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September 18, 2014

Water Docket # EPA-R10-OW-2014-0505  
U.S. Environmental Protection Agency  
Mail Code: 2822T  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

RE: EPA's Proposed Determination Pursuant to Section 404(c) of the Clean Water Act for the Pebble Deposit Area, Southwest Alaska

To the Administrator:

Thank you for the opportunity to provide comments on the Environmental Protection Agency's (EPA's) Proposed Determination for Pebble Mine entitled "Proposed Determination of the U.S. Environmental Protection Agency Region 10 Pursuant to Section 404(c) of the Clean Water Act, Pebble Deposit Area, Southwest Alaska" (Proposed Determination). As stated in comments submitted previously, the New England Aquarium (Aquarium) and FishWise support the EPA's efforts to protect the Bristol Bay ecosystem from potential impacts that large-scale mineral extraction from the proposed Pebble mine project are likely to generate. The analysis put forward in the EPA's Final Report on the Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska (Final Assessment) released in January 2014 underscores why our organizations stand behind the EPA's actions to protect this ecologically, economically, and culturally important area. The analysis and review contained in the Final Assessment reinforce the high level of risk to Bristol Bay salmon populations associated with large-scale mineral extraction. As such, we urge the EPA to exercise its Clean Water Act authority under Section 404(c) by moving forward with recommending and finalizing the Proposed Determination to restrict the discharge of dredged or fill material in the Bristol Bay watershed, as this region represents a rich and unique area for fish spawning and wildlife habitat.

As one of the preeminent aquariums in the United States, the New England Aquarium is a global leader in ocean exploration and marine conservation. In addition to our exhibit halls, which educate over a million visitors a year on marine and aquatic ecosystems and their inhabitants, the Aquarium is a leading ocean conservation organization with research scientists and experts working around the globe for the preservation and sustainable use of ocean resources. Central to the Aquarium's conservation work is our Sustainable Seafood Program, through which we have partnered with major seafood buyers such as Ahold USA, Darden Restaurants, Sea Port Products, The Fresh Market, Starwood Hotels and Resorts, and Gorton's, Inc. to advance the sustainability of wild-capture fisheries and aquaculture operations worldwide.

Additionally, FishWise is a non-profit consultancy that partners with seafood companies throughout the supply chain to design and implement sustainable seafood programs. FishWise business partners include some of the largest grocery retailers and seafood suppliers in the United States, including Safeway, Target, Hy-Vee, Lusakamerica, Santa Monica Seafoods, and Sea Delight. Together, the business partners of



**New England  
Aquarium**

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our two organizations buy hundreds of millions of pounds of seafood annually. Bristol Bay sockeye salmon is an important product for many of these companies.

Bristol Bay is home to one of the world's largest entirely wild salmon populations. The connectivity between the watershed's aquatic systems and the lack of development (e.g., dams and other flow management structures) contribute to the diversity and productivity of this unique habitat. The Final Assessment indicates that even the smallest mine scenario (0.25 billion ton size) would have unacceptable and irreversible direct and indirect negative impacts (e.g., removal of wetland, lake, stream, and pond habitats, reduced stream flow, diminished genetic diversity, and loss of spawning habitat) on the Bristol Bay watershed and associated salmon habitat.<sup>1</sup> Given the Pebble deposit's production potential of 11-12 billion tons of ore and statements from Northern Dynasty Minerals to investors, the development of the Pebble deposit would likely far exceed this 0.25 stage mine and lead to even greater damage to this intact ecosystem.

Additionally, the Final Assessment outlines other potential impacts from mine operations related to the necessary transportation corridor and other induced development. It is clear that the failures commonly associated with mining operations of the scale proposed for the Pebble deposit, combined with potential impacts from infrastructure development and general mining operations, could have substantial long-lasting and cumulative impacts to the salmon resource as well as the ecology and diversity of the Bristol Bay watershed. Given the relatively pristine state of the Bristol Bay watershed, there are no compensatory actions or improvement efforts that could sufficiently mitigate the potential adverse impacts associated with mining the Pebble deposit or return the ecosystem to its current state.

