

PEBBLE MINE, BIG RIPPLES

A PRIMER ON THE PROPOSED GIANT HOLE IN SOUTHWEST ALASKA

Could impact world's richest salmon system.

BY TOM REALE

For those of you new to the whole Pebble Mine vs. Bristol Bay salmon controversy, here's a synopsis of the issue to date, along with a few new wrinkles. A group calling itself the Pebble Partnership, "an Alaska limited partnership between Anglo American PLC and Northern Dynasty Minerals Ltd.," seeks to develop the world's largest copper, gold and molybdenum mine, and locate it in Alaska. Normally a production of the size and scope of this project would entail quite a bit of con-

troversy, given the public relations problems suffered by the mining industry in recent years. Failed dams, deaths of coal miners, pictures of entire mountains ripped apart and turned into enormous open pits - these are not the kinds of things that portray mine operators as warm and fuzzy outfits.

The Pebble Mine project, though, has an even greater hill to climb when it comes to gathering public and regulatory acceptance. The project's location is in Southwest Alaska, on the Alaska Peninsula, near the headwaters of only the most productive salmon system in the world, the Bristol Bay sockeye fishery.

Given the proposed location of the mine, and given the financial, cultural, political and environmental issues involved, controversy is pretty much guaranteed. However, as you look into the proposal, and you learn about the issues involved, the size of the problem and the implications for the area can stagger the imagination.

FOR STARTERS, when reading about the project, you quickly get into facts and figures that seem nearly incomprehensible. On the one side, the sheer size of the Bristol Bay salmon run is amazing - up to 60 million fish per year returning



There are probably few wetlands in the Northwest as undisturbed as this one above Lake Iliamna, near where an international consortium wants to put in a large mine. (EPA)

to their natal streams. This run supports untold numbers of commercial, sport and subsistence fisheries, and is worth millions of dollars a year. One of the aspects of this run that's emphasized by opponents of the mine is that this salmon resource is an infinitely renewable one that would be endangered by the development of the mine. People can harvest up to half of that total number of fish every year, and like a huge fish factory, the Bristol Bay region will continue to supply more salmon into the foreseeable future.

The numbers you encounter when reading about the Pebble Mine project are every bit as impressive. Here are a few examples to chew on: According to the mine's proponents, this is the largest contained gold and contained copper deposit in North America. The deposit is more than a half mile deep, and holds an estimated 80 billion pounds of copper, 5.5 billion pounds of molybdenum, and over 100 million ounces of gold. At 2011 prices, that's something like 500 billion dollar's worth of metal. The open pit mine would be a mile deep and 2 to 3 miles wide.

To get this stuff out of the ground and to the market, the largest dam ever built would create an impoundment holding back something like 10 billion tons of sulfide waste. The chemical composition of this mine waste has been compared to battery acid. The dam would be 700 feet high and cover several square miles. Eventually a second dam would be required - these dams would be among the largest man-made structures on earth.

The potential for disaster, should these dams fail or leak, seems self-evident. In addition, these mining wastes would remain poisonous and have to be monitored for, not 100 years, not 1,000 years, not even 10,000 years, but forever. That's right.

For. Ever.

These concerns are considered by the mine's spokesman as being a mere engineering problem. In other words, what could go wrong in monitoring and containing 10 billion tons of battery acid behind an earthen dam, forever?

The construction of the mine and dam would only be a part of the project. In addition there's the construction of an 86-mile-long road, a plant to supply the power for the complex, and a large shipping port to get the product from the mine to overseas markets. This enormous conglomeration of infrastructure would turn the area from a pristine wilderness into a mining district. This in turn would have untold impacts on subsistence hunting and gathering activities of local Native populations and on commercial fishing and sport fishing and hunting interests.

OPPOSITION TO THE PROJECT is gathering allies as the project gets closer to the permitting phase. According to Ted Williams, writing in *Audubon Magazine* in the Nov.-Dec. 2012 issue, the mine's opposition includes "700 businesses; 700 hunting and angling groups; 77 commercial fishing groups; 200 chefs and restaurant owners; the National Council of Churches, representing 45 million people; major newspapers; leading jewelry retailers; and ultra-conservative legislators."

Recently the mine has drawn the attention of the federal Environmental Protection Agency. The EPA assembled a report at the request of a coalition of Alaska Native and sportfishing groups. The groups asked the EPA to get involved due to the perceived lack of oversight on the project by state Department of Natural Resources officials. The Alaska resource development oversight authorities are thought by environmental groups to be too friendly with extractive industries, and to have never met a mine they didn't like. The EPA asserted its authority under the federal Clean Water Act, a move that was lauded by mine opponents and condemned as federal overreach by the mine's backers.

In addition, opposition groups are finding more and more opportunities to file suits against the mine's progress. The latest move was a petition filed by the Center for Biological Diversity to protect a population of harbor seals residing in Iliamna Lake and thought to be

the only known population of harbor seals in freshwater in the U.S.

As of this writing, the Pebble Mine group has yet to submit a formal mining plan. Once that step occurs, expect more public relations and lobbying activity from the Pebble Partnership and from the groups opposed to the mine. In the meantime, Alaska residents and Lower 48 sportsmen can enjoy the point and counterpoint as both groups continue to wage war in the media. We'll keep our readers posted as the issue progresses. **ASJ**

ALASKA GOVERNOR WANTS TO SPEND \$30 MILLION TO STUDY CHINOOK PROBLEMS

Following up on the collapse of some stocks last year, Alaska's governor said his 2014 budget would include \$10 million for a comprehensive study of the state's Chinook salmon.

Some funds would come from the Department of Fish & Game's operating budget, and will be used to develop strategies to enhance viability and increase returns, using improved information from indicator systems across Alaska, according to Gov. Sean Parnell's office.

All totaled he hopes to spend \$30 million over five years on the Chinook Salmon Research Initiative to better the state's understanding about what affects runs from year to year. Last season saw disastrous runs on the Yukon and some Cook Inlet waters, but also improving returns on the Nushagak.

Biologists will look at adult and juvenile fish, harvests, as well as genetics, biometrics, and local and traditional knowledge. Data from marine surveys and near-shore trawl research in the Bering Sea and Gulf of Alaska could help identify key biological and oceanographic factors affecting salmon growth and productivity.

"Alaska's fishing industry is a vital economic engine in our state," Parnell said. "Chinook salmon are a cornerstone of our culture and livelihood. I look forward to working with the Legislature in support of this research initiative." **-ASJ**