

Northern Mining: Our Past, Our Future

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General Manager

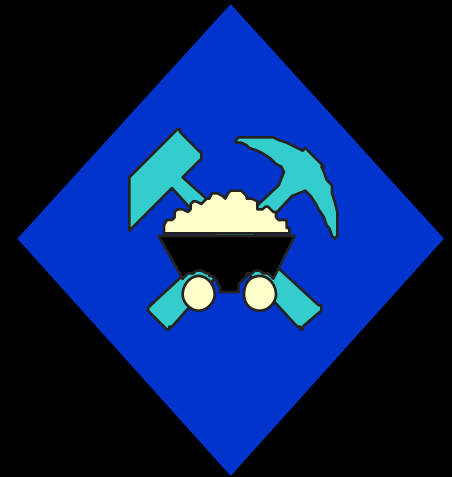
NWT & Nunavut Chamber of Mines

NWT Mining History

Mining History

Mining & Infrastructure

Mining & the Community

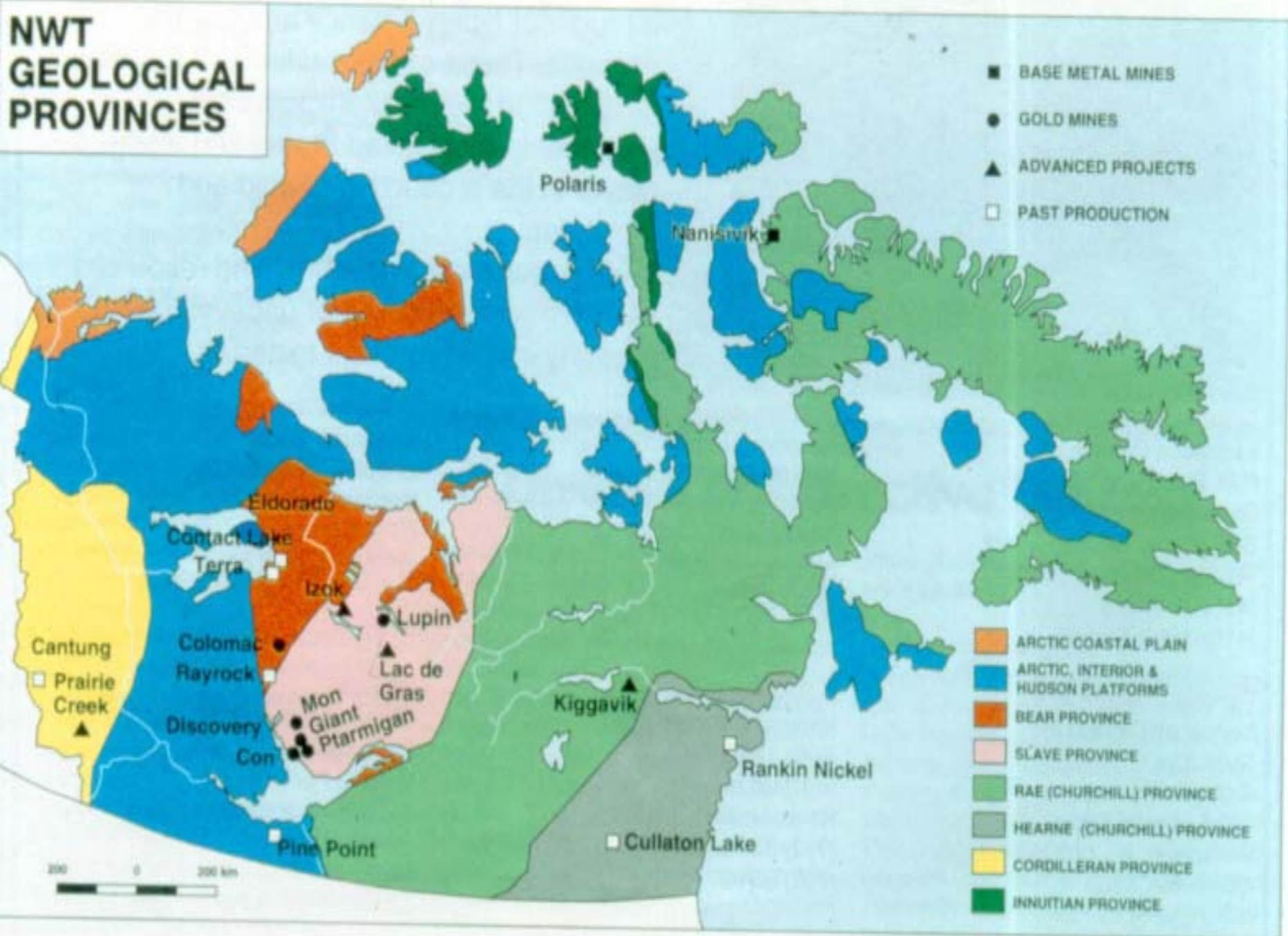


History Overview

