Proposed Pebble Project
Preliminary Draft Environmental Impact Statement
Review Comments

Reviewer:	NARF Technical Team
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Chapter:	Chapter 3: Affected Environment
Section:	Section 3.16 Surface Water Hydrology
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Comments

Neither ***Section 3.16 Surface Water Hydrology*** nor ***Section 3.17 Hydrology*** appear to identify potential impacts to surface water from the proposed project or regulations applicable to surface water quality.

Section 3.16.1.2 Transportation Corridor. Essentially no hydrologic data are provided for these areas; therefore, it is unclear how key project features, such as large bridges and culverts, would be designed or what the potential hazards and impacts would be. There is no discussion regarding how these data gaps will be filled. Without this information, it is unclear how the impacts of the project elements and alternatives can adequately be assessed and evaluated. As with many other areas of this environmental impact statement (EIS), the potential impacts to the environment from the transportation corridor will require more detailed studies, like those available for the mine site, before proceeding with the EIS.

***Section 3.16.1.3 Amakdedori Port*.** Essentially no hydrologic data are provided for this area; therefore, it is unclear how key project features of the port facility would be designed or what the potential hazards and impacts would be. There is no discussion regarding how these data gaps will be filled. Without this information, it is unclear how the impacts of the project elements and alternatives can adequately be assessed and evaluated. As with many other areas of the PDEIS, the potential impacts to the environment from the Amakdedori Port facilities will require more detailed studies, like those available for the mine site, before proceeding with the EIS.

***Flood Hazards*.** This subsection includes a bold but entirely unsupported statement; "*The Port would be developed above the floodplain above Amakdedori Creek; therefore, there are no flood hazards.*" This claim is made, despite the complete absence of hydrologic data for Amakdedori Creek. There are no data from streamflow monitoring, seasonal hydrology, or floodplain mapping.

Marine Water – Western Marine Landfall of Natural Gas Pipeline*. *Regional Wave Climate.* *Table 3.16-7. The potential for tsunami-generated waves in this very active earthquake area should be discussed in this subsection and table. While this may also be addressed under geologic hazards, it is appropriate to provide the information here.

Local Wave Climate. A quote from Chester Passic, Commander, U.S. Coast Guard, is provided on Pages 3.16-28 and 3.16-29. This quote from a knowledgeable vessel captain with direct daily experience of the area is an example of the type of local knowledge that should be taken very seriously. Any issues with navigation in the port area could increase the potential for grounding, spills, and other incidents that could have significant adverse effects on this resource-rich and currently undeveloped environment.

Iliamna Lake. The third paragraph on Page 3.16-31 includes the following text: "*for a fetch length of 35 miles from the proposed ferry crossing to the northeastern end of Iliamna Lake, a significant wave height of 10 feet meters and dominant wave period of 6.5 seconds were calculated*" (emphasis added). The underlined text should be reviewed to determine whether the modeled wave height is in feet or meters, since this would make quite a difference to an attempted ferry crossing. The additional wave height that might occur should wind strengths be greater than those modeled should also be calculated. Actual wind strength data should be collected prior to attempting to evaluate the feasibility of a ferry crossing Iliamna Lake, particularly in winter.

Section 3.16.4.2 Mine Site Water Use. The first paragraph on Page 3.16-45 is a fairly cryptic paragraph that must be significantly expanded. What are these water rights for? When do they expire? What percentage of the streamflow do they represent? Are there water rights that would be needed in any other areas of the proposed project or for other alternatives?