

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

Reviewer: NARF Technical Team
Date: December 21, 2018
Chapter: Chapter 4: Environmental Consequences
Document: Sec4.4_EnvJustice_reviewdraft_2018.11.02

Comments

4.4 Environmental Justice. In the opening paragraph of Section 4.4, please cite Executive Order 12898 (1994) Section 4–4 Subsistence Consumption of Fish and Wildlife, sub-section 4–401 directly instead of summarizing it. Citing the regulation directly will avoid confusion. Section 4–4. Subsistence Consumption of Fish and Wildlife, sub-section 4–401 states:

In order to assist in identifying the need for ensuring protection of populations with differential patterns of subsistence consumption of fish and wildlife, Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. Federal agencies shall communicate to the public the risks of those consumption patterns.

In the sixth paragraph of Section 4.4, the U.S. Army Corps of Engineers (USACE) continues to use a truncated environmental impact statement (EIS) Analysis Area for Environmental Justice with respect to subsistence described in Section 3.4. The EIS Analysis Area must be expanded to include the communities of King Salmon, Naknek, Aleknagik, Clarks Point, Manokotak, Dillingham, South Naknek, Ninilchik, and Seldovia. The proposed project components would potentially impact their subsistence and traditional use areas.

On Page 4.4-1, second bullet, please include Alaska Native communities in this bullet, as described in the first paragraph.

Referring to Page 4.4-1, fourth paragraph, “Generally accepted norms” is a term that has little meaning if the norms of one culture are imposed on those of another culture. In particular, Western economic or cultural norms should not be assumed valid when assessing impacts to Alaska Native communities.

Referring to Page 4.4-1, fifth bullet, unique exposure pathways related to subsistence fishing, hunting, or gathering should be protected regardless of whether they are present in minority or low-income communities, as defined by Western economic standards. Subsistence fishing, hunting, and gathering are more than just ways of obtaining food; they also represent cultural and spiritual practices important to the psychological and spiritual well-being of the community.

Alaska Native and Native American communities may also prefer traditional food resources because they are healthier than the typical Western diet, which Alaska Native physiology is not well-adapted for. Contamination or loss of traditional food resources may result in increased rates of obesity, diabetes, and heart disease due to a lower-quality diet, especially given the high cost of purchased food in these areas.

Referring to Page 4.4-2, second paragraph, it is inappropriate to rely only on the sections listed for an environmental justice analysis. Any elements of the environment for which significant impacts are identified should be reviewed to determine whether such impacts would disproportionately affect the protected communities. As just one example, contamination of surface water or groundwater could affect available water resources for surrounding communities and their exposures to contaminants. This type of analysis is central to the purpose of environmental justice assessment and is not comprehensively addressed by the few sections listed.

4.4.1 No Action Alternative. Refer to Page 4.4-2, fourth paragraph. Throughout this section, please separate Western jobs and income from impacts on subsistence resources. As noted above, subsistence hunting and fishing are one component of traditional ways of life that provide cultural and spiritual sustenance to Alaska Native communities, as well as food resources. Loss of these resources would have sociological impacts far beyond the economic need to replace them by buying other food. There is nothing “similar” about these two topics.

4.4.1.2 Subsistence. For the No Action Alternative, USACE states “*Resource availability would not change from the conditions present during exploration activity and environmental studies at the mine site*” and “*that existing trends in subsistence resources and uses would continue, and that these communities would continue to harvest subsistence resources.*” This is unknown. Most of the subsistence studies for this project occurred a decade ago. USACE does not know the present resource availability nor the “existing trends in subsistence resources and uses” let alone if these trends would continue.