- **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



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



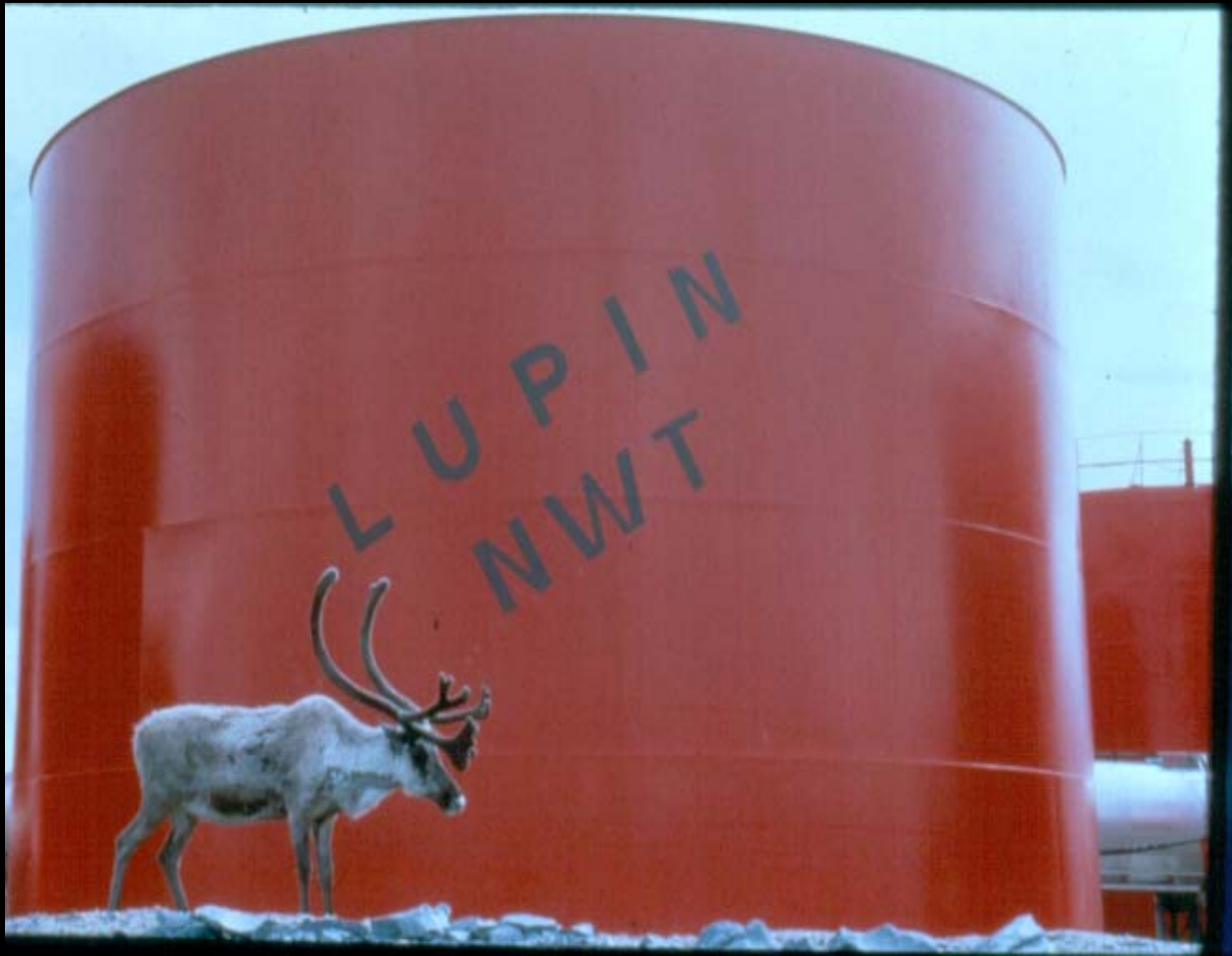
Nanisivik Zinc-Lead Mine, 1976 - today



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

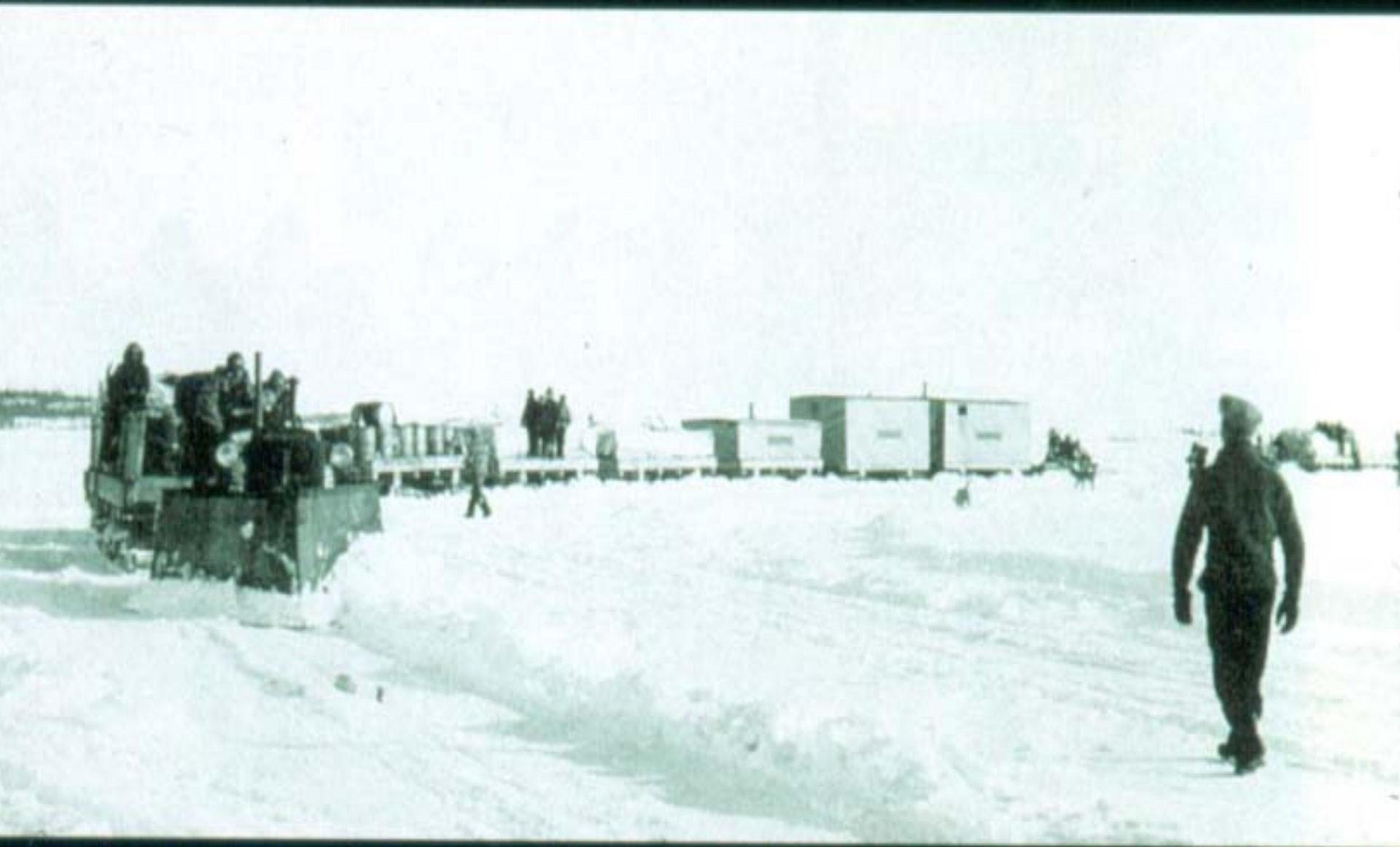


Bush planes opened new, previously inaccessible areas





