

**US Fish and Wildlife Service Comments – Pebble Project Preliminary Draft EIS, Section 3.23 – 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	General-Analysis area	<p>Many important avian resources outside the mine site could be impacted by the proposed development, including those along the Koktuli, Nushagak, and Mulchatna Rivers.</p> <p>Nushagak Bay supports an estimated 60,000 shorebirds within the Nushagak Bay Western Hemisphere Shorebird Reserve Network (<a href="https://www.whsrn.org/nushagakbay">https://www.whsrn.org/nushagakbay</a>).</p> <p>Bird communities along the mine access road, on Iliamna Lake, and the Upper Talarik Creek drainage could be affected by the proposed action. Impacts could occur to bird populations as far away as Kvichak Bay, including tens of thousands of long-tailed ducks and black scoters, over 100,000 king eiders (Larned 2002, 2003, 2004, 2005), and more than 20,000 shorebirds in the Kvichak Bay Western Hemisphere Shorebird Reserve Network site (<a href="https://www.whsrn.org/kvichack-bay">https://www.whsrn.org/kvichack-bay</a>).</p>	See Response.	<p>Comment noted. The analysis area around the mine site, port, and transportation and natural gas pipeline corridors was determined to exclude Nushagak Bay because the only project impacts that might extend that far away are related to various spill scenarios. The analysis area for various spill scenarios has been included in Section 4.27, Spill Risk, and has been extended down to Nushagak Bay. Additionally, none of the spill scenarios occur within waters that would empty into the Kvichak Bay and therefore are not included in the analysis area under the spill scenarios.</p>
USFWS	2	General-Analysis area	<p>Both the Nushagak and Kvichak Bays are recognized by Audubon as areas of global importance. Up to 89 percent of the king eiders and black scoters recorded during spring migration surveys along the coast of southwestern Alaska were documented in Kvichak Bay (Larned 2002, 2003, 2004, 2005), making it among the most important sites in the</p>	See Response.	<p>Comment noted. The analysis area around the mine site, port, and transportation and natural gas pipeline corridors was determined to exclude Nushagak Bay because the only project impacts that might extend that far away are related to various spill scenarios. The analysis area for various spill scenarios has been included in Section 4.27, Spill</p>

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			region for those species.		Risk, and has been extended down to Nushagak Bay. Additionally, none of the spill scenarios occur within waters that would empty into the Kvichak Bay and therefore are not included in the analysis area under the spill scenarios.
USFWS	3	General-Analysis area	The DEIS should incorporate updated information from the Alaska Department of Fish and Game on sensitive breeding populations of Aleutian terns in both the Nushagak and Kvichak Bays. Contact Kelly Nesvacil (kelly.nesvacil@alaska.gov) for additional information.	See Response.	Comment noted. As detailed in the responses above, the project is not anticipated to impact Aleutian terns that breed within Kvichak Bay since no spill scenarios would impact that drainage. Additionally, under the proposed spill scenarios, the released material would be diluted to within water quality standards by the time it reaches Nushagak Bay.
USFWS	4	Species of concern	The Service recommends the addition of the Kittlitz's murrelet, marbled murrelet, Aleutian tern, and pigeon guillemot to the Species of Concern list.	See Response.	While these are species of concern, there were no confirmed sightings of Kittlitz's murrelet during any of the ABR surveys in western lower Cook Inlet. Aleutian terns were not observed. Marbled murrelet and pigeon guillemots were both observed and are mentioned in Section 3.23.
USFWS	5		Water quality is important to wildlife, including birds and fish. The withdrawal, capture, storage, and release of treated and untreated water could impact raptors, shorebirds, and waterbird species inhabiting downstream locations, and should be discussed in this section of the DEIS.	See Response.	Comment acknowledged and considered. Water that is released back into the environment would be within water quality standards (Section 4.18 Water Quality). Based on the steam flow modeling for the North and South Fork Koktuli which are detailed in Section 4.24.2.3, impacts to stream flows would not be recognizable beyond the confluence

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					<p>of the North and South Fork Kaktuli, which occurs approximately 11 radial miles from the mine site. The EIS analysis area (a 10-mile radius buffer) encompasses most of the potential impacts from impacts to water.</p> <p>Additionally, this comment is more centered on impacts, which are discussed in Section 4.23.</p>
USFWS	6		<p>We were unable to evaluate wildlife resources for the North Access Road in Alternative 3, because no road is present in Alternatives 1 and 2 where wildlife resources are predominantly discussed, and no discussion of this proposed road is presented in this chapter. We recommend including a more detailed analysis of the North Access Road in Alternative 3 so potential impacts to wildlife resources can be evaluated across the Alternatives.</p>	See Response.	<p>Wildlife information under the Transportation and Natural Gas Pipeline Corridor for Alt 2 would be the same as the North Access Road for Alternative 3. Even though a portion of the north access road would not be constructed under Alternative 2, there would still be a natural gas pipeline corridor. Therefore, the wildlife resources that would be impacted by a natural gas pipeline (Alternative 2) or a road (Alternative 3) would be the same, but the impacts would vary. Impacts to wildlife from increased roadkill potential, etc. for the north access road under Alternative 3 are discussed in Section 4.23.</p>
USFWS	7		<p>The proposed project has a direct footprint in marine areas and could potentially impact the Lower Cook Inlet (and possibly Shelikof Strait), yet the DEIS does not address these habitats nor the potential impacts of spills, accidents, and disturbance in marine waters. The same is true for the</p>	See Response.	<p>Comment noted. The analysis area around the mine site, port, and transportation and natural gas pipeline corridors was determined to exclude Bristol Bay because the only project impacts that might extend that far away are related to various spill scenarios. The analysis area for</p>

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			marine waters of Bristol Bay. We recommend the DEIS include a discussion of the marine areas potentially affected by the proposed project, as well as the potential impacts of spill, accidents, or disturbance in marine waters.		various spill scenarios has been included in Section 4.27, Spill Risk. The analysis area for wildlife resources is different for spill impacts since the spill scenarios are hypothetical scenarios based on potential impacts.  The analysis area in the spills section includes Lower Cook Inlet and Shelikof Strait, since a large diesel spill could spread that far based on results of modeling.
USFWS	8		Summaries of species present within the proposed site focus only on the most common species. Therefore, it is unknown if less common species, including species of high conservation concern, are present. The conservation status of species detected within the proposed site is not included in the chapter section, and the chapter references the Alaska Biological Resources (ABR) reports, which were not available for our review. The information provided does not contain sufficient detail to evaluate the potential environmental impacts of the proposed action, or its alternatives. Information for this review was summarized, and no references were provided, so it was difficult to evaluate the scope and intensity of potential environmental impacts. We recommend providing additional details on wildlife species that occur for each of the four main project components: the Mine Site, the		Comment noted. While several species of conservation need/concern were detected, no large aggregations, major breeding or staging locations or other population-level impacts were identified. Additional descriptive information on ADF&G species of greatest conservation need, including number and habitat type for landbirds and shorebirds has been incorporated. ABR reports are located on the project website <a href="https://pebbleprojecteis.com/documents/library">https://pebbleprojecteis.com/documents/library</a> .

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			Transportation Corridor, the Amakdedori Port and Lightering Locations, and the Natural Gas Pipeline.		
USFWS	9		<p>Data on the marine distribution of seabirds, or seabird population estimates, are largely lacking in the DEIS. The document references seabird colony sites in the region and provides an estimated number of birds at “<i>many colonies</i>,” but it is unclear how many colonies are included in this estimate, and what methodology was used to collect colony data. We recommend expanding the seabird colony information to better quantify the number of birds and species at each colony site, and providing a map showing all colony locations in the region. The seabird colony database is available online via <a href="http://axiom.seabirds.net/portal.php">http://axiom.seabirds.net/portal.php</a>. We note, however, that some of the colony data contained therein is decades old, and should be updated to accurately reflect current seabird populations at risk.</p>	See Response.	<p>Information on birds (including seabirds) counted from 2004 to 2008 for the marine waters around Iliamna and Iniskin Bays (Alternatives 2 and 3) is referenced in Section 3.23 and additional information included in the DEIS.</p> <p>A figure (Figure 3.23-10) has been created to show the extent of seabird colonies from western lower Cook Inlet in Kamishak Bay along the natural gas pipeline east to eastern Cook Inlet.</p>
USFWS			On the Bristol Bay side, the outer regions of this bay have been identified as molting and foraging areas for marbled murrelets	See Response.	This is considered to be outside of the EIS analysis area (especially for the diesel spill scenario), including beyond the Section 4.27, Spill Risk,

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			and other species during fall migration from coastal breeding sites. Murrelets may be flightless for periods in the fall, and would be susceptible to oil spills or disturbance.		analysis area.
USFWS	10		The DEIS should incorporate updated information from the U.S. Geological Survey investigators from their Cook Inlet marine bird and forage fish surveys for 2016-2018.  Lead investigators are Dr. John Piatt (Jpiatt@usgs.gov) and Mr. Dan Ruthrauff (druthrauff@usgs.gov); reports may be available to update seabird colony data for selected study sites and offshore distribution of non-colonial species such as murrelets.	Contact these researchers for additional data.	Due to partial government shutdown these staff were unavailable to request information from in time for DEIS production. Information will be requested for the Final EIS and incorporated as appropriate .
USFWS	11		Classification of habitat use for each species into value classes (i.e., high, moderate, low, or negligible) appears to be very subjective. More information on this classification method should be incorporated into this chapter.	See Response.	The detailed methods for how ABR classified various habitats for wildlife species are detailed in their Environmental Baseline Document Chapter 16 (ABR 2011a). This document is located on the project website <a href="https://pebbleprojecteis.com/documents/library">https://pebbleprojecteis.com/documents/library</a> .
USFWS	12		Wording about survey methodology is unclear. <i>"The second survey for each year was timed to coincide with peak nesting of</i>	See Response.	Additional text has been added to Section 3.23 to further elaborate on the methodology used to determine "peak nesting".

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			<p><i>cliff-nesting raptors...</i>” What is “<i>peak nesting</i>”?</p> <p>The species listed as examples (e.g., golden eagle, gyrfalcon, rough-legged hawk) have slightly different nesting phenologies, so there might be different timing among the species. Determining nesting success and productivity for multiple species is difficult with a single survey due to differences in phenology. For example, most gyrfalcons will have fledged before golden eagles can be surveyed for nest success. Please clarify the survey methodology used to assess peak nesting.</p>		
USFWS	13		<p>Some raptor species (e.g., Northern harrier, ground-nesting species including short-eared owl) are not well surveyed by the aerial methods used; thus negative nest survey results at the mine site may be misleading. Additional ground surveys for these species would clarify their presence or absence at the mine site. We recommend clearly disclosing the limitations of the survey methods used to evaluate wildlife presence and impacts in the</p>	See Response.	Text has been added to recognize this survey limitation.

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			project area.		
USFWS	14		It is unclear if raptor studies were conducted in the same or different areas during the 2004 and 2005 periods. For example, was the entire site and buffer area surveyed both years, or were forested areas surveyed in 2004 and cliff habitats in 2005? Please clarify the timing and locality of the raptor surveys.		Text clarified and the survey areas are shown on Figure 3.23-1.
USFWS	15		Both active and inactive bald and golden eagle nests are protected under the Bald and Golden Eagle Act.	See Response.	Comment noted.
USFWS	16		Eagle surveys identified golden eagle and bald eagle nests within 0.8 and 4 miles of the project footprint, respectively. Please note that eagle nests are dynamