Pebble Mine: A case study in science and policy relative to a NON-transboundary mine

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Nearly half of the world’s sockeye salmon are from Bristol Bay

From Ruggerone et al. 2010
Mining Claim Companies

- Alaska Earth Resources Inc (Ae Ri)
- Big Chunk Corporation
- Full Metal Minerals (USA) Inc.
- Groundhog Mines, Llc
- Nika Mines, Llc
- On-Line Exploration Svcs, Inc
- Pebble East and West Claims
- Stuy Mines, Llc

Mining Claims - 2008
AK DNR
414,281 acres
647.3 square miles

Mining Claims - May 2010
AK DNR
507,256 acres
792.6 square miles

Anadromous Waters Catalog (AWC)
AK Dept. of Fish & Game - June 2010
Other Streams - not mapped in AWC
State Mining Claims - AK DNR - May 2010
State Mining Claims - AK DNR - May 2008
Industry Science
CONCLUSION: “The Assessment found that mining the headwaters of these river systems could cause harm to the valuable fishery in Bristol Bay.”
NGO and University Science

EPA protocol (was EMAP now NARS)
• Physical habitat
• Diatoms
• Macroinvertebrates
• Fish

Additional
• eDNA
• Evaluation of non-traditional bioindicators (sculpin)
• Comparison between science and permitting
CONCLUSION: “No population-level impacts would be expected for fish…”

EPA: The draft EIS lacks critical information and likely underestimates the risk the project poses to water quality and aquatic resources.

DOI: The DEIS was so inadequate that it precludes meaningful analysis.
Thank you, and questions?

Photo: Michael Melford