

US Fish and Wildlife Service Comments – Pebble Project Preliminary Draft EIS, Section 4.23 – Wildlife Values

Agency	Comment No.	Section, Paragraph, and Page #	Cooperating Agency Comment (and Purpose of Comment)	Proposed Resolution (Additions or Deletion of Text)	Response
USFWS	1		This DEIS focuses on the direct impacts within the footprint of the proposed mine site, with little consideration given to potential direct and indirect impacts from the gas pipeline, transportation corridor, power plant, ports, and other facilities. Wildlife resources within Cook Inlet are generally not included in the description of the environmental consequences. The scope should be broadened to adequately capture the direct and indirect impacts of the proposed project, as is required by the NEPA.	See Response.	Additional text regarding potential indirect impacts to project components including those in Cook Inlet are included.
USFWS	2		The Wildlife Management Plan referenced on Page 4-23-1 has not been completed; therefore, the Service is unable to evaluate the proposed impact avoidance and mitigation measures.	See Response.	A Wildlife Management Plan (WMP) plan is not included in the DEIS as it would be developed at a later point in the permitting process.
USFWS	3		The Service was unable to evaluate the direct effects of wildlife contact with contaminants (including acid generating tailings and dissolved heavy metals), because “analysis of risk to wildlife from pit lake water is pending” (Page 4-23-4). The DEIS should evaluate and disclose these potential impacts.	See Response.	Text has been added that addresses the pit lake water.
USFWS	4		The mine is expected to emit air-borne pollutants including particulates and heavy metals (e.g., mercury) as a result of burning large amounts of natural gas and diesel fuel. What are the potential effects of pollutants on water and air quality? What are the associated adverse effects on wildlife and human health? The DEIS should evaluate and disclose the potential	According to models, contamination will not be a long term impact with the project. Refer reader to appropriate sections in the DEIS.	A reference to indirect impacts of altered air quality is provided in Section 4.20, Air Quality.

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			impacts from air-borne pollutants.		
USFWS	5		<p>The DEIS should include a discussion about the potential of new infrastructure and human waste (garbage, landfills) to attract avian predators (Powell and Backensto 2018).</p> <p>https://www.researchgate.net/publication/237228506_Common_ravens_Corvus_corax_nesting_on_Alaska's_North_Slope_Oil_Fields.</p>	Indirect impact to add to list.	This potential indirect impact on wildlife has been included in the DEIS.
USFWS	6		<p>The DEIS should include a discussion of any transmission lines that would be built along roadways. Electrical transmission lines are known to cause bird strikes and electrocution of raptors. Transmission lines and poles are also known to provide artificial perch sites for avian predators, which may lead to increased mortality of prey species, including birds. Facility lighting can also significantly affect avian migration behaviors, as well as inland flights of nocturnal seabirds during the breeding season. Lighting can result in disorientation or injury and death of nesting seabirds. The Service can provide specific recommendations on both the type and location of lighting to reduce these effects.</p>	Check project description.	<p>According to the project description in Chapter 2, no transmission or electrical lines are planned along the port or mine access roads. There is the potential for distribution lines within the mine site, and this has been included.</p> <p>Potential impacts from lighting at night have been added to the text.</p>
USFWS	7		<p>The environmental impacts associated with constructing and operating the proposed 270-megawatt power plant should be discussed. A comparable plant, the 248-megawatt gas-fired River Road Generating Plant in Vancouver, Washington, was among the biggest greenhouse gas emitters in the Pacific</p>	See Response.	Section 4.20, Air Quality has been referenced. A WMP would be developed at a later point in the permitting process.

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			Northwest, producing greater than 100,000 metric tons of carbon dioxide equivalent (CO ₂ e) per year from 2012 to 2016 (https://ecology.wa.gov/DOE/files/2d/2d41cf1e-8947-4a80-9a66-e412a051e45b.pdf). What are the anticipated impacts of the proposed power plant on wildlife? What measures would be in place to reduce and mitigate these emissions?		
USFWS	9		Analyses of potential spill impacts to migratory birds, listed species, and other wildlife and their habitats outside the immediate mine site and within transportation corridors are not included in the DEIS. The DEIS should address the potential for vessel groundings and oil spills in the region given the varied and complex bathymetry of Kamishak Bay. The potential for spills and accidents that might result from lightering at two offshore locations (Figure 1-5) should also be evaluated. Kamishak Bay and the waters around Augustine are known to be frequented by both marbled and Kittlitz's murrelets and listed Northern sea otters.	This has been addressed in spills.	Refer to Section 4.27, Spill Risk.
USFWS	10		Potential disturbance of seabird colony sites is not included in the DEIS. Seabirds could be disturbed at breeding colonies by the noise generated by port construction, and by 12 helicopter overflights in the region. Disturbance could also impact non-colonial birds such as marbled murrelet and Kittlitz's murrelet, both of which nest inland and are relatively	This data has been added to 3.23.	The information on marbled and Kittlitz's murrelets has been added to Section 3.23 and information on seabird colonies has been incorporated.

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			abundant in the Lower Cook Inlet. The most recent at-sea surveys indicate that in the Lower Cook Inlet, the more abundant marbled murrelet has an estimated population of approximately 30,000 birds, which is approximately 7 percent of Alaska's total population (Piatt et al. 2007), whereas the Kittlitz's murrelet has a minimum estimated population of approximately 3,000 birds, which could be 9 percent of the world population (Kuletz et al. 2011). Additionally, the southwestern, outer portion of Kachemak Bay is known to be a "nursery" area for newly fledged murrelet juveniles (Kuletz and Piatt 1999).		
USFWS	11		No effort is made to quantify the number of animals of any species that might be affected by the individual project components, and/or different project alternatives. Impacts to wildlife are unlikely to be the same across the different alternatives; simply saying "same as alternative 1" is not sufficient.	See Response.	Comment acknowledged. The text recognizes that individual mortalities may result from the individual project components.
USFWS	12		Chapter 4.23.6 Cumulative Effects is inadequate. The document talks about Reasonable and Foreseeable Alternatives identified in Section 4.1 being carried forward for analysis; however, the analysis presented is one paragraph that provides general statements of effects. More details should be included based on impacts documented at other development sites (e.g., the Prudhoe Bay oil field, Red Dog Mine).	See Response.	This section has been revised and with respect to RFFA's, including the Pebble Expanded Mine Scenario.