

State of Alaska Comments – Pebble Project Preliminary Draft EIS, Section 4.16 – Surface Water Hydrology

Agency	Comment No.	Section or Figure	Cooperating Agency Comment (and Purpose of Comment)	Proposed Resolution (Additions or Deletion of Text)	Response
ADF&G (habitat)	Excel line 75	4.16.2.5	Section only states impacts would be similar to transportation corridor but does not describe actual impacts or consequences	Section should describe sources of erosion/scour and consequences from all aspects of pipeline installation at stream crossings including direct pipeline trenching, HDD, inadequate bank protection, ditch maintenance, blasting, erosion and channelization from surface water intercepting the pipeline ditch, etc.	Text has been expanded to address typical potential impacts at stream crossings by bridge, culvert, and pipeline methods.
ADF&G (sport fish)	Excel line 26	4.16.2.1	Streamflow Effects-seasonality/seasonal flow distributions must be maintained. How will excess water from dewatering operations be seasonally managed? Concern regarding water releases during typical low flow periods in headwater streams.	Further explain timing/seasonality (not only net water balances) in text. Include Water Management Plan.	Section 4.24, Fish Values, addresses treated water releases to maintain habitat flow needs for priority species and life stages for the NFK and SFK rivers, and UTC. The Operations Water Management Plan (Knight Piésold 2018a) and Closure Water Management Plan (Knight Piésold 2018d) are referenced in this section, and are available on the Pebble project public website in the document references section.
ADF&G (sport fish)	Excel line 27	4.16.2.1	References Knight Piésold 2018a. This reference is not included in references sections and cannot locate document.	Provide required reference documentation for all Knight Piésold 2018 documents	All referenced Knight Piésold documents are available the Pebble project public website in the document references section.
ADF&G (sport fish)	Excel line 28	4.16.2.1	Water Management- "Water not diverted before becoming contact water would be ... or treated and released to environment." Management of surplus water...	Instream flow shifts and variations can affect riparian habitat. ADF&G recommends streamflow regimes similar to the magnitude and timing of the natural streamflows to maintain seasonal use of fish habitat. Provide magnitude and timing of flow augmentation anticipated	Section 4.24, Fish Values, addresses treated water releases to maintain habitat flow needs for priority species and life stages for the NFK and SFK rivers, and UTC.

State of Alaska Comments – Pebble Project Preliminary Draft EIS, Section 4.16 – Surface Water Hydrology

Agency	Comment No.	Section or Figure	Cooperating Agency Comment (and Purpose of Comment)	Proposed Resolution (Additions or Deletion of Text)	Response
				from release of surplus water	
ADF&G (sport fish)	Excel line 29	4.16.2.1	"Flows from the fresh water diversions and reclaimed facilities are expected to vary according to natural flow patterns, which are also linked to seasonal climate variability.	Provide appropriate documentation where hydrographs which are "expected to vary according to natural flow patterns" can be reviewed	Text in the comment was deleted in revisions for the DEIS. Discussion of water management during closure and post-closure has been expanded.
ADF&G (sport fish)	Excel line 30	4.16.2.1	Bridge Crossings- "Instream channel work, including installation of bridge footings and embankments, would occur year-round during the first 2 years of construction."	Instream work will be limited to dates specified in Fish Habitat Permits	Comment noted and understood. Text has been revised to read: "Instream channel work, including installation of bridge footings and embankments, would occur year-round during the first 2 years of construction <i>as permitted</i> ."
ADF&G (sport fish)	Excel line 31	4.16.2.1	"Before the extraction of water from anadromous streams along the road and pipeline corridors, sufficient streamflow would need to be demonstrated to permit summer/winter extraction."	Demonstration of sufficient streamflow/monitoring will be the onus of the applicant	Comment noted.
ADF&G (comm fish/ homer)	Excel line 116	4.16.2.1	Water management plan...based on historic temperature and precipitation data. Climate changes, specifically significantly warmer winters resulting in precipitation no longer being stored as ice and snow at historic levels. How will this impact mine operation and safeguards?	Address climate change in water management plan.	Results of analysis and discussion of long-term climate change is provided in Section 3.16, Surface Water Hydrology (Chapter 3, Affected Environment), Section 4.16, Surface Water Hydrology (Chapter 4, Environmental Consequences), and Technical Appendix K3.16 of the DEIS. Framework for climate change discussion is provided in Section 3.1, Introduction to Affected Environment.