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

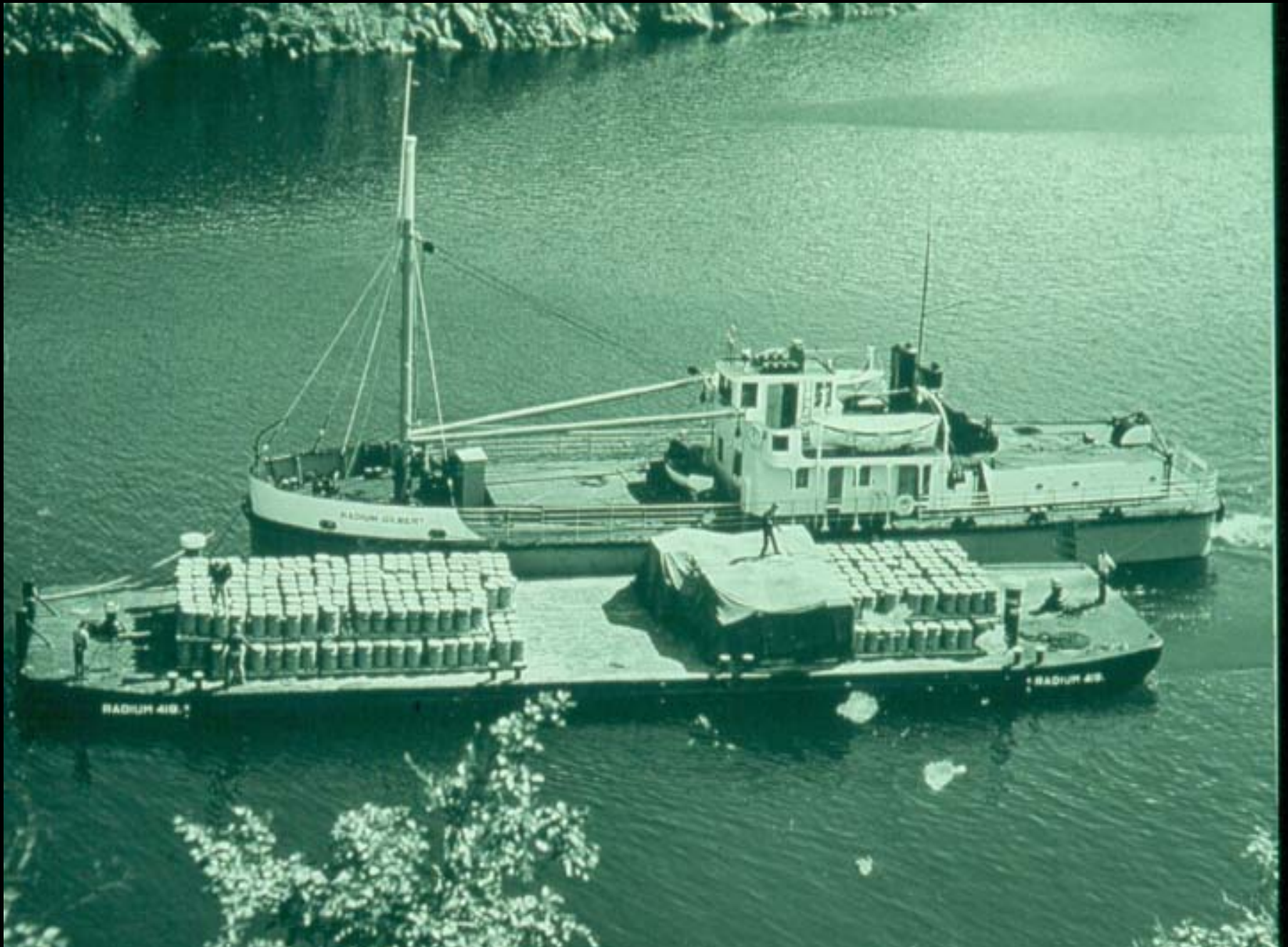


“Cat Trains” created early ice roads

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

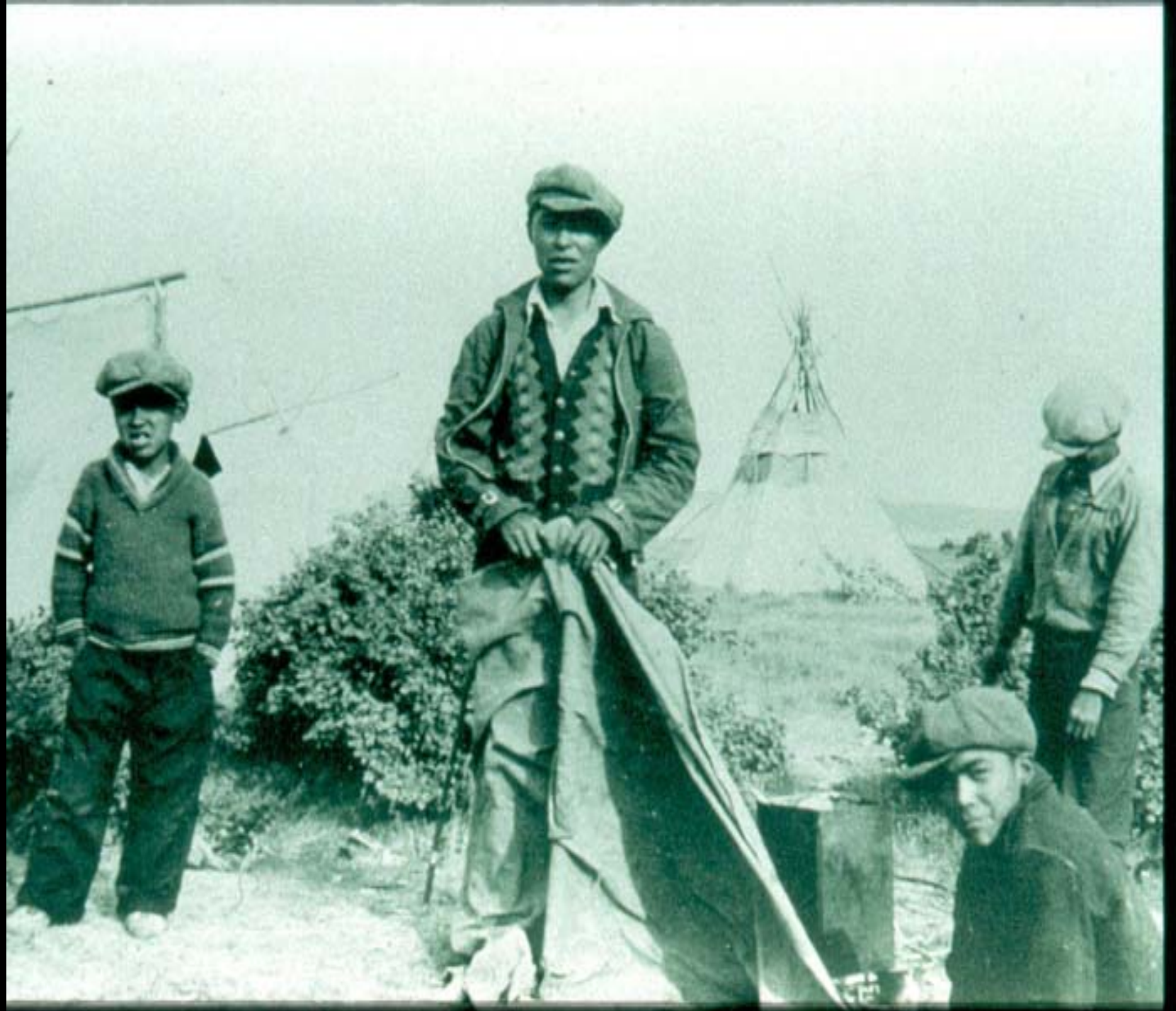


Ice Roads are lifelines

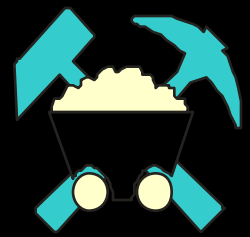
Mining & the Community