4.4.1.3 Health and Safety. This section is confusing. This is the no action alternative, which represents conditions unchanged from the present. As described in Section 4.1.1.1, there would be no loss of jobs or change in employment status from current conditions, as existing

exploration activities would be expected to continue. Almost by definition, since the no action alternative represents the baseline condition, the impacts of it cannot be “high and adverse.” The only way this could be the case is if the USACE were assuming that Alternative 1—the applicant’s preferred alternative—was the baseline, and that no action would result in a comparative loss of the hypothetical jobs assumed to be associated with that alternative. Such an assumption is highly inappropriate and transparently biased towards the applicant’s preferred outcome. This section should be revised to assume conditions unchanged from current conditions and to indicate neither a benefit nor an adverse impact in comparison to current conditions.

4.4.2 Action Alternative 1 – Applicant’s Proposed Alternative. This section and those that follow demonstrate a fundamental misunderstanding of the purpose of an environmental justice evaluation. It is not appropriate or necessary to “balance” that analysis by presenting both adverse impacts and beneficial effects. An environmental justice evaluation is intended to determine whether, *of the identified significant environmental impacts associated with an alternative*, any of them will have a disproportionate impact on low-income, minority, tribal, or subsistence-based communities.

Therefore, this section should appear at the end of Chapter 4 after all of the significant impacts associated with each Action Alternative have been identified. For each significant impact, the environmental justice evaluation should be carried out to assess whether that impact falls disproportionately on the protected communities.

All elements of the environment for which significant adverse impacts are identified should be included in Section 4.4, ideally organized by element of the environment rather than by alternative. Since the alternatives do not present any real or meaningful differences from one another, this would make it easier to identify those significant impacts that disproportionately impact the protected communities and any mitigation of these inequities provided by Action Alternatives 2 and 3.

Each section should end with a clear statement of whether the impacts identified disproportionately affect the protected communities and ways of life, with a summary of these disproportionate impacts at the end of the section.

4.4.2.1 Needs and Welfare of the People. As noted in the comment above, this entire section should be removed for all the alternatives, because as written, it does not discuss an adverse impact and whether such an adverse impact would fall disproportionately on a protected population. It also repeats verbatim information previously presented without providing any new analysis.

4.4.2.2 Subsistence. USACE states "As discussed in Section 4.9, Subsistence, communities closest to project infrastructure would be the most affected by changes in resource availability." "Closest to" is not an EIS Analysis Area. In Section 3.1, USACE defines EIS Analysis Area as "the entire area of resource analysis, which is specific to each of the resource sections and may differ by resource." Sections 3.9, 4.9, and Appendix K3.9 do not have EIS Analysis Areas defined. The phrase "analysis area" appears only once in these sections and it is in Paragraph 5 of Section 4.9.2.2. The analysis area for subsistence in this section should match the EIS Analysis Area for Section 3.9. Section 4.9, and Appendix K3.9 because they are all addressing the topic of subsistence. Please establish EIS Analysis Areas for Section 3.9. Section 4.9, and Appendix K3.9; explain the rationale for this area; and use this EIS Analysis Area for subsistence in the Environmental Justice sections.

In the third paragraph of section 4.4.2.2, USACE states:

"During the construction period, access to the area around project components would be inhibited or restricted. This would impact a number of communities located near project infrastructure that use this land for subsistence fishing, hunting, gathering, education of youth on subsistence traditions, and other cultural and customary practices."

USACE needs to specify which communities instead of the vague "number of communities." This vagueness prevents verification of this statement.

In the fifth paragraph of section 4.4.2.2, USACE states:

"The effects would be localized in geographic extent; as there is availability of alternate areas in traditional and currently used subsistence areas for activities for these communities and mitigation for access to areas near or around project components is planned (PLP 2018-RFI 078)."

USACE needs to cite sources, data, and examples behind this statement that communities will just pick some new places to carry out their traditional ways of life with little to no impacts. USACE provides no evidence to support the veracity of this statement.

In the sixth paragraph of section 4.4.2.2, USACE states, "When cash incomes increase, subsistence production often increases as a result." USACE, again, provides no citation for this statement. It is not possible to assess it without knowing the sources and data behind it.

