

**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 3.9 Subsistence
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Comments

General. This section would benefit from a summary of the most important subsistence resources in the area. Unlike other sections, there is no discussion of their proximity to and overlap with features of the proposed project. This information needs to be added to this section. The maps in Appendix K3.9 would be a good format for presenting the locations and areas of each subsistence resource along with components of the proposed project alternatives.

The U.S. Army Corps of Engineers (USACE) needs to define the term “subsistence” so everyone is on the same page when reviewing this section. USACE could use its own definition of subsistence in its 2011 report *Economic Value of Subsistence Activity, Little Diomed, Alaska*. On Pages 42 and 43, this report defines subsistence as:

... a way of life in which wild renewable resources are obtained, processed, and distributed for household and communal consumption according to prescribed social and cultural systems and values.

The harvest, distribution, and consumption of subsistence resources are governed by technology, infrastructure, cognitive mindsets, and traditional knowledge. These resources may be used as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of nonedible plants and byproducts of fish and wildlife resources; for barter or sharing for personal or family consumption; for customary trade; and for celebrations and ceremonies.

Subsistence activities are primarily organized through kin relations, special roles, and communal values within and among specific communities. These communal values emphasize reciprocity between individual community members and the community as a whole through sharing and with respect for the environment and

relations with non-human species. Subsistence activities are reproduced across generations through both formal and informal training of descendants in the concepts, behaviors, values, and skills necessary to successfully sustain the community and the resources upon which they depend.

The Subsistence way of life satisfies to various degrees and in various contexts the economic, social, cultural, and nutritional needs of subsistence-based communities.

In addition, USACE needs to address the Keystone Recommendations for the proposed Pebble Project that Pebble Limited Partnership supported (*Callaway 2012 Pebble Subsistence Review Presentation for Keystone Policy Center*. Video on file at Keystone Policy Center, Keystone, Colorado). These recommendations include the need to collect information on exchange of goods and services and identify social networks to monitor changes in communities' demographics, income, and subsistence. This has not been done, which means USACE is not adequately assessing the impacts to subsistence. Tables for each community in this Section have data on Giving and Receiving, but this is not identifying social networks or little else.

Referring to the first paragraph, not only fish but other aquatic resources (invertebrates, aquatic mammals, aquatic plants) are harvested. These other aquatic resources should be mentioned here.

Section 3.9.1 Traditional Ecological Knowledge. In this section USACE states, "*The data (tables, charts, and maps) used to determine the environmental baseline for this section reflect the findings of this study, and a subsequent data review of the six communities closest to the proposed project infrastructure.*" "Closest to" is not an EIS Analysis Area. Please define and justify an EIS Analysis Area for this section.

In Table 3.9-1, is USACE saying people only harvest wood in June? Trees are plants. The paragraph following this table states "*Winter is the typical time for gathering firewood*" (Jones and Kostick 2016). Please correct this table.

The information sources referenced here are a start; however, before the public review draft EIS is released, the USACE should integrate information gained through the consultation process, including each Alaska Native community's review of the section pertaining to its use of resources and their presence on the landscape.

Section 3.9.3 Subsistence Harvest Patterns by Community. In the first paragraph, with respect to the analysis for this section, USACE states, "*Communities for which there were older data or no data were not included.*" Why is this? This is a data gap and needs to be addressed. Also, please

list which communities have old data or no data. Also, define “older” because Table 3.9-2 is using data for Dillingham that is 20 years old. Subsistence data that are older than 10 years are not current for the proposed Pebble Project. Such data are historical according to the Pebble Project Environmental Baseline Document (SRB&A 2011).

In the third paragraph of Section 3.9.3, USACE states, “*Table 3.9-2 shows subsistence harvest amounts for eight resource groups for each community.*” Please explain the rationale behind choosing eight resource groups.

In the seventh paragraph of Section 3.9.3, USACE states:

Communities have traditional use areas that represent a sophisticated cumulative body of knowledge about where animals are likely to be available and in prime condition throughout the seasons of the year. Use areas for some species are relatively constant, such as salmon fishing areas; while use areas for other species, such as moose, caribou, and fur-bearers, would vary with changes in abundance and distribution. Cumulative traditional use areas are relatively constant over long periods of time, although not all portions of the long-term use area would be used each year. Instead, harvest patterns are dynamic and strategic, as subsistence users concentrate their efforts in areas likely to be productive, with current abundance and distribution of resources. Traditional places names identify significant locations in a traditional use area, and further indicate the long-term use patterns.

Please cross-reference how USACE will evaluate these “traditional use areas” as traditional cultural places and cultural landscapes in Section 3.7 Cultural Resources.

Table 3.9-2: Estimated Per Capita Subsistence Harvests in Edible Weight (lbs.) by Community. This table shows the inadequacy of USACE’s data for this section. Dillingham and Seldovia are the only communities with current data (i.e., less than 10 years old). As Stephen R. Braund & Associated (SRB&A) (2011) states in the Pebble Project environmental baseline report on subsistence for Bristol Bay communities, “Subsistence uses are not static (Page 23-9).” SRB&A (2011) reported subsistence data from 1996 for Pedro Bay was “dated and therefore may not reflect current subsistence uses in the study area (page 23-6).” Table 3.9-2 lists SRB&A doing subsistence research in Pedro Bay in 2004. This means Pebble Limited Partnership and SRB&A thought eight-year-old subsistence data needed to be updated. All the communities in Table 3.9-2, except for Seldovia, are represented by data that are eight years old or older. USACE needs to update these subsistence data. These data are not current and do not take into account changes to subsistence that may have occurred because of the extensive drilling

program conducted for the proposed Pebble Project that began around 2004 and continued through 2013.

The information in Table 3.9-2 is very old and does not reflect recent changes in communities, the economy, and the environment, including the effects of climate change. All this information should be updated based on newer research and surveys prior to attempting to evaluate the effects of the proposed project on subsistence use.

Figures. Figures 3.9-3, 5, 7, 9, and 11 are very difficult to interpret and do not seem nearly as effective as the maps of specific resource uses provided for other communities in Appendix K3.9. This is a topic of considerable importance to each of these communities, and it would seem appropriate to map the use of individual resources for each community, like the figures in Appendix K3.9 but broken out by community. This would make it possible for each community to check the information on the map against their own knowledge of their subsistence use areas.