

Peel Watershed Planning
Commission
Mining Exploration
& Development

Whitehorse
2006

Mining Overview

General Features Of The Industry

- A global industry
- Canada is a world leader
- Complex, high TECK, innovative
- High risk
- Highly regulated
- Profitable
- Driven by metal prices and markets
- Cyclical

Structure Of The Industry

- Prospector / independent
- Junior mining companies
- Major mining companies
- Consulting firms
 - Assay laboratories
 - Engineers, metallurgists
 - Surveyors
 - Environmental

Stages Of Exploration

- Target commodities, background research and data compilation
- Land acquisition – staking or option
- Exploration permits
- Grass roots to advanced exploration
- Resource definition, geochemical sampling, trenching, drilling, bulk samples
- Preliminary engineering and feasibility studies

Stages Of Development

- Environmental review and permitting
- Bankable feasibility
- Smelter contracts, concentrate sales
- Financing
- Construction phase
- Mining and milling, mine site exploration
- Closure and reclamation

Exploration Time Lines

- Preliminary exploration 1-5 yrs
- Resource definition 1-3 yrs
- Mine permitting 1-2 yrs
- Mine construction 1 yr
- Mining and milling 1yr to tens of years
- Mine closure and reclamation 1-2 years

Some Statistics

- On average it requires approximately ten years and \$ 50-75 million exploration expenditures to locate and define an economic mineral deposit
- Of some 57 major mines in the circum-pacific, the project was explored by at least three companies over a 20 year period prior to discovery

Yukon Mining Legislation

- Quartz & Placer Mining Acts
(Including mining land use regulations)
- Yukon Waters Act (water board licenses)
- Mining License
- Yukon Lands Act (for activities off claims)
- YESA / DAP
- Yukon Surface Rights Act
- Fisheries Act

SOURCES of DATA

- Yukon geology program
(Geological mapping, mineral deposit studies, Yukon Minfile, Yukon geology CD, etc.)
- Geological survey of Canada
(Regional mapping, regional geochemical surveys, airborne magnetic and radiometric surveys)

SOURCES of DATA

- Mining Recorders Offices
(Claim maps and claim ownership,
Assessment Reports)
- Internet (Company web pages, company
press releases)

Requirements for a Healthy Mining Industry

- Mineral potential (Yukon is high)
- Access to land (Issue of Parks and SMA's)
- Clear & timely regulatory process
- Geological data base
- Skilled workforce
- Infrastructure

FIRST NATIONS

- Land Owners (Class A & B Settlement Lands)
- Impact Benefit Agreements
 - Negotiated between First Nation and Company
 - Recognizes First Nations traditional territory
 - Provide jobs and training and contracting opportunities
 - Can provide an economic base
 - First nations must share risk and be competitive with other private sector companies

