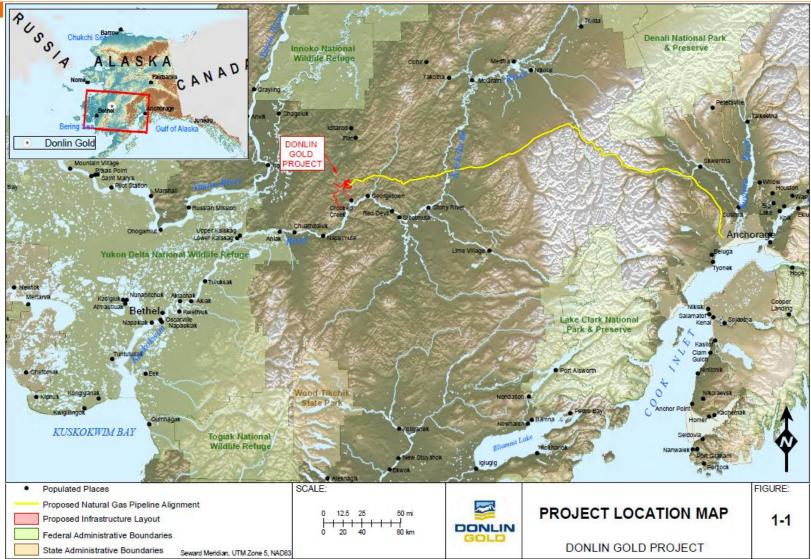
Proposed Hardrock Mines in Western Alaska

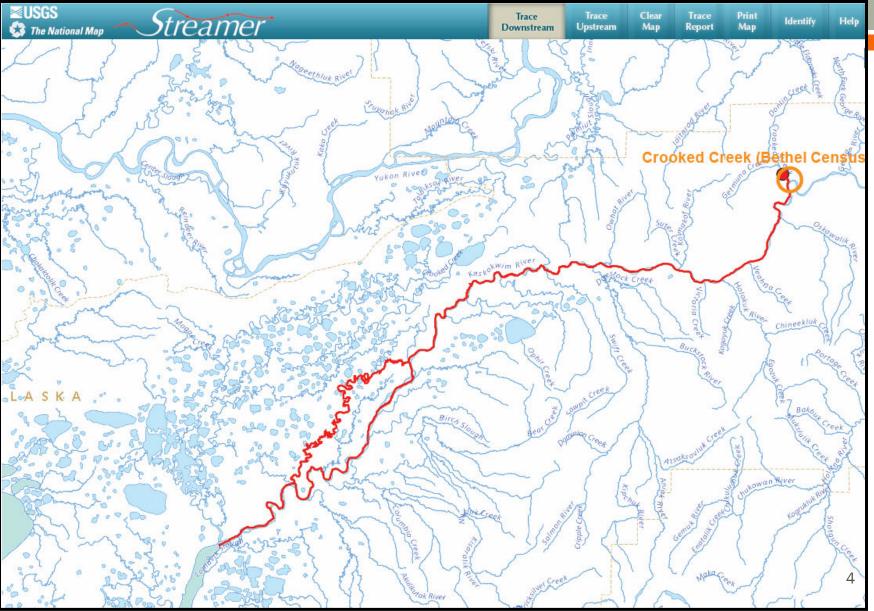
Donlin Creek Gold Mine and Arctic Deposit Copper Mine

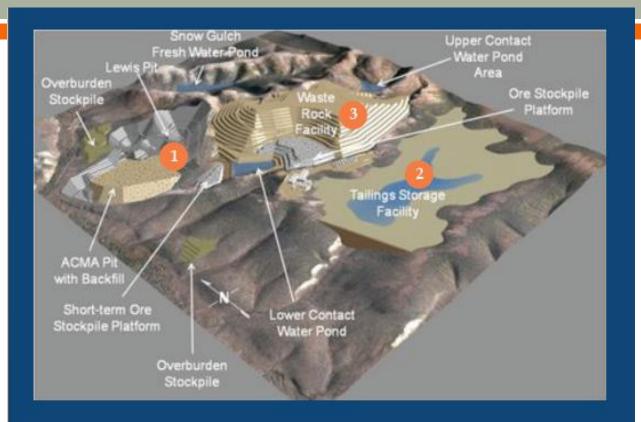
Jill Yordy Clean Water & Mining Program Director Northern Alaska Environmental Center