- **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



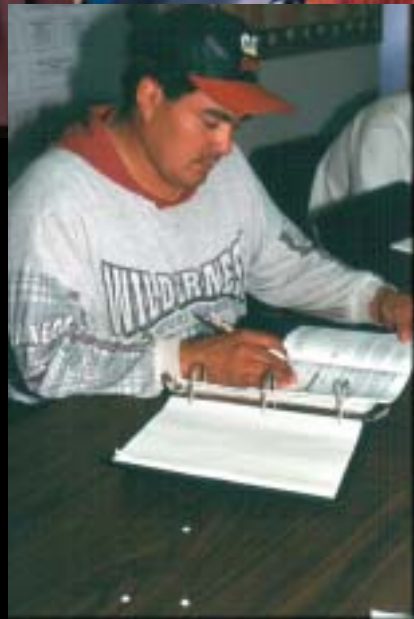


Nanisivik – 1980s



Colomac – 1990s

Diavik Training Programs, 2000





Diamonds:
The Creation of a
New Canadian Industry



Ekati Diamond Mine, 1998 - today

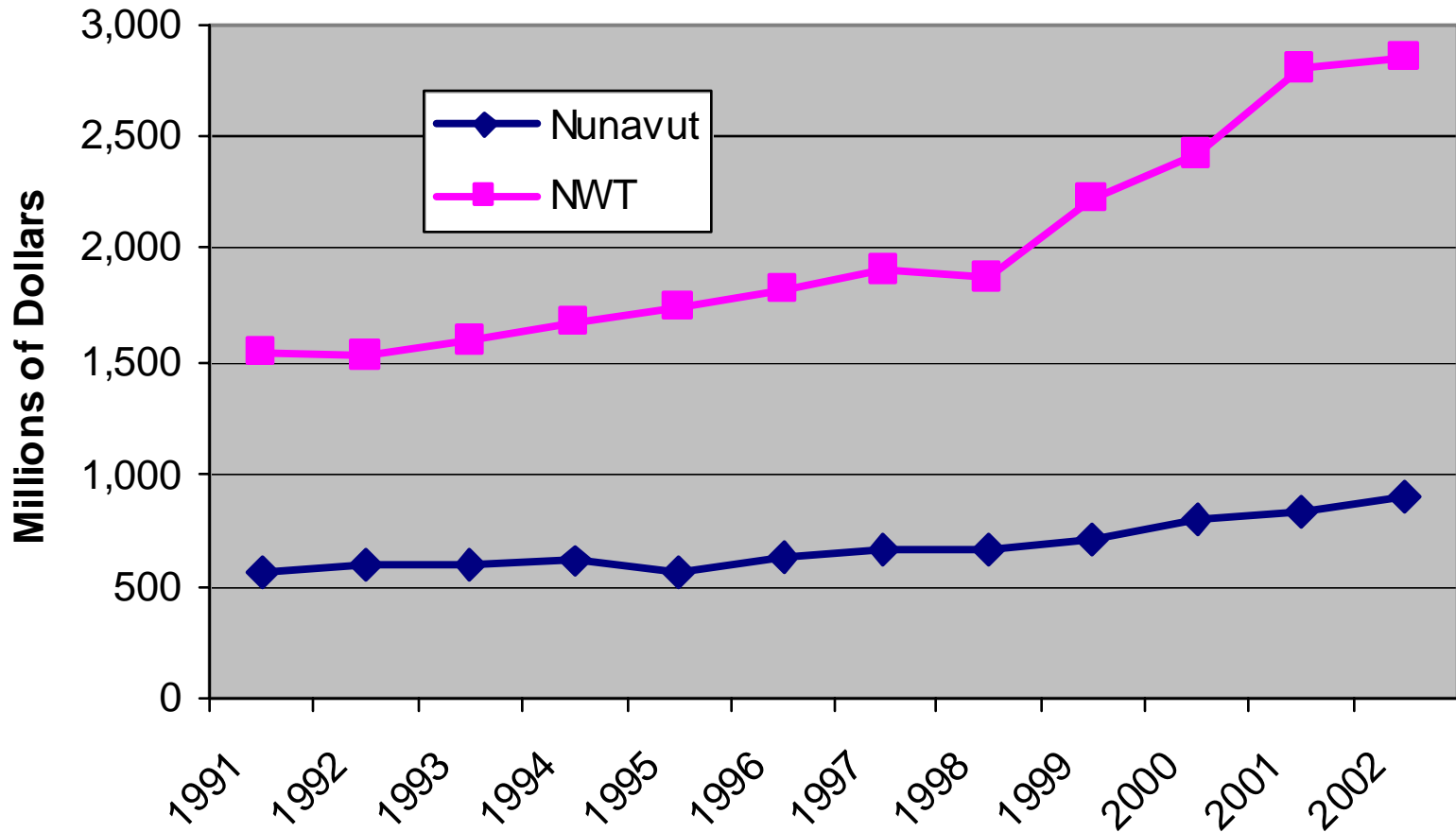


Diavik Diamond Mine, 2003 - 2022



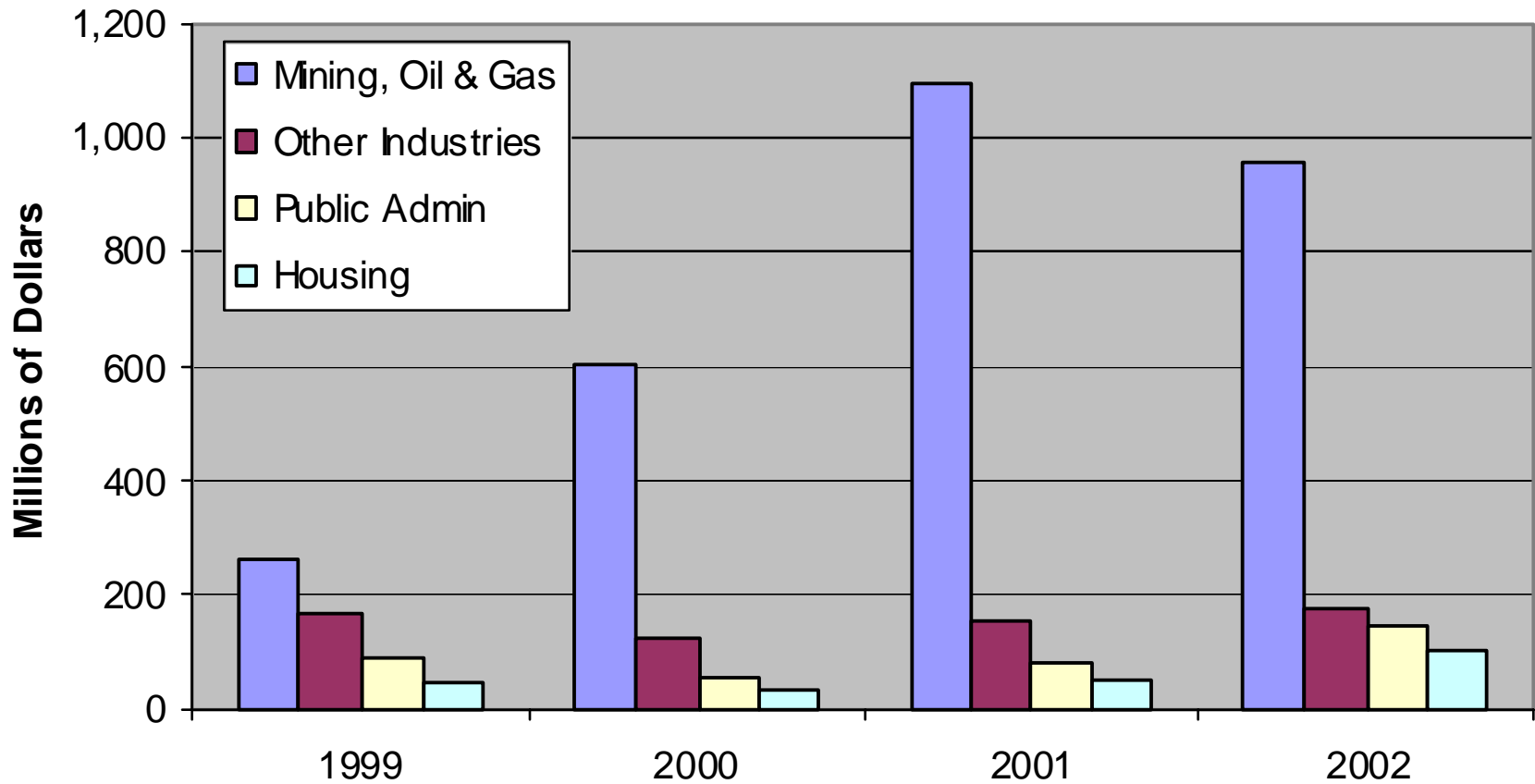
GDP at Basic Prices

Chart 1: GDP at Basic Prices



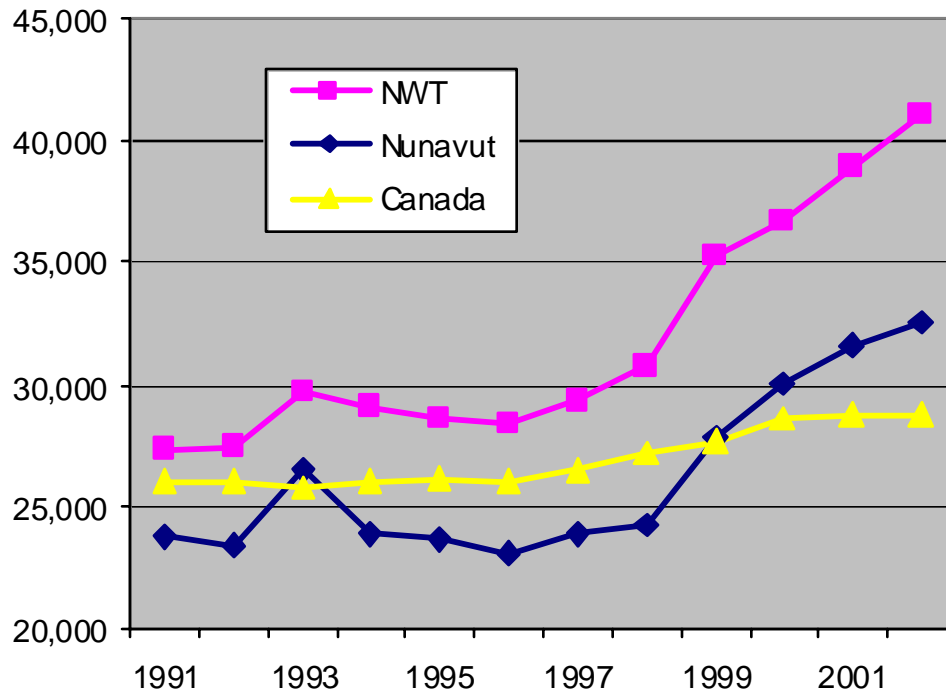
New Capital Investment in the NWT

Chart 3: New Capital Investment in the NWT



Real Personal Income Per Person

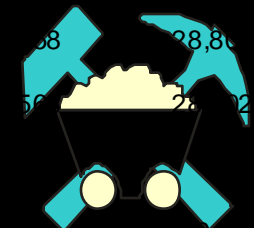
Chart 4: Real Personal Income per Person