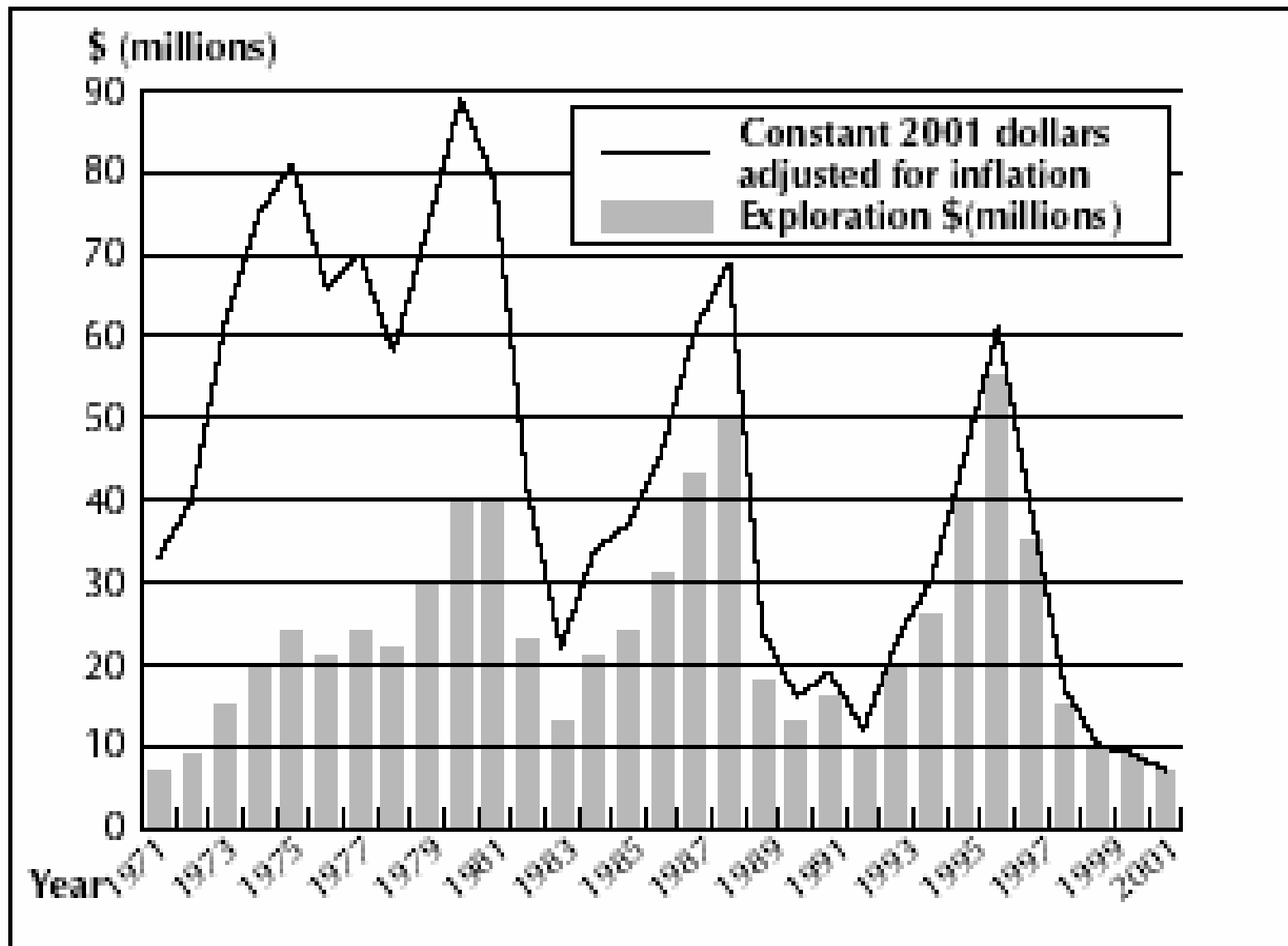
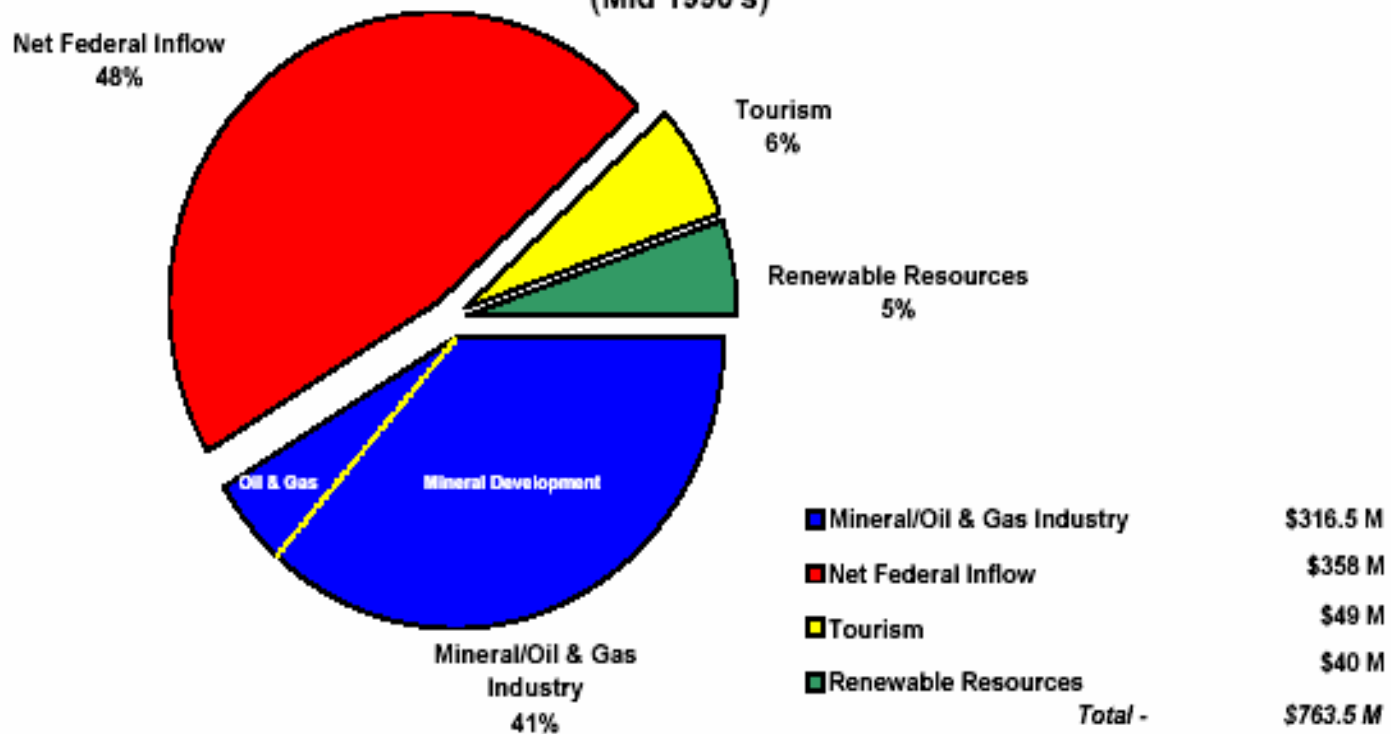


Figure 2. Yukon exploration expenditures: 1971-2001.

YUKON MID 90's

Primary Economic Generators - Yukon Economy
(Mid 1990's)



Yukon Now

Primary Economic Generators - Yukon Economy
(Most Recent Data Available)

