

**Proposed Pebble Project  
Preliminary Draft Environmental Impact Statement  
Review Comments**

**Reviewer:** NARF Technical Team  
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**Chapter:** Chapter 4: Environmental Consequences  
**Section:** Section 4.7 Cultural Resources  
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**Comments**

**Section 4.7 Cultural Resources.** Please incorporate historic properties into this section. Historic properties are a type of cultural resource and do not receive special treatment under the National Environmental Policy Act (NEPA).

In the first paragraph of this section, the U.S. Army Corps of Engineers (USACE) states, *"traditional resource collecting areas (subsistence)"* are a type of cultural resource. USACE needs to cross reference this in the Subsistence sections (Sections 3.9 and 4.9) of this environmental impact statement (EIS). These sections do not use the term "cultural resource" one time. Also, in the first paragraph of this section, USACE states, *"Currently, the project footprints for the mine site, the transportation corridor, Amakdedori port, and the natural gas pipeline guide the analyses of environmental consequences on cultural resources."* This is different than the EIS Analysis Area USACE describes in Section 3.7.2 as follows: *"The area of analysis for cultural resources under NEPA is the claim block of the project at the mine site and the viewshed of the project footprint when data are available."* Please make the EIS Analysis Area in this section consistent with that of Section 3.7. Furthermore, in the first paragraph, USACE states, *"When cultural resources are identified within a part of the project footprint, direct, indirect, and cumulative effects that may result are considered. The potential for indirect effects is also considered, particularly visual impacts on cultural resources outside of the project footprint."* This makes little sense. Please explain why cumulative impacts not being considered outside of the project footprint.

The USACE needs to assess auditory and olfactory impacts to cultural resources. As we note in our comments for Section 3.11, the proposed project will have a smell that is different than the existing environment. Examples of new odors that the proposed Pebble Project could introduce to the environment, at a scale never experienced in the region before, include but are not limited to smells of operating heavy equipment, dust, and excavated earth. Mine construction and operation would also generate sounds at a scale not heard in the region before. Foreign

smells and loud noise will impact traditional cultural places, places of traditional teaching, and other cultural resources. These kinds of impacts will diminish the integrity of these places and change how the communities who value these places benefit from them.

As with Section 3.7, this Section 4.7 is too focused on specific point or linear features, like trails, campsites, documented archaeological sites, etc. Not that these sites and features are not important, but a greater effort should be made to understand and discuss the overall cultural impacts on the whole region. For example, hunting, camping, and gathering areas are not static. An area that is used on one trip may not be used on the next trip or next season, and a different area might be used, depending on where the greatest abundance of resources is located. Entire intact landscapes are important for subsistence, cultural, and spiritual values. The impacts of the proposed project with the extensive infrastructure in addition to the mine site itself should be considered on a landscape scale, rather than focusing only on individual features that can be located using GIS.

The USACE must take a hard look at all the potential impacts that the proposed project would impose on the entire watersheds and landscapes including the effected air, water, soil, plants, animals, and people in the region.

One way to appreciate the cultural value of the landscapes would be to conduct consultation and interviews with local residents to understand how this level of disturbance across a landscape will affect their culture and the resources on which they depend for their livelihoods.

Sociological conditions and changes should also be considered part of cultural resources. For example, if subsistence resources are fewer and more difficult to access due to avoidance of the affected areas and barriers such as linear transportation corridors, the community will have fewer subsistence resources and lower resiliency. A further shift to a cash economy, with attendant changes to resiliency, standard of living, risks of unemployment, and high cost of living would adversely affect the health and wellbeing of the people. Cultural heritage in the form of spiritual practices, stories, and oral history may be irrevocably lost if it is tied to an area affected by the mine or infrastructure of the proposed project.

**Section 4.7.1 Analytical Limitations.** In the opening paragraph of Section 4.7.1, the USACE's use of "*systematic cultural resource field investigations*" is another example of archaeological bias. Please change the language to "systematic cultural resources research."

