The

LOGBOOK "CSIP"

The CENTER for SCIENCE in PUBLIC PARTICIPATION

"Technical Support for Grassroots Public Interest Groups"

The Story Behind the Pebble DEIS



The Pebble Mine has been the featured article in this publication several times. Why again? Part of the answer is, of course, it is an important project, is still a live proposal and still in the news. The other part of the answer is the role science and politics are playing in the latest chapter of this story.

The most recent chapter begins in 2011 when the EPA, then under the Obama administration, decided to begin an assessment called the Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, or the Bristol Bay Watershed Assessment. The Clean Water Act authorizes the Army Corps of Engineers (the Corps) or an approved state to issue permits for discharges of dredged or fill material at specified sites in waters of the United States. Section 404(c) of the Clean Water Act however, authorizes EPA to restrict, prohibit, deny, or withdraw the use of an area as a disposal site for dredged or fill material if the discharge will have unacceptable adverse effects on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas. Although the Corps processes approximately 80,000 permit actions per year, EPA has used its Section 404(c) authority very sparingly, issuing only 13 final veto actions since 1972.

Bristol Bay is clearly a "fisheries area" so it clearly falls under the mandate of the EPA's authority. Sever-

al things made the EPA involvement on Pebble controversial. First, the EPA was using its 404(c) veto authority preemptively. That is, EPA anticipated issuing what amounted to a veto to the Pebble project before Pebble had submitted a permit application for the project, and before the project had undergone a NEPA review via an environmental impact statement (EIS). EPA has not done this before. Since I have been dealing with NEPA reviews for many years now, I can recall being told on several occasions in the 1990s by industry environmental representatives 'just let us know where we can mine, don't make us spend all the money and time to do an EIS only to find people don't want a mine'. That outlook has changed, largely because the EIS process seldom leads to a mine denial.

The second controversial issue was that EPA initiated this investigation at the request of tribal and regional interests. The EPA, unlike the State of Alaska, recognizes tribal governments as sovereign bodies, with rights not preempted by the federal constitution or laws. People in the Bristol Bay region oppose this project by an approximate 80%-20% margin. Pebble had repeatedly promised, but delayed, submitting a permit application to the regulatory agencies. People in the region wanted closure. The project had been a major issue since 2004, and people did not want this project hanging over their heads for another decade (it has).

I have reviewed several EPA assessments that were written in support of earlier 404(c) veto actions. The Watershed Assessment is head and shoulders better than any of its predecessors. An initial draft for public review came out in 2012, and received a peerreview by a panel of academic and industry experts. It went back for a second draft. Again, it was released for public review and peer-review (2013). Each peer-review drew positive and negative comments, as most peer-review processes do. EPA issued its Final Bristol Bay Watershed Assessment in 2014, and made a formal recommendation to limit the size of major metal mines in the Bristol Bay watershed that would have effectively prohibited the develop-

ment of the Pebble mine.

The Pebble mine sued, asserting that the Watershed Assessment was a biased document based on faulty science. The 'bias' rises from the communication between an EPA employee and tribal interests in Bristol Bay, assisting them in submitting their appeal to the EPA to conduct the assessment. The 'faulty science' is based on pure hypocrisy from the Pebble Partnership, who want the public to believe their scientists are the best (they most certainly are not), and that their science proves that the mine will have no significant impact to fisheries in Bristol Bay. University and government scientists disagree, and see significant risk to Bristol Bay from the Pebble mine.

When the Trump administration arrived, Pebble executives quickly met with new government appointees, and the EPA quickly agreed to suspend the preliminary determination coming from the Watershed Assessment, in order to allow Pebble to conduct an EIS, something the public had been requesting for over 10 years. The only federal agency with authority to conduct an EIS was the Army Corps of Engineers. When Pebble filed its application in December 2017, the Corps announced it would complete a Draft EIS in 12 months and a Final EIS in another 12 months. The Corps had just completed an EIS on the Donlin mine, which took 6 years to complete, using the same EIS contractor





that was hired for the Pebble EIS. Personally, I have never seen a large mine EIS completed in 2 years, yet Pebble is potentially the largest mine in North America, and in sensitive habitat.

During the Draft EIS development, the mine design had major changes, background data on fisheries was not completed along the road corridor because it was a new alignment, geotechnical work on the tailings dams was unfinished, and dam design was only preliminary. In order to make the project environmentally acceptable, mining would high-grade the surface deposit to minimize waste rock production, and all the waste rock and potentially acid generating tailings were to be placed back in the open pit for closure. However, backfilling the open pit is unrealistic because it would bury the remainder of the open pit resource, and potentially the underground resource too. This would leave 80% of the deposit in the ground, an unrealistic scenario given the expectation of investors for developing the resource.

Unlike virtually every other large mine proposal, or expansion, there is no economic analysis accompanying the application. Ex-Rio Tinto environmental scientist and manager Richard Borden contends the mine, as proposed, is not economic. A commenter on the DEIS for the Department of Interior stated "Based on these identified deficiencies, the DEIS is so inadequate that it precludes meaningful analysis." Daniel Schindler, a professor in the School of Aquatic and Fishery Sciences at the University of Washington, said: "It is absolutely clear that it (the DEIS) has way underestimated risks and does not pass as credible science."