Wild salmon is a critical commodity within the US and international seafood industry. As one of the top three most popular seafood choices among US consumers, more than 100,000 metric tons of Pacific salmon is consumed annually.<sup>2</sup> The Bristol Bay fishery, one of the last truly wild salmon fisheries in the world, is highly valued throughout the seafood industry, supplying on average nearly half of the world's wild sockeye salmon and representing roughly a third of the total Alaska salmon harvest value.<sup>3</sup> It is also the primary economic driver for the Bristol Bay region, providing approximately 12,000 jobs and directly generating \$390 million a year in output value. According to a recent report, "in 2010, harvesting, processing, and retailing Bristol Bay salmon and the multiplier effects of these activities created \$1.5 billion in output or sales value across the United States".<sup>4</sup> As an engaged stakeholder with a vested interest in the health and sustainability of Bristol Bay resources, we are particularly concerned that partial or total loss of salmon production in Bristol Bay due to ecosystem degradation will adversely affect those directly tied to the resource as well as end-user markets through factors such as supply constraints and price increases.

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<sup>1</sup> An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska (Final Report), Environmental Protection Agency (January 2014).

<sup>2</sup> Knapp, G., Roheim, C. A., & Anderson, J. L. (2007). Overview of U.S. Salmon Consumption (Ch. 8) In: *The great salmon run: competition between wild and farmed salmon*: TRAFFIC North America.

<sup>3</sup> Knapp, G., Guetttabi, M., Goldsmith, S. (2013). The Economic Importance of the Bristol Bay Salmon Industry. Institute of Social and Economic Research, University of Alaska Anchorage, Anchorage, AK.

<sup>4</sup> *Ibid.*



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Recognizing the destructive potential of the proposed Pebble Mine, the Aquarium and FishWise join a diverse group of stakeholders including commercial fishers, sport fishing and hunting organizations, chefs and restaurant owners, churches, and Bristol Bay tribal communities in recommending that the EPA move forward in exercising its authority under Section 404(c) of the federal Clean Water Act to protect rivers and wetlands important for fish spawning and wildlife habitat by recommending and finalizing the Proposed Determination.<sup>5</sup> Section 404(c) authorizes the 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 (including spawning and breeding areas), wildlife, or recreational areas. The implementing regulations define “unacceptable adverse effect” as impact on an aquatic or wetland ecosystem which is likely to result in significant loss of or damage to fisheries, shell fishing, or wildlife habitat or recreation areas.<sup>6</sup> The Final Assessment repeatedly references the likely impacts and risks to salmon spawning habitat posed by mining development and activities. As such, it is well within the statutory authority of the EPA to exercise its 404(c) authority to prohibit mining disposal activities in the region even before an application has been submitted to or approved by the Army Corps of Engineers.<sup>7</sup>

Given the information presented in the Final Assessment and Proposed Determination, it is clear that the risks to the ecosystem at large, as well as the ecological resources and indigenous cultures within the Bristol Bay watershed, far outweigh any potential benefits associated with large-scale mineral extraction. What’s more, there are no mitigation measures that could sufficiently compensate for the irreversible harm posed by the mining the Pebble deposit. Indeed, the importance of the salmon resource to the seafood industry, including the many jobs it supports from fishermen to retailers, further reinforces the need to protect this resource.

Once again, we appreciate this opportunity to comment on the Proposed Determination. We are hopeful that the EPA will utilize its authority to ensure the natural and cultural resources in and around Bristol Bay are conserved and managed in a sustainable manner in perpetuity.

Sincerely,

Meghan Jeans  
Director of Conservation  
New England Aquarium

Tobias Aguirre  
Executive Director  
FishWise

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<sup>5</sup> 33 U.S.C §1344(c) (2012)

<sup>6</sup> 40 C.F.R. § 231.2(e) (2011)

<sup>7</sup> 40 C.F.R. § 231.1(a) (2011)