2

- 50 Current Status: Permitting
- Mining Method: Open-pit, bulk tonnage
- so Size: 3.85 billion tons
- Mine Life: 27.5 years
- 87 Waste:
 - Over 3 billion tons of waste rock, 225 million tons of PAG
 - 619.5 million tons of tailings (2,351 acre tailings facility)
- 🔊 Water:
 - Total usage rate of 17,838 gpm during mine life
 - Discharge of waste water during wet years and seasonally after the pit lake fills post-closure.
- Post-closure and Reclamation: Once the mine closes all water drainage from the facility will be directed to the pit lake. This water will then be treated and discharged whenever the pit lake gets too full







Lewis and ACMA pits, about 2.2 miles long, 1 mile wide, and 1,850 ft deep

Waste treatment facility (tailings storage), about 2.5 miles long by 1 mile wide, covering about 2,350 acres



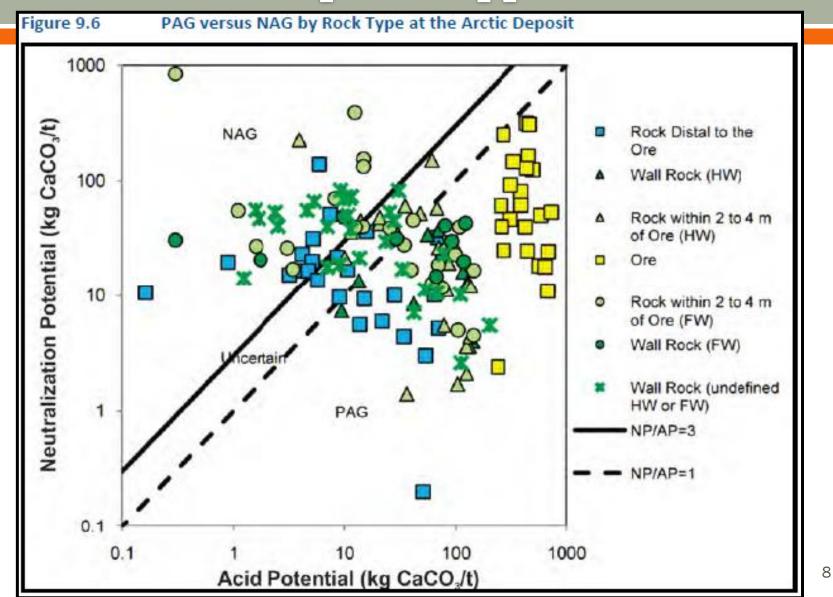
Waste rock, covering about 2,300 acres

Fort Knox is an operating open pit gold mine near Fairbanks, Alaska.

Donlin will have a final pit four times larger than the one at Fort Knox.



- So Current Status: Pre-feasibility
- Mining Method: Open-pit, bulk tonnage
- so Size: 36 million tons
- Mine Life: 12 Years
- 87 Waste:
 - 299.4 million tons of waste rock (164.8 million tons PAG)
 - 25.7 million tons of tailings
- 50 Water: Unknown usage rate at this stage
- Post-closure and Reclamation: No complete closure/reclamation plan at this stage. Tailings facility will have to be a "wet closure" which requires long term water management. Closure costs estimated at \$30-60 million *not* including costs for perpetual water treatment.



- Downstream
 Waterways: Subarctic
 Creek → Shungnak
 River → Kobuk River
- Tailings Dam: over
 300 feet high at the end of mine life.
- PAG tailings will be kept perpetually underwater behind the tailings dam.

