

# Why aren't there more metal mines in Alaska? Opportunities and Challenges

Karen Matthias Council of Alaska Producers April 2, 2015





# Mining in Alaska Passes the Test

- ☑ It pays for itself
- ☑ It has strict environmental/safety standards
- ☑ It benefits Alaskans







# Mining pays for itself

- Companies pay exploration, development and construction costs
- This often includes access and infrastructure
- Reimbursable Service Agreements
- Financial assurance for reclamation and closure



# Capital intensive, long timelines

Mine	Discovered	First Production	Development Period
Greens Creek	1975	1989	14 years
Red Dog	1968	1989	21 years
Pogo	1994	2006	12 years
Fort Knox	1984*	1996	12 years
Kensington	1983*	2010	27 years

<sup>\*</sup>Historic district, first modern deposit discovery





## AIDEA's Return on Investment

Mission: encourage Alaska's economic growth

AIDEA has already received \$450 million in payments from its \$267 million investment in the Red Dog port and road. Under current schedule, payments continue to 2034.





# Infrastructure

- Mining resulted in lower cost electricity to Juneau and Fairbanks.
- Donlin Gold's proposed natural gas pipeline could bring access to cheaper and cleaner energy in Western Alaska.





# ☑ Strict environmental/safety standards

- Permitting
- Operational oversight
- Closure/Reclamation
- Financial Assurance



# No Single Permit to Mine: there are many permits & authorizations

Mine permitting is a mixture of State, Federal and local permitting requirements.

Each project is unique.

#### STATE

- Plan of Operations (DNR)
- Reclamation and Bonding (DNR)
- Waste Management Permits and Bonding (ADEC)
- CWA Section 402 APDES Water Discharge Permit
- Certification of ACOE Permits (ADEC)
- Sewage Treatment System Approval (ADEC)
- Air Quality Permits (ADEC)
- Fish Habitat and Fishway Permits (ADF&G)
- Water Rights (DNR)
- Right of Way/Access (DNR/DOT)
- Tidelands Leases (DNR)
- Dam Safety Certification (DNR)
- Cultural Resource Protection (DNR)
- Monitoring Plan (Surface/Groundwater/ Wildlife) (DNR/DEC/DFG)

#### **FEDERAL**

- •US EPA Air Quality Permit review
- •US EPA Safe Drinking Water Act (UIC Permit)
- •US ACOE Section 404 Dredge and Fill Permit
- •US ACOE Section 10 Rivers and Harbors Act
- •US ACOE Section 106 Historical and Cultural Resources Protection
- •NMFS Threatened and Endangered Species Act Consultation
- •NMFS Marine Mammal Protection Act
- •NMFS Essential Fish Habitat
- •NMFS Fish and Wildlife Coordination Act
- •USFWS Threatened and Endangered Species Act Consultation
- •USFWS Bald Eagle Protection Act Clearance
- **•USFWS Migratory Bird Protection**
- •USFWS Fish and Wildlife Coordination Act

These are only some of the permits required!



Strict standards





### **Reclamation and Closure**

- Alaska law (AS 27.19) requires that a mine site must be returned to a stable condition compatible with the post-mining land use
- Financial assurance



# ALASKA BENEFITS

\$620 MILLION DIRECT & INDIRECT PAYROLL



\$167 MILLION ANCSA REVENUE SHARING



\$167 MILLION LOCAL/STATE REVENUE



\$169 MILLION EXPLORATION/DEVELOPMENT

\$500 MILLION LOCAL PROCUREMENT

\$3 MILLION CHARITABLE DONATIONS & SCHOLARSHIPS



\* Annual figures based on most recent available data



Benefits Alaskans





# Low commodity prices impact industry

01/2011-01/2015

 S&P/TSX Global Mining Index dropped 50%

 5 global mining companies active in Alaska saw an average 75% drop in their share price Exploration spending in Alaska (\$ millions)

400

300

200

100

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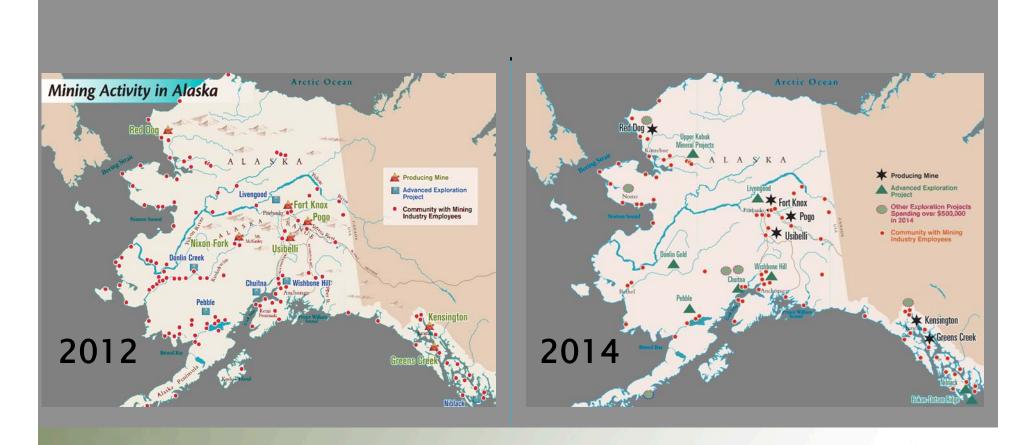
2010 2011 2012 2013 2014



# **Operating Costs Keep Rising**

	2003	2013
Average mining salary	\$70,750	\$100,000
CAT haul trucks	(789) \$2,000,000	(793F) \$4,100,000
Average diesel price per gallon	\$1.11	\$3.66
6 yard underground loader	\$570,000	\$1,100,000
40 ton underground haul truck	\$560,000	\$1,300,000





120+ communities with mining industry employees

50+ communities with mining industry employees





# Fraser Institute Survey 2014

### Alaska:

- Pure Mineral Potential: #3
- Policy Perception: #23
- Investment Attractiveness: #10





# Fraser Institute Survey 2014 **Investment Attractiveness**

- 1. Finland
- 2. Saskatchewan
- 3. Nevada
- 4. Manitoba
- 5. W. Australia 10. Alaska

- 6. Quebec
- 7. Wyoming
  - 8. Nfld/Labrador
  - 9. Yukon







# Mining in Alaska:

- Paying for itself
- Achieving strict environmental & safety standards
- ☑ Benefitting Alaskans
- Providing economic diversity