I believe that Trump administration operatives are using the Pebble EIS process as a model for the new right wing EIS process, one that is driven by timelines, not by science. Timelines for the Pebble EIS were established when the permit was filed, and the

CENTER for SCIENCE in PUBLIC PARTICIPATION

224 North Church Avenue Bozeman, Montana 59715-3706

Phone: 406-585-9854 Fax: 406-585-9854 e-mail: csp2@csp2.org Web: www.csp2.org

The Center for Science in Public Participation is a 501(c)(3) non-profit corporation

Volume 23, Number 1, Fall 2019

CSIP² Board of Directors

Ann Maest, Boulder, CO
Anna Cederstav, Oakland, CA
David Chambers, Bozeman, MT

Glenn Miller, Reno, NV
Alan Young, Ottawa, ON

Army Corps of Engineers has made every effort to keep to the timeline. This process essentially says to the scientists involved, do your best, but what you have at the deadline is what we will use. This is not science, it is project management. It is more akin to sweeping everything into a bucket and then sorting it to see what you have collected.

I am hopeful that the courts will not allow the Army Corps to proceed based on an EIS that is clearly deficient. However, the courts are becoming more and more politicized, and the courts in general have been only grudgingly supportive of environmental improvements or tribal interests for almost a half century. In this current political era, belief dominates reason. The National Environmental Policy Act, the law that requires an environmental impact assessment, does not require that the most environmentally benign alternative be chosen for development. NEPA does require that a defensible scientific analysis be performed. Politics can govern the final decision, but not the EIS process.

CSP²/CSP²/CSP²/CSP²/CSP²/CSP²

FROM THE EXECUTIVE DIRECTOR

We live in interesting, yet strange, times. Our value system used to value integrity, honesty, compassion, and a sense of fairness. There was a sense of pride in keeping promises, saving instead of borrowing, and using science to inform decision-making. We can see many of these issues in the article on Pebble in this newsletter.

What we see with Pebble is different scientists using the very same data sets to come to diametrically different conclusions. Company scientists and scientists for the Army Corps of Engineers believe the data says there will be no effect on the fisheries resource in Bristol Bay from the Pebble mine. Scientists from the EPA, universities, and conservation organizations believe the long-term risks are substantial. Who is right?

For a long time I have openly questioned why there



Dave Chambers is the Executive Director of **CNP2**

has never been a government investigation into environmental impact assessments, and their failure to accurately predict impacts to water resources by mines. Kuipers and Maest, two non-profit researchers, looked at this issue in 2006, and found that 76% of their case study mines had mining-related exceedances in surface water or groundwater.

Federal agencies have been conducting environmental impact analyses since the early 1970s. There has never been an environmental impact statement that predicted a mine would pollute, yet most mines do pollute. Why do mining EISs get it so wrong?

I recently attended a meeting with government and university fisheries research scientists. We asked ourselves this same question. One of our joint concerns is that environmental impact analyses does not follow a rigorous scientific process. Important questions are often not asked, or when asked aren't answered. Alternatives that might provide significant mitigation are often ignored because they are not the most profitable approach.

Most important, there is no peer review process for environmental impact statements. Peer review is an essential part of the scientific process, yet it is not used for EISs. The findings of the proponents science is often the final word. Moreover, courts, through the arbitrary and capricious standard, make it extremely difficult to professionally challenge the findings of an EIS, regardless of the qualifications of the challenger.

We need to strengthen the science in the EIS process in order to adequately inform the decision making process. The EIS process is broken with regard to the application of science, and it needs to be fixed. Society will be better served with a science-based EIS process, rather than the time-driven EIS process politicians today would like us to follow.

CSP²/CSP²/CSP²/CSP²/CSP²/CSP²



THANKS to the Following Donors for Their Support!!!

BENEFACTOR (\$1,000 & above)	Bill Leighty* Juneau, AK	Houston Kempton Boulder, CO
Guarantor (\$500 - \$999)	Gordon & Shirley Rock Mercer Island, WA	
<u>Steward (\$250 - \$499)</u>	Jim & Kaylene Eberhardt* Anacortes, WA	
<u>Patron (\$100 – \$249)</u>	Marianne Mulrey* Austin, TX	Connie Chambers* Geneva, IL
<u>Sponsor (\$50 - \$99)</u>	Sylvia & Gary Schultz Fairbanks, AK	Ruth McHenry & Cliff Eames Copper Center, AK
Supporter (\$49 & below)		
		* Thanks! A repeat donor

- Become a Donor to the **CENTER for SCIENCE in PUBLIC PARTICIPATION**. You can help us to provide local public interest organizations with technical analysis and policy support. CSP² is the only organization focusing on providing technical support to local groups on local issues. We realize that there are a lot of good causes, and that everyone is asking for your support. A donation of \$50, or more, would help our efforts in furthering rational debate on natural resource issues
- You can make a one-time credit card donation, or set up a monthly donation, by going to the website at www.csp2.org

We would like to publish our donors names in The Logbook. If you do **not** want your name published, please let us know when you send in your donation. Thanks

Mail to: CENTER for SCIENCE in PUBLIC PARTICIPATION 224 North Church Avenue Bozeman, MT 59715–3706

Thank you for your support. Your contribution is tax deductible.

