PROTECTING AMERICA'S WATERS FROM IRRESPONSIBLE MINING: Close the Clean Water Act's Mining Waste Loopholes



PEBBLE MINE, ALASKA

Alaska's Bristol Bay region, one of America's most spectacular places and home to the world's largest runs of sockeye salmon, is being targeted for large-scale mineral development. The Pebble gold and copper mine--planned for the headwaters of Bristol Bay's best wild salmon rivers--would be the largest open pit mine in North America. It would scar this wilderness landscape forever and could destroy the salmon that make Bristol Bay unique.

MINING LOOPHOLES IN THE CLEAN WATER ACT

One of the most important goals of the federal Clean Water Act (CWA) is to prohibit the use of our nation's waters as dump sites for pollution. Unfortunately, public officials have undercut that goal by adopting **two regulatory loopholes that allow hard rock mines to treat the nearest lake or wetland as a waste dump** for massive quantities of toxic, acid-producing tailings.

The mining industry is the single largest source of toxic waste and one of the most environmentally destructive industries in the country. Today's massive mining operations involve blasting, excavating, and crushing many thousands of acres of land and treating the ore with huge quantities of toxic chemicals such as cyanide and sulfuric acid.

The mines that produce our gold, silver, copper, and uranium are notorious for polluting adjacent streams, lakes, and groundwater with toxic by-products. In fact, the Environmental Protection Agency (EPA) estimates that **40% of the watersheds in the western United States are contaminated by pollution from hard rock**



Grizzly bears are at risk from the proposed Pebble mine. Photo: USFWS.

mines. Toxic spills and acid mine drainage kill wildlife, poison community drinking water, and pose serious health risks.

IMPACTS TO COMMUNITIES AND WILDLIFE

The Pebble open pit gold and copper mine puts at risk the most spectacular and abundant ecosystem in North America. The region's pure waters, healthy habitat, and breathtaking wilderness setting generate millions of dollars for the local economy by sustaining a thriving commercial fishery, attracting trophy salmon and trout anglers from all over the world, and supporting the centuries-old subsistence lifestyle of Alaska Natives. Preliminary plans indicate that:



Photo: Jim Wagner

- The Pebble mine will discharge **billions of tons of tailings into two enormous impoundments** built directly on top of streams, ponds, and wetlands in the headwaters of some of the most productive salmon rivers on earth.
- The larger of the two impoundments will include three earthen dams, **each taller than the world's largest concrete dam**, the Three Gorges dam in China. Both impoundments will contain a vast lake of toxic slurry hundreds of feet deep.
- The mine site is located in a **seismically active area** and experiences frequent magnitude 6-7 earthquakes.
- A dam failure, even decades from now, would be environmentally devastating, **funneling mine pollution directly into the river systems** that have been the life blood of Bristol Bay for centuries.

MINE TAILINGS AND CLEAN WATER DON'T MIX

One of the most important components of a healthy, sustainable fishery is clean water. Sockeye, in particular, require not only pristine rivers and creeks to spawn, but also large, freshwater lake systems where they spend time as juveniles before heading to sea.

For thousands of years, Bristol Bay has been untouched by development, providing optimal conditions for returning salmon. **Up to forty million sockeye salmon return to this watershed each year**, contributing over \$400 million per year to the Alaskan economy.

Toxic by-products are an inevitable result of open pit mines like the proposed Pebble Mine. This puts salmon at great risk, as they are highly sensitive to the slightest increases in certain metals like copper, interfering with their sense of smell, direction, and ability to evade predators.

Bristol Bay's salmon are the foundation of a vibrant community of wildlife that includes bears, wolves, moose, caribou, and waterfowl.



Photo: Thomas Quinn / UW

WE CAN CLOSE THE MINING LOOPHOLES



Discharging wastes into waters may be cheaper for mining companies, but it is not a necessary way of doing business. In 1975, EPA began adopting "effluent limitations" that require mines to treat their wastes and meet strict water quality standards, in some cases prohibiting discharges into waters altogether. As part of this process, EPA studied the industry and determined that the effluent limitations were not only feasible but already being met by most mines. These limits, if applied consistently today, would prevent hard rock mines from "storing" their wastes in our waters. Unfortunately, the two CWA loopholes have made the effluent limitations largely ineffectual.

The good news for people who care about pure water, community health, and abundant wildlife is that EPA and the Army Corps of Engineers can close the mining loopholes with two simple changes to the Clean Water Act regulations. Closing the loopholes would not prohibit hard rock mining but it would greatly reduce the negative environmental impacts from large mines.

As a nation, we decided that industries should not be able to profit from polluting the waters that sustain America's communities, fish, and wildlife. Help us close the two loopholes in the Clean Water Act

that encourage irresponsible mining practices and irresponsible mines such as the Pebble mine in Alaska.

TAKE ACTION: Go to www.nwf.org/miningloopholes

For more information, please contact:

Tony Turrini Senior Counsel, Pacific Regional Center, Alaska Office National Wildlife Federation <u>turrini@nwf.org</u> Jim Adams Executive Director, Pacific Regional Center, Alaska Office National Wildlife Federation adamsj@nwf.org