Real Personal Income per Person

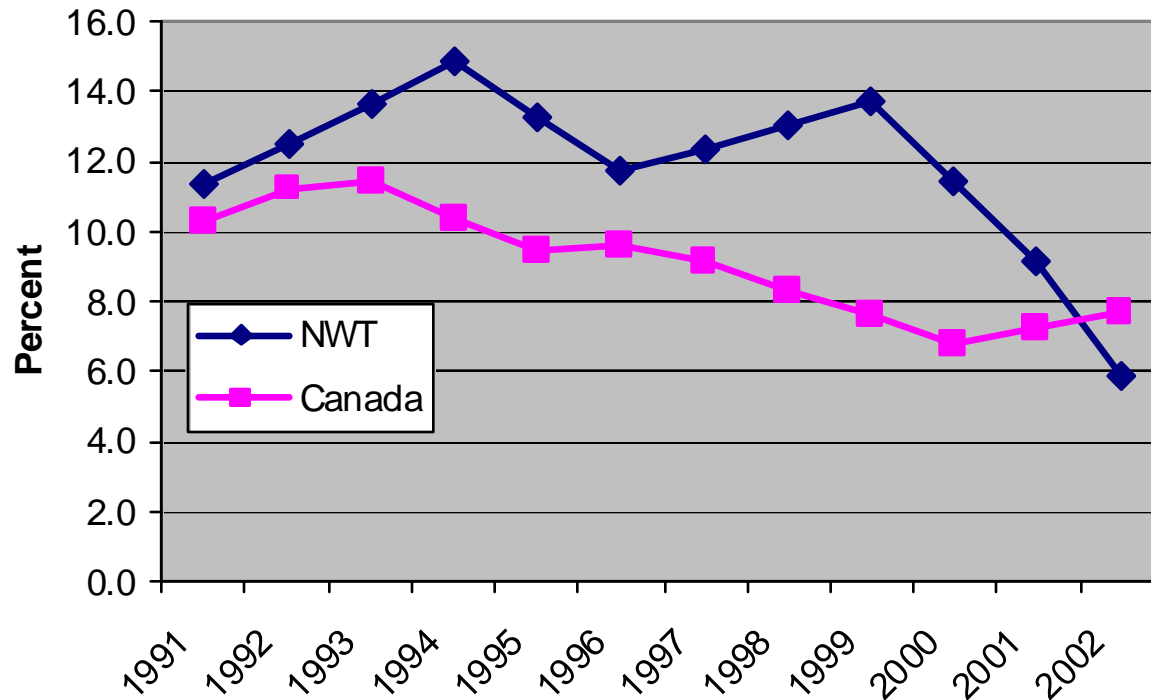
Constant 2002 Dollars

	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
2000	36,800	30,000	28,800
2001	39,000	31,800	28,800
2002	41,126	32,662	28,800



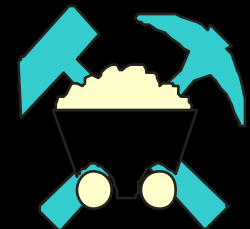
NWT and Canada Unemployment Rates

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



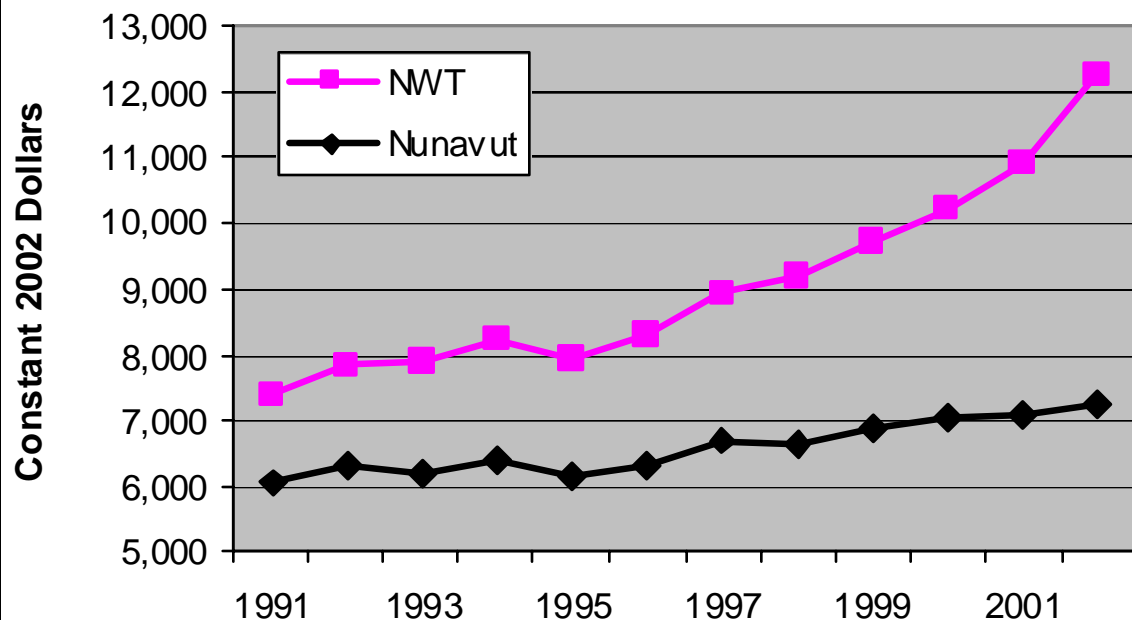
**Unemployment Rates
(Percent)**

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



Real Retail Sales Per Person

Chart 6: Real Retail Sales Per Person



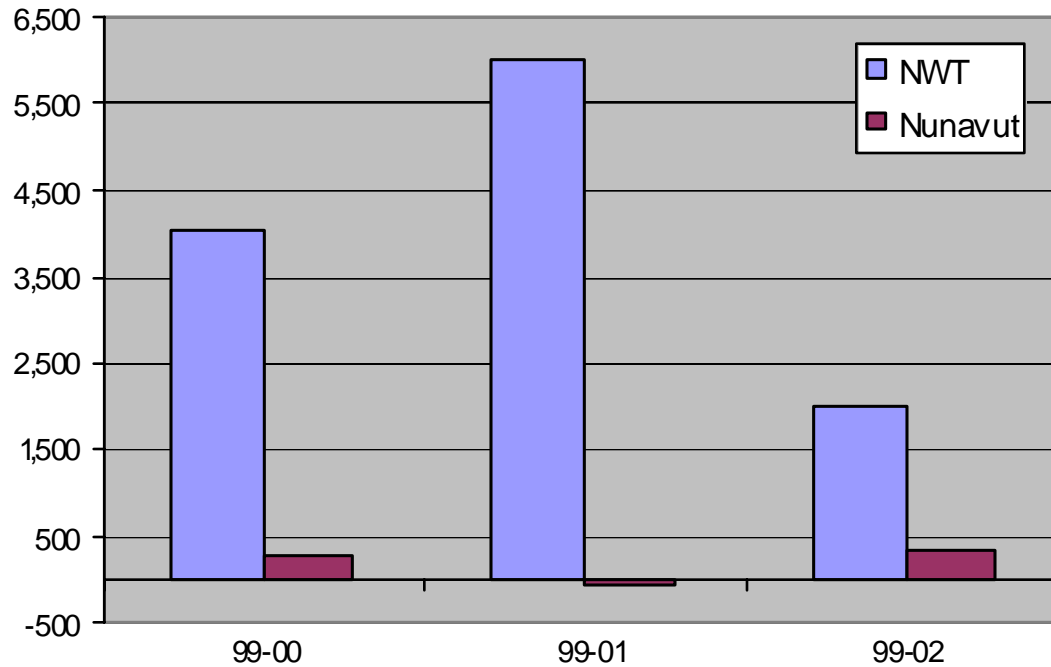
Real Retail Sales Per Person
Constant 2002 Dollars

