The metals 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 notoriously pollute 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 from hardrock mines. Toxic spills and acid mine drainage kill aquatic life, poison community drinking water, and pose serious health risks.

Record metal prices coupled with new technologies allow the mining industry to exploit places—and at a scale—that would not have been feasible in the past. For example, the Pebble Partnership is proposing to build North America's largest copper and gold mine in the remote headwaters of Alaska's Bristol Bay, the source of the greatest runs of sockeye salmon left on earth.

Adding insult to injury, the American public receives very little in exchange for the use and destruction of the public lands where many hardrock mines are located. Most mines are owned by foreign corporations and, unlike other extractive industries, the hardrock mining industry does not pay royalties for minerals taken from federal public lands. What's more, taxpayers are generally on the hook for the clean-up of abandoned mines. EPA estimates that the half million abandoned mines across the country could cost as much as $50 billion to clean up.

**Loopholes in the Clean Water Act Allow Hardrock Mines to Poison Our Waters**

While there is not a single solution to the problems posed by hardrock mining, one obvious step is to prevent mines from dumping their toxic wastes into our lakes, rivers, and wetlands. Hardrock mines produce millions, sometimes billions of tons of waste. The production of one gold ring produces 20 tons of mine waste. Mine waste and tailings frequently contain toxic chemicals such as arsenic, cadmium, and lead. Unfortunately, it has become a common industry practice for mines to use our lakes, streams, and other waters as cheap toxic waste dumps.
In theory, the Clean Water Act (CWA) should stop this destructive practice. One of the primary goals of the act was to stop the use of the nation’s waters as disposal sites for industrial wastes. The problem is there are two loopholes in the CWA that allow many hardrock and surface coal mines to treat the nearest river valley or lake as a waste dump for massive quantities of tailings and overburden. Mines that have exploited these loopholes have had devastating impacts on local communities, fish, and wildlife populations—effects often felt for decades.

1. **The first loophole is found in EPA and Army Corps of Engineers (Corps) regulations** that state that Clean Water Act protections do not apply to what the Corps calls “waste treatment systems.” This exclusion allows mine developers to build a dam across the mouth of a valley and dump their wastes into the waters behind the dam because these waters have become part of a “waste treatment system” and are no longer considered to be a river, lake, or wetland deserving of protection. This legal fiction—that waters impounded by mine developers are no longer waters—defeats the very purpose and spirit of the CWA.

2. **The second loophole resulted from a 2002 revision of regulations that changed the meaning of the word “fill” under Section 404 of the Clean Water Act.** Section 404 was intended to regulate the disposal of wood chips, soil, plastics, clay, sand, or related materials normally associated with dredging and construction-related activities. Now, EPA and the Corps treat the discharge of tailings from hardrock mines and overburden from coal mines as fill. The effect of this change is that hazardous contaminants from mine waste are treated the same as relatively innocuous organic building materials.

**We Can Close the Mining Loopholes**

While discharging wastes into wetlands, streams, and lakes may be cheaper for mining companies, it is not the only way of doing business. Mines can operate profitably without discharging their wastes into the nation’s waters. Over 30 years ago, EPA adopted a zero discharge standard for mines using cyanide or similar processes to extract metals such as gold and copper. That standard, if applied consistently today, would prohibit hardrock mines from “storing” their wastes in our waters.

The good news for people who care about clean water, community health, and abundant wildlife is that EPA and the Corps can close the loopholes with two simple rule changes.

1. First, the agencies should explicitly limit the waste treatment system exclusion to only manmade waters. This was, in fact, how EPA originally interpreted the regulation back in 1980.

2. Second, EPA and the Corps can revise the 2002 definition of fill to again exclude waste disposal.

The current waste disposal practices of hardrock mines and surface coal mines are an indefensible throwback to a time when polluters could legally poison our waters. It is time to close the mining loopholes.