In the second paragraph of section 4.4.2.3, USACE states, "The Pebble Project would increase household incomes, employment rates, and education attainment, and those economic benefits

would likely result in an improvement to the overall health and well-being of residents living in the communities from which the workforce for the project would be employed.” The following paragraphs in this section do not explain how this balances out against threats to their subsistence foods security. If there are impacts to salmon, this will reduce the cultural health of the communities no matter how many of their residents have jobs. In this same paragraph, USACE states, “Economic benefits to these communities would also likely result in increased diet options and lower regional food costs, and therefore food security.” Food replacement is not food security. Replacing impacted traditional foods with store-bought food comes with a cost to physical and cultural health.

Section 4.4.2.2 is overly focused on human access to subsistence resources where they are currently located, and does not specifically discuss any of the following:

- Disturbance, filling, linear barriers and other changes to the environment that may result in declines in populations of species relied upon for subsistence, particularly as there is evidence that this is already occurring from the relatively minimal exploration activities;
- The potential for contamination of currently pristine resources that may be used as food and resulting human health exposures to contaminants;
- Whether areas offered as mitigation for displacement from current use areas are equivalent in terms of size, accessibility, distance, and food resources relied upon for subsistence; and
- Whether subsistence hunting, fishing, or gathering areas remaining near the proposed project could be adversely affected by structural failures due to catastrophic events such as major earthquakes (i.e., what are the low-probability, high-stakes events that could eliminate such resources over substantial areas or watersheds).

All these topics are relevant to subsistence impacts and need to be incorporated into the discussion. Maps and descriptions are needed to identify specific areas to which access would be restricted or eliminated, barriers to access, and areas where resources currently relied upon would be themselves adversely impacts and either reduced, eliminated, or would move to another area. The subsistence resources likely to be impacted by mining construction (both in upland and aquatic areas) should be specifically identified.

The last sentence of this section is a weak attempt at offering a solution to only part of the problem, which Pebble Limited Partnership (PLP) has not even offered. Throughout this document, the USACE seems determined to show the project in a better light than it has actually

been proposed. All speculative statements about what PLP might or could do to mitigate impacts should be removed until such mitigation has been expressly made part of the project proposal.

Refer to Page 4.4-5, second paragraph - This paragraph makes assumptions not in evidence about the willingness of PLP to provide access to their transportation corridors for community use for subsistence or other purposes. The permit application provides no such assurances and refers to these roads and other corridors as private. In addition, as noted above, only significant impacts should be discussed in this section, with an emphasis on whether they would particularly affect protected communities.

Refer to Page 4.4-5, fourth paragraph - Please remove this paragraph. The individuals that may benefit from mine-related jobs may be living in work camps and/or most likely would not be the same individuals conducting subsistence harvesting activities. It cannot be assumed that additional wages from mining jobs will provide direct resources (such as money for gas or supplies) to individuals conducting subsistence activities. The last two sentences of this paragraph require citations.

Refer to Page 4.4-5, fifth paragraph - Nearly every sentence in this paragraph speaks of highly significant cultural and social impacts, each of which deserves more thorough treatment than is given here. It is exactly these kinds of impacts that have had long-term generational impacts on tribal communities both in Alaska and in the Lower 48, and which environmental justice assessments were designed to acknowledge and address. The paragraph is filled with hypothetical and vague statements and does not appear to include specifics or substantial input from local communities. This section should conclude with a finding of "high and adverse" impact that disproportionately affects protected communities and traditional ways of life.

The sentence, "*Changes in harvest participation are a leading indicator of cultural changes,*" is so very true, particularly for tribal communities. In this case, cultural change is proposed to be forced upon local communities by an international corporation extracting resources for its own profit. It is difficult to imagine a clearer example of environmental injustice than that.

