**Beyond Pebble: Protect the entire watershed**

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The Alaska Independent Fishermen’s Marketing Association (AIFMA) applauds the U.S. Environmental Protection Agency for its watershed assessment of impacts of potential large-scale mining in the Bristol Bay drainages of Alaska. The assessment is thorough, peer-reviewed and comprehensive. It describes the risks of unavoidable, adverse, cumulative effects of potential large mines, including Pebble mine, on fish, wildlife, and subsistence, commercial and recreational fisheries in the region.

AIFMA especially appreciates Sens. Mark Begich of Alaska and Maria Cantwell of Washington for their strong support of Bristol Bay.

In May 2010, six federally-recognized tribes and AIFMA requested the EPA to initiate a public process under Section 404(c) of the Clean Water Act to protect fish, wildlife and fisheries from the effects of potential mines at acid-generating metallic sulfide deposits in the Kvichak and Nushagak drainages, including the Pebble deposit. The tribes and AIFMA asked EPA to prohibit or restrict discharges of dredged or fill material, including mining wastes, into “waters of the United States,” meaning those under federal regulatory jurisdiction and wherever the discharges would be associated with acid-generating mines at such deposits. In response, EPA’s assessment describes the unavoidable adverse impacts certain or likely to occur if large-scale mining, including at metallic sulfide deposits, is allowed.

Although most public discussion to date has focused on Pebble, EPA’s assessment addresses all potential large-scale mining in the Kvichak and Nushagak drainages, uses Pebble as an example, and identifies fifteen other deposits where significant exploration has occurred. These include ten other metallic sulfide “porphyry copper” deposits, which are the same acid-generating type of low-grade deposit as Pebble. The Pebble deposit, of at least several billion tons, is the largest identified so far. The others, such as the Humble and AUDN deposits claimed by Millrock Resources, Inc., and the Big Chunk claims of Liberty Star Uranium & Metals, are not fully explored. Therefore, the assessment uses the worldwide average size of mines at porphyry copper deposits, about .25 billion tons, to assess impacts of mining the other porphyry deposits.

**On its website, Millrock describes its claims as “giants” and the Humble prospect as “drill-ready”. The company says it is “currently seeking potential partners” to develop this deposit 50 miles northeast of Dillingham.**

EPA’s Assessment says that Pebble and similar mines in the Kvichak and Nushagak drainages would unavoidably destroy many miles of stream habitat for salmon and other fish and many acres of wetlands associated with that habitat. EPA regulations require self-sustaining, compensatory mitigation of unavoidable adverse impacts. The assessment concludes that proposals for compensatory mitigation, such as fish hatcheries, pumping water upstream to replace lost water, removal of beaver dams (an idea long rejected by fisheries scientists), manipulating water chemistry and reconnecting old stream channels Mother Nature abandoned, will not provide self-sustaining mitigation of lost productivity and genetic diversity of salmon and other fish.

That conclusion applies to Pebble and all potential large mines which would affect fish in the Kvichak and Nushagak drainages. For this and other reasons related to likely unavoidable adverse effects, the EPA should and probably will adopt a Section 404(c) determination.

EPA’s 404(c) determination should apply prohibitions and restrictions, as facts warrant, to all potential large-scale mining in the Bristol Bay watershed, including all deposits identified in the Kvichak and Nushagak drainages. EPA should prohibit discharge of dredged or fill material associated with large-scale mines into federally regulated waters, including wetlands and tributaries, wherever:

• Waters are used by salmon or other fish, or support subsistence, commercial or recreational fishing or hunting.

• Mines, including tailings facilities and waste rock piles, would require water treatment forever or long term storage of toxic or acid-generating wastes.

• Compensatory mitigation will not be self-sustaining and cannot maintain the productivity and genetic diversity of salmon and other fish upon which the commercial, subsistence and recreational fisheries ultimately depend.

David Harsila is President of AIFMA, a commercial fishermen’s association formed in 1966 whose members own salmon fishing businesses in Bristol Bay.