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Protecting Bristol Bay: Saving America's Last Wild Places

The cool, shallow waters of Alaska's Bristol Bay are surrounded by tundra, crisscrossed by rivers, and dotted with lakes large and small. Bears, wolves, seals, and whales flourish in this nearly untouched ecosystem, all drawn by the same lure: tens of millions of thrashing salmon, charging upstream to spawn. Huge salmon runs are the linchpin of this ecosystem, supporting valuable commercial fisheries, Alaska Natives, and a vast array of wildlife. Tragically, the whole system could be put at risk if giant mining companies are allowed to pursue their narrow interests. NRDC's BioGems program, dedicated to winning permanent protection for endangered wild regions across the Americas, is fighting to preserve this pristine ecosystem.

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Destructive Mining Could Devastate Bristol Bay

Foreign mining companies, including British mining giant Anglo American, Canadian-based Northern Dynasty, and British-based Rio Tinto are eyeing low-grade gold, copper, and molybdenum deposits on pristine state-owned land in the Bristol Bay watershed in an area known as Pebble. A Bush-era management plan could also open up more than 1 million acres of public land in the region to mining.

Large-scale hard rock mining is a destructive and dirty process. A study of mines similar to the proposed Pebble Mine showed that 93 percent of the operations polluted nearby waters.¹ Initial plans for Pebble Mine call for an open pit mine 2 miles wide and 2,000 feet deep and an underground mine 5,000 feet deep. Colossal earthen dams up to 740 feet high would be built to store in perpetuity more than 10 billion tons of mining waste. Mine-related infrastructure, including major power plants, hundreds of miles of slurry pipelines, and 86 miles of new road to a new deep water port in Cook Inlet would also be

necessary. The pit, dams, and roads—all built in an active earthquake zone—will put at risk Bristol Bay's rivers and ground and surface waters. While a single accident here would be disastrous, even the construction and day-to-day operation of the mine could harm the biodiversity and economic sustainability of the entire watershed.

Pebble Mine Puts Wildlife at Risk

- Pebble Mine includes a proposed port in Cook Inlet, which could disrupt the highly endangered Cook Inlet beluga whales with increased shipping traffic through their critical habitat, as well as chemical and noise pollution.
- Bristol Bay's pristine wetlands, lagoons and the upper reaches of its watershed support millions of migratory waterfowl and terrestrial birds, including bald eagles, Steller's eiders, rock ptarmigans, Arctic terns, sandhill cranes, swans, and emperor geese.
- An unusual, little-studied population of freshwater harbor seals lives year-round at Lake Iliamna, Alaska's largest freshwater lake, which



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www.nrdc.org/policy

www.savebiogems.org

BioGems Facts



You can do your part to help protect Bristol Bay by taking action at www.StopPebble.org

drains into Bristol Bay via the Kvichak River. There is only one other population of freshwater harbor seals in the world. Salmon are a key part of the Lake Iliamna seals' diet.

- Brown (Grizzly) bears, wolves, whales, and eagles also depend on the salmon runs.
- Calving grounds for the Mulchatna caribou herd—one of Alaska's largest—include the lands at and around the proposed Pebble Mine.

Bristol Bay: Fast Facts

Where: Southwestern Alaska, United States

What's at stake: Huge salmon runs supporting bears, whales and other wildlife in largely untouched wilderness

Threatened by: Large-scale hard rock mining

Animals include: Salmon, bears, wolves, eagles, whales, and freshwater harbor seals



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Alaska Depends on Bristol Bay Salmon

The Kvichak and Nushagak rivers, both of which feed Bristol Bay, are home to some of the world's largest wild salmon runs. Record sockeye salmon runs have exceeded 50 million fish annually. As the backbone of the economy, wild salmon generate more than \$445 million in revenue annually—including commercial and sports fishing, hunting, tourism, and subsistence.² Wild salmon have sustained native communities that rely on subsistence fishing and hunting for thousands of years.

Even minute increases of copper dust above natural levels in water (2 to 10 parts per billion) have been shown to damage the navigational ability of a salmon to return to its spawning stream.³ Given the risk that mining poses to salmon it is no wonder that more than 80 percent of Bristol Bay residents oppose the Pebble Mine.⁴

behind Pebble Mine, and meeting with senior officials at Anglo American, Rio Tinto, and the metals division of Mitsubishi Corporation. Mitsubishi divested all of its shares in the Pebble project in February 2011, which is an important building block as we increase pressure on Anglo American and Rio Tinto to do the same.

The Obama Administration recognized the area's importance when it barred offshore oil and gas exploration and development in Bristol Bay, calling it "too special to drill" and "a national treasure that we must protect." Bristol Bay must be protected from large-scale mining as well. To that end, the Environmental Protection Agency should initiate action under 404(c) of the federal Clean Water Act to prohibit or restrict the discharge of dredge or fill material from large-scale mining in the Bristol Bay watershed. And the Bureau of Land Management should reject a plan that would open 1.1 million acres to hard rock mining and allow the creation of a large-scale mining district in this pristine area. Going forward, Congress and the State of Alaska should ensure protection for this important ecosystem by pushing back against mining companies seeking to turn this wilderness area into a network of mining operations.

Protecting Bristol Bay from Foreign Mining Companies

NRDC is working to bring national and international attention to the region, generating hundreds of thousands of petitions in protest of the project to the foreign mining companies

The proposed mine site and the Bingham Canyon open-pit mine outside of Salt Lake City, Utah. The pit is 2.75 miles in diameter and .75 miles deep. The proposed open-pit mine for Pebble Mine would rival Bingham Canyon's.

¹ Kuipers, J.R., Maest, A.S., MacHardy, K.A., and Lawson, G., Comparison of Predicted and Actual Water Quality at Hardrock Mines: The reliability of predictions in Environmental Impact Statements, 2006, www.earthworksonline.org/pubs/ComparisonsReportFinal.pdf.

² Duffield, J.W., Bristol Bay Wild Salmon Ecosystem Economics: 2008 Update, 2009. Duffield, J.W., Neher, C.J., Patterson, D.A., and Goldsmith, O.S., Economics of Wild Salmon Ecosystems: Bristol Bay, Alaska, 2007. www.fs.fed.us/rm/pubs/rmrs_p049/rmrs_p049_035_044.pdf.

³ Woody, Carol Ann, Salmon and the Proposed Pebble Mine, Fish for the Future Foundation, www.pebblescience.org/pdfs/Pebble_copper_salmon.pdf.

⁴ Hellenthal and Associates, Bristol Bay and Lake Peninsula Boroughs Pebble Mine Survey, October 2009, www.renewableresourcescoalition.org/sites/www.renewableresourcescoalition.org/files/resolutions-polls/Hellenthal%20Poll%20-%2020140ct09.pdf

