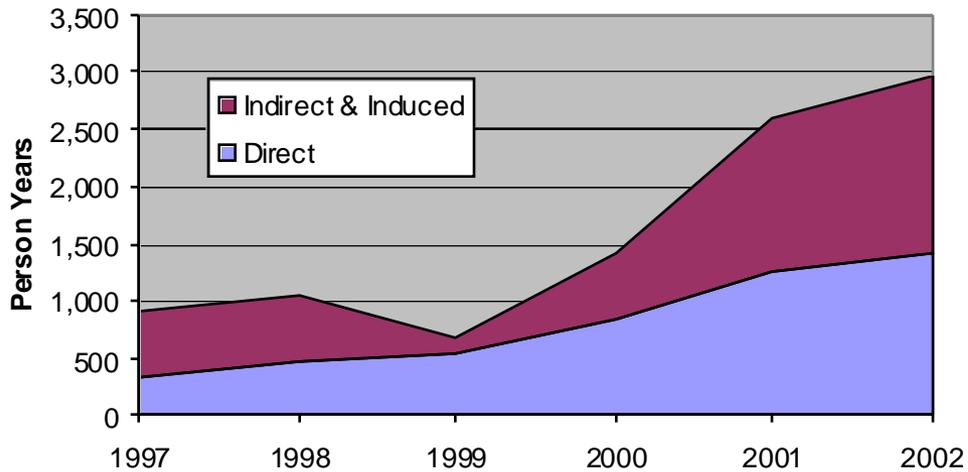
Diamond Mining Contribution to  
NWT GDP at Basic Prices  
(\$Millions)

	Direct	Indirect & Induced	Total
1997	98	63	161
1998	151	76	227
1999	474	39	513
2000	405	122	528
2001	534	175	709
2002	591	185	776
<b>Total</b>	<b>2,254</b>	<b>660</b>	<b>2,914</b>



# Total Impact of Diamond Mining on NWT - Employment

**Chart 18: Total Impact of Diamond Mining on NWT Employment**

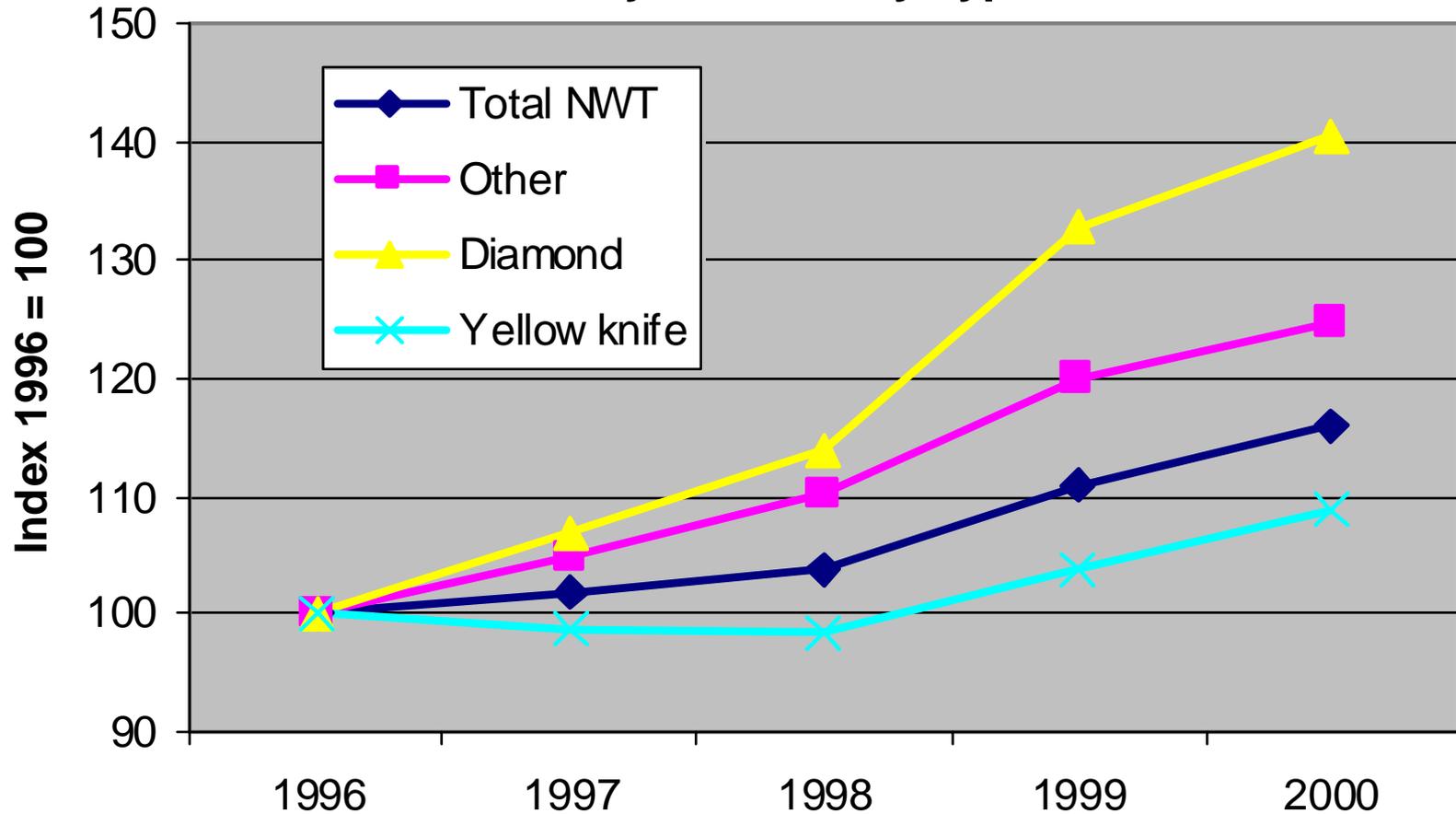


## Diamond Mining Contribution to NWT Employment (Person-Years)

	Direct	Indirect & Induced	Total
<b>1997</b>	323	587	910
<b>1998</b>	473	585	1,058
<b>1999</b>	536	139	675
<b>2000</b>	827	586	1,413
<b>2001</b>	1,248	1,361	2,609
<b>2002</b>	1,414	1,560	2,975
<b>Total</b>	4,821	4,819	9,640
<b>Average</b>	804	803	1,607

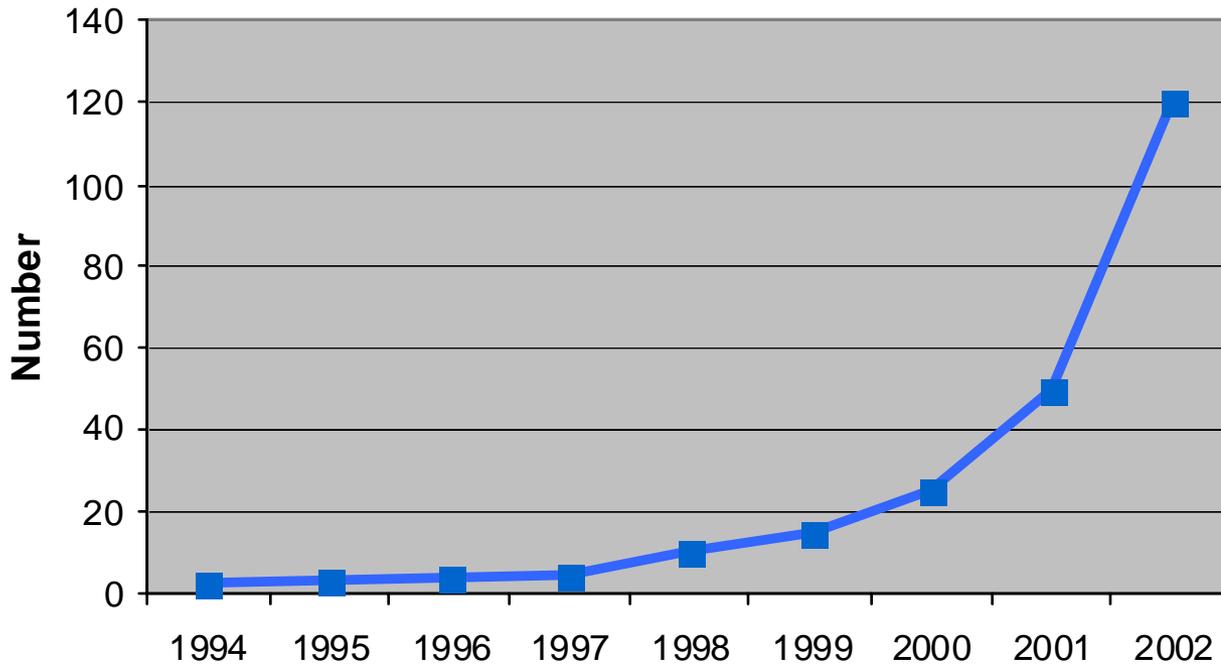
# Total Employment Income Per Person

Chart 23: Total Employment Income per Person by Community Type

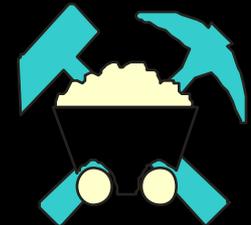


# Dogribs Enrolled in Post – Secondary Education Programs

Chart 24: Dogribs Enrolled in Post-Secondary Education Programs



	Number
1994	2
1995	3
1996	4
1997	5
1998	10
1999	15
2000	25
2001	50
2002	120



# Conclusion

- **High Northern Mineral Potential**
- **A Rich Mining Heritage**
- **Mining Impacts Infrastructure & Communities**
- **Today is History - Mining is finally becoming all northerners' industry**



**For more information:**

**www.  
miningnorth.com**