4.4.2.3 Health and Safety. In the fourth paragraph of Section 4.4.2.3, USACE states, "*Subsistence users would likely adjust the seasonal round, resource use areas, and species composition of harvest resources to target resources that would be less affected by project activities.*" Please cite the sources, data, and examples of where this has occurred compared to places where communities did not or could not adjust their seasonal round, resource use areas, and species composition of harvest. Both alternatives are equally plausible. In this same paragraph, USACE also states, "positive benefits may also occur since increased incomes and

employment can positively affect subsistence harvest levels and participation including making procurement of hunting and fishing equipment more affordable." Please cite sources and data for increased employment resulting in great subsistence participation.

In Table 4.4-1: Summary of Key Issues for Environmental Justice under Subsistence Impacts, USACE states for Alternative 1 and its Variants that "Impacts to access of subsistence resource harvest areas for minority and low-income communities would not be high or adverse." This contradicts sentences in Section 4.4.2.2 like the following:

- *"In general, the impacts of subsistence resource availability on minority and low-income communities would potentially be adverse."*
- *"Construction of linear features, such as the roads, pipeline, and ice-breaking ferry corridor, could interrupt travel to resources or communities on the other side of the linear features, and create some unease with hunting in the vicinity of these construction activities and facilities, resulting in adverse effects on those minority and low-income communities."*
- *"The Iliamna Lake ice-breaking ferry could disrupt winter travel over the frozen lake by potentially adding to travel time and increasing fuel expenditures. This could potentially result in adverse effects on minority and low-income communities that rely on winter travel over the lake. In addition, the open water in the ferry's wake would present a safety hazard for subsistence users."*

In Table 4.4-1: Summary of Key Issues for Environmental Justice under Health and Safety Impacts for Alternative 1 and its Variants, it is not clear how adverse impacts "from psychosocial and family stress, injuries"; "access to and quantity of subsistence resources"; and "perceived impacts could cause additional stress for local residents harvesting salmon for subsistence, commercial fishing, and recreational fishing purposes" results in "benefits and improvements to the overall health and well-being of residents, especially those in the Lake and Peninsula Borough." USACE's summary findings are incongruous with its statements. Please correct the findings.

Refer to Pages 4.4-6 through 4.4-7 - This section should be similarly revised for all alternatives as discussed above. Perceived positive benefits need not be described, as they are already overly focused on in other sections and are not part of the environmental justice evaluation. More emphasis should be given to the identified significant adverse impacts of the alternatives on Health and Safety and whether each of these impacts disproportionately affects protected communities.

Refer to Page 4.4-7, first paragraph – Exposure of environmental justice populations to chemicals in the workplace, home, or environment should be discussed here, rather than referencing another section. This was the original point of environmental justice analyses and needs to be given full and complete treatment in this section. The assessment should not rely on assurances from PLP that all will go well and there will be no releases from the proposed project. Instead, inadvertent and catastrophic releases and spills should be assumed to have at least the potential to occur due to human error or seismic or other natural events. The potential impacts under these circumstances are a large component of what causes stress and concern among nearby communities and should be straight-forwardly addressed. In this environmental justice section, it is important to address whether, if such releases were to occur, protected communities would be disproportionately impacted.

4.4.3 Alternative 2 and 4.4.4 Alternative 3. The comments provided above also apply to the very similar discussions of Alternative 2 and Alternative 3 and of Cumulative Impacts. Cumulative impacts should be discussed in its own chapter, rather than being buried in each section. Cumulative impacts address not just the identified RFFAs on individual elements of the environment, but ways in which impacts to multiple elements of the environment magnify these impacts. This is particularly the case for subsistence use of natural resources and sociological impacts on Alaska Native communities, where impacts to multiple elements of the natural and human environment contribute to severe and generational effects on community resources, values, cohesiveness, and cultural identity.

Table 4.4-1. Please refocus this table to only the significant impacts associated with each alternative, including all elements of the environment for which the proposed project would have significant impacts. The table should allow the reader to quickly identify which significant impacts would have a disproportionate impact on low-income, minority, subsistence, or tribal communities, and ideally, which ones. The table should also allow evaluation of whether Alternative 2 and Alternative 3 mitigate any of these significant impacts or their disproportionate effects.