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Mr. Casey Sixkiller
Regional Administrator, Region 10
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

Disclaimer: The opinions expressed herein are our own and do not necessarily reflect the views of The Johns Hopkins University.

RE: EPA-R10-OW-2022-0418 - Proposed Determination To Prohibit and Restrict the Use of Certain Waters Within Defined Areas as Disposal Sites; Pebble Deposit Area, Southwest Alaska

Dear U.S. Environmental Protection Agency Region 10,

We are researchers at the Johns Hopkins Center for a Livable Future, based at the Bloomberg School of Public Health in the Department of Environmental Health and Engineering. The Center engages in research, policy analysis, education, and other activities guided by an ecologic perspective that diet, food production, the environment, and public health are interwoven elements of a complex system.

We are pleased to submit this comment regarding the Proposed Determination To Prohibit and Restrict the Use of Certain Waters Within Defined Areas as Disposal Sites; Pebble Deposit Area, Southwest Alaska (EPA-R10-OW-2022-0418) as it relates to the Bristol Bay watershed and its sockeye salmon fishery. We appreciate the work of the U.S. Environmental Protection Agency (EPA) in undertaking this determination and support both the proposed prohibition and proposed restriction laid out in this determination as critical protections needed not only for the survival of the Bristol Bay sockeye salmon fishery, but also the larger public, environmental, and economic health of the region.

The Bristol Bay watershed is home to the largest wild sockeye salmon fishery in the world and the proposed Pebble Mine would be one of the largest open-pit copper and gold mines in the world (EPA, 2014a). In 2021 alone, the Bristol Bay commercial salmon season had a sockeye salmon run of 66.1 million fish — the largest on record (ADFG, 2021). Sockeye salmon are sustainably harvested and relatively low in embodied energy, making them a climate friendly fishery (Brown et al. 2022). In 2019, the commercial fishery supported some 15,000 jobs and as much as \$2 billion in economic output (McKinley Research Group, 2021). Siting the mine at the headwaters of the sockeye salmon fishery would pose serious threats to this unparalleled fisheries resource.

In 2014, the EPA and its former Administrator, Gina McCarthy, determined that “...Pebble Mine would likely have significant and irreversible negative impacts on the Bristol Bay watershed and its abundant salmon fisheries” (EPA, 2014c). In 2020, the U.S. Army Corps of Engineers (USACE) denied the Pebble

Limited Partnership's (PLP) CWA Section 404 permit application on the grounds that their 2020 Mine Plan was not in the public interest and that "the proposed project would cause unavoidable adverse impacts to aquatic resources which would result in Significant Degradation to aquatic resources" (EPA, 2022). Mining the Pebble deposit would result in extensive loss of waterways, risk toxic contamination of the watershed in the event of a mine tailings dam failure (EPA, 2014d; EPA, 2022) and risk contaminating waterways with copper particles that impair salmonid's sense of smell and subsequent ability to return to spawning grounds (Welch, 2019; McIntyre et al. 2012). Along with many others, we contend that the Bristol Bay watershed is an abundant, thriving, and sustainable ecosystem that should not be sacrificed.

Salmon is also a key part of Bristol Bay Alaska Native communities' cultures — their relationship to salmon has been maintained for the past 4,000 years (EPA, 2014a; EPA, 2022). These communities practice a subsistence-based way of life and rely heavily on Bristol Bay salmon as a source of important nutrients like protein and omega-3 fatty acids (Johnson et al. 2009; EPA, 2014a; EPA, 2014b; EPA, 2022). Moreover, virtually every household in the Bristol Bay watershed uses subsistence resources and salmon constitutes at least 52 percent of the subsistence harvest in this region (EPA, 2014a). Yet, this highly sustainable relationship would be threatened by the proposed Pebble Mine, which would operate for only 20 years but could leave behind a toxic legacy in perpetuity (USACE, 2019; EPA, 2022).

Food security and the global seafood supply are threatened by the impending crises of a changing climate, growing population and myriad other global stressors. Wild Bristol Bay sockeye salmon represents a vital resource to the health of future generations, both locally and around the world as part of the global seafood supply. We urge the U.S. EPA to consider this comment, enforce the determination under consideration, and ultimately uphold its responsibilities under the Clean Water Act to protect the survival of the Bristol Bay sockeye salmon fishery and the larger public, environmental and economic health of the region.

Sincerely,

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