	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
Change		
91-96	924	287
96-02	3,967	942



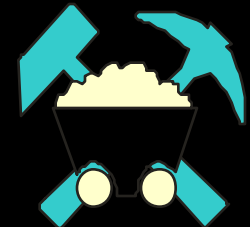
Annual Changes in Gov't Revenues

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



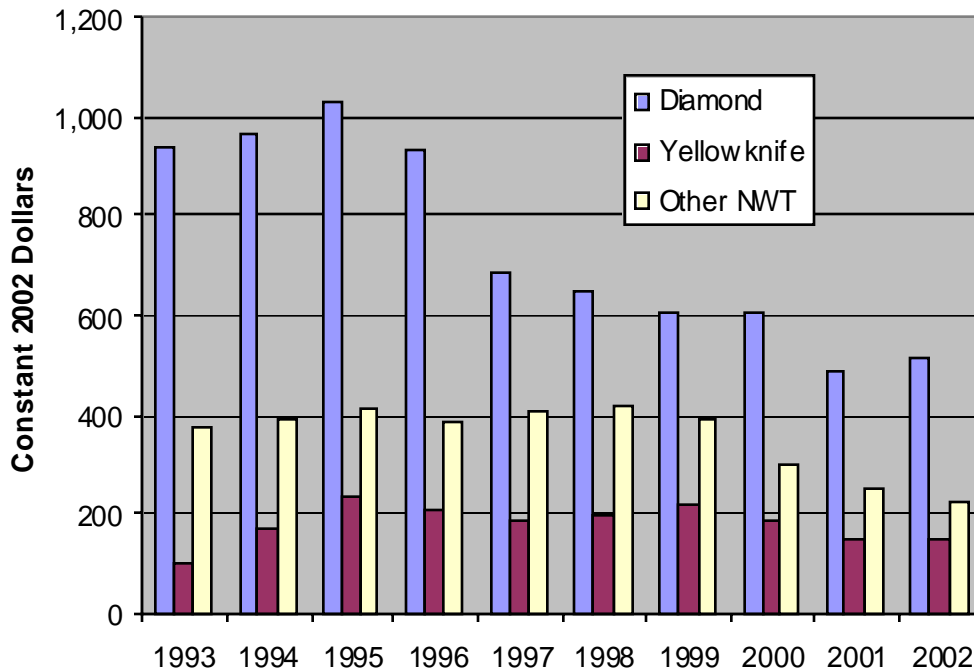
Total Real Territorial Government Revenues Per Person (Constant 2002 Dollars)

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

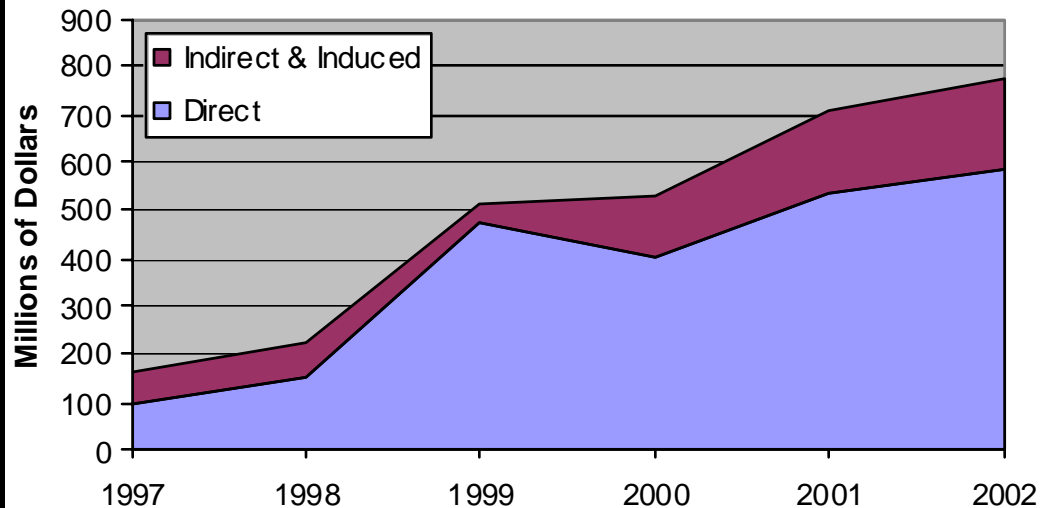
Change

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



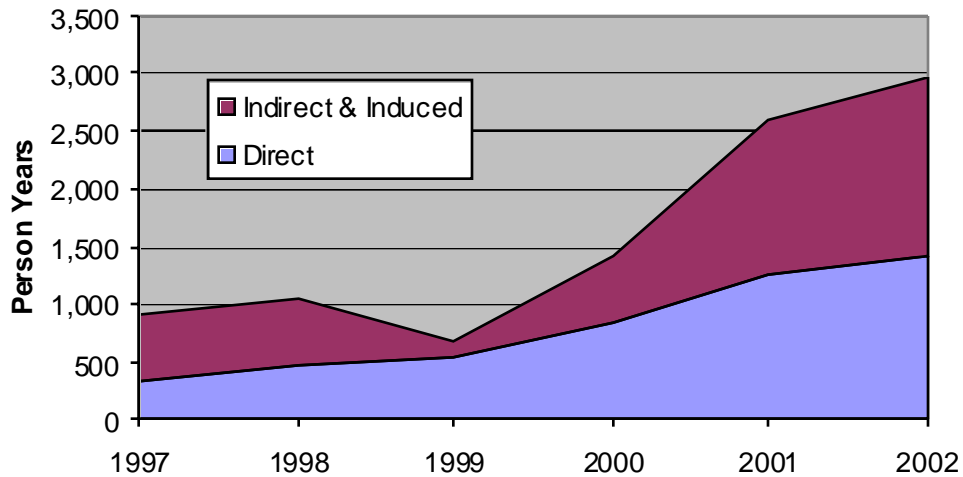
Diamond Mining Contribution to
NWT GDP at Basic Prices
(\$Millions)

	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
Total	2,254	660	2,914



Total Impact of Diamond Mining on NWT - Employment

Chart 18: Total Impact of Diamond Mining on NWT Employment

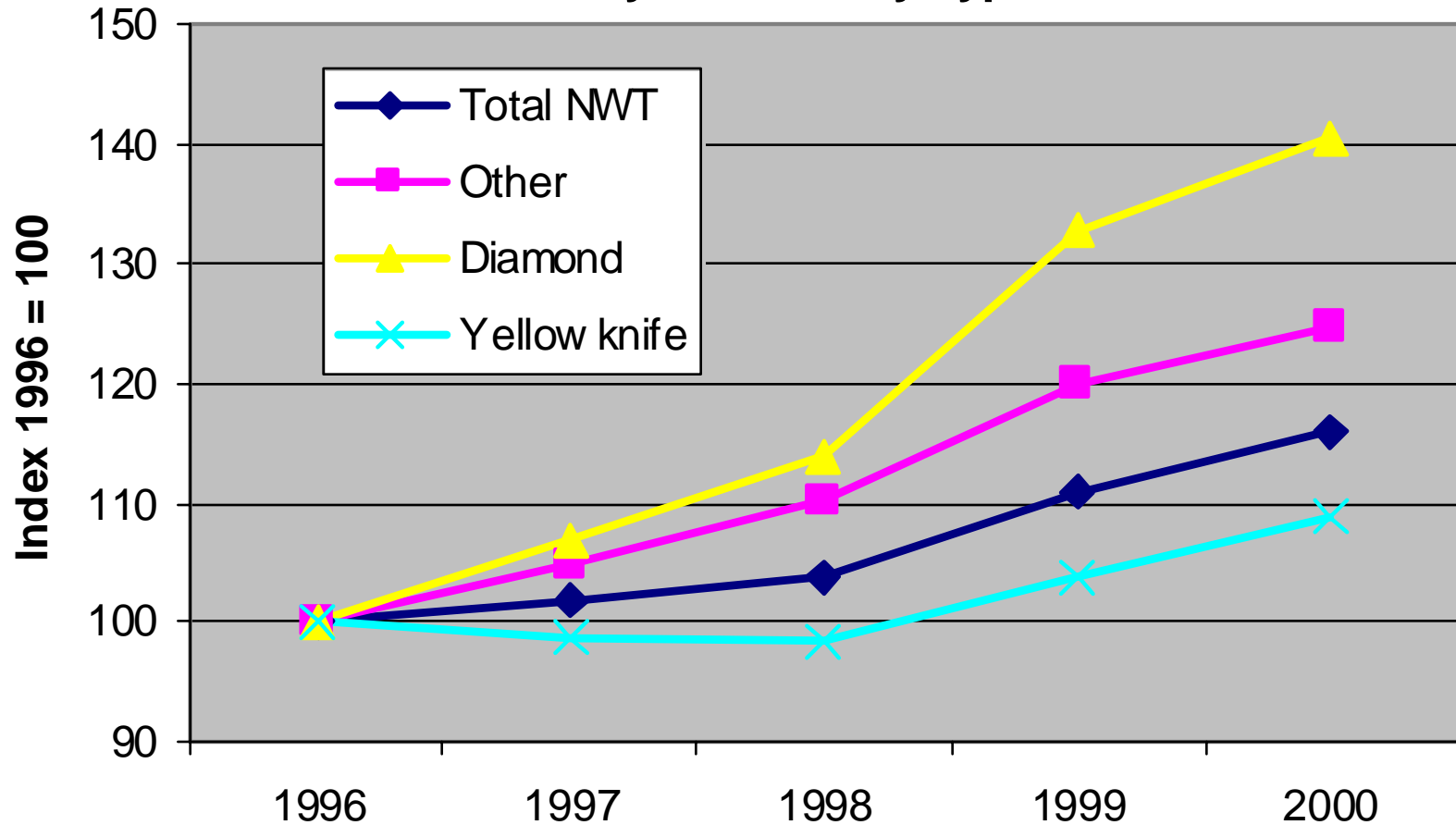


Diamond Mining Contribution to NWT Employment (Person-Years)

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

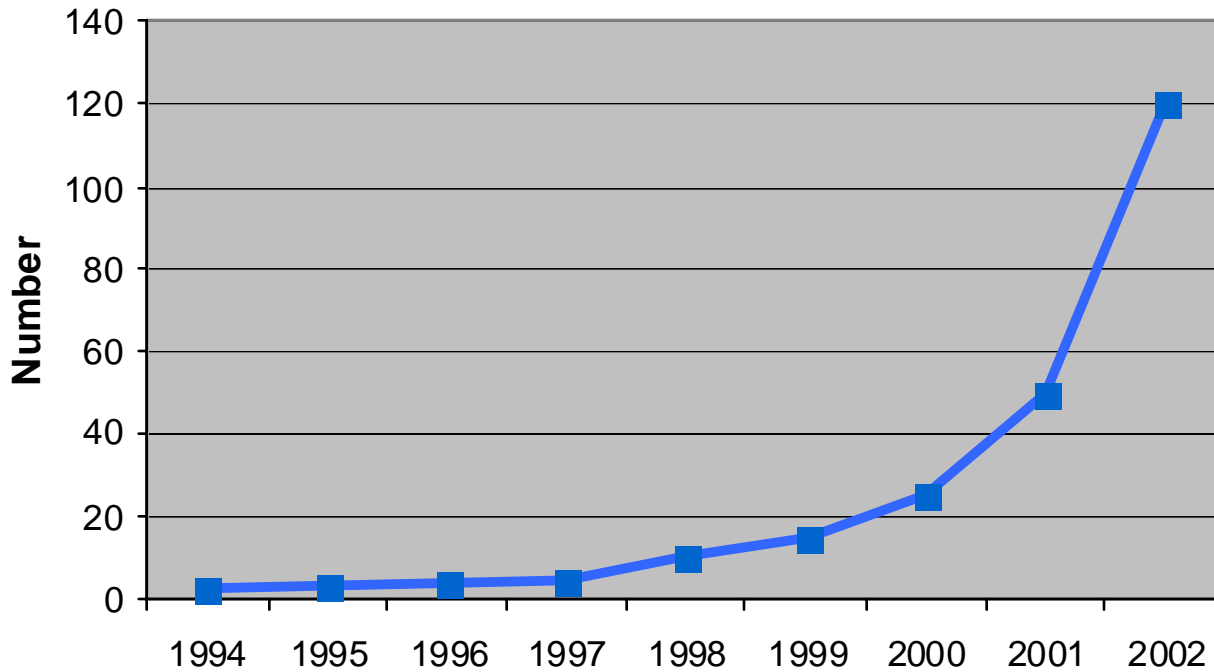
Total Employment Income Per Person

Chart 23: Total Employment Income per Person by Community Type

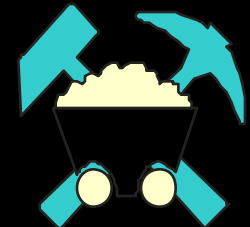


Dogribs Enrolled in Post – Secondary Education Programs

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**