In the second paragraph of Section 4.7.1, USACE states, "*The current data and analytical gaps allow for a limited discussion of the environmental consequences, and the ability to compare the relative impacts of one alternative over another is currently constrained, because the number and*

*types of resources that may be impacted are not fully known."* This is an understatement at best. How can USACE address environmental consequences with such limited data? Also, in this paragraph, USACE states, "*. . . it is not atypical during the National Environmental Policy Act (NEPA) process that field surveys by the applicant focus solely on the proposed action and have not been conducted for alternatives. Specifically, the U.S. Army Corps of Engineers (USACE) will be addressing these data gaps throughout its Section 106 process.*" The Section 106 process cannot possibly address these data gaps because the Section 106 process only addresses historic properties, which are one type of cultural resource. The NEPA process addresses all types of cultural resources regardless of whether they are included in, or eligible for inclusion in, the National Register of Historic Places. Using the Section 106 process would preclude the USACE from analyzing environmental consequences to all types of cultural resources. USACE needs to complete their cultural resource studies prior to the issuance of the Final EIS.

Ongoing evaluation under the National Historic Preservation Act Section 106 process is inadequate to characterize the new areas included in the proposed project and its alternatives. More detailed assessments, such as those conducted for the previous version of this project, need to be completed. Also, as noted in comments on the Subsistence section, information on subsistence uses for communities near these project elements is outdated, and more recent information needs to be compiled and provided prior to evaluation of alternatives so that potential impacts to the environment can be accurately and comprehensively described.

**Section 4.7.2 Impacts to Cultural Resources.** Please add olfactory to the types of impacts to cultural resources in Section 4.7.2.

In the third paragraph of Section 4.7.2, USACE states, "*Subsistence, as a way of life, would apply to the context of cultural resources.*" USACE needs to cross reference in Sections 3.9 and 4.9 that subsistence applies to cultural resources. Currently the term "cultural resource" does not appear in any subsistence section.

Also, in the third paragraph of Section 4.7.2, USACE states, "*These impacts would last through the project operations, and would cease when subsistence resources are re-established after closure.*" Please provide data and sources to support this statement. If this is an assumption, please state that it's an assumption.

Impacts on subsistence will cease when the mine discontinues operations, since the open pit, tailing storage areas, mine waste rock piles, and much of the infrastructure will still be present. Remaining facilities including roads, ports, ferries, and the open pit will continue to adversely impact subsistence resources, the accessibility to these resources, and the use of these

resources. For example, wildlife may avoid areas of human activity and be unwilling or unable to safely cross roads or other linear features.

Any new information obtained, and additional mitigation measures proposed, must be provided in the Public Review Draft EIS, not in the Final EIS after the opportunity to comment has passed, and final decisions have been made regarding permitting of the proposed project. Potential impacts to cultural resources and subsistence lifeways should be central topics of discussion in consultation with Alaska Native communities, and sufficient time should be given to provide all participants with a full understanding of the resources and potential impacts to these resources. Once such an understanding is achieved, modifications to the alternatives may be needed to avoid or mitigate adverse impacts.

**Table 4.7-1 Summary of Key Issues for Cultural Resources.** This table lists Alaska Heritage Resource Survey (AHRS) Sites, Place Names, and Cultural Resources as types of cultural resources. Please either explain how cultural resources can be types of cultural resources or recategorize the information in the table. Also, the AHRS contains trails, buildings, landscapes, traditional cultural places, sites, and more. The use of the term “AHRS sites” denotes an archaeological bias. Please correct this.

In Table 4.7-1 under the Mine Site section, USACE states, “*No locations with place names in the footprint.*” It is important to note that *Qukdeli* (South Fork Koktuli), *Tuni Vetnu* (Upper Talarik Creek), and *Vak'ent'esi Vena* (Frying Pan Lake) are locations with Indigenous place names that are in the Mine Site.

**Section 4.7.4.2 Transportation Corridor.** These elements of the proposed project are identified as having the least existing information regarding cultural resources and impacts, and yet this is the aspect of the project that changes the most among the alternatives. A clear understanding of cultural resources along these varying routes is needed to select a preferred alternative or to develop another alternative if none of the alternatives proposed in this EIS is acceptable.

**Section 4.7.4.3 Amakdedori Port.** The loss of the current use of this area for cultural camps should be identified as a cultural resource impact, and the importance of these camps to local communities should be recognized and evaluated in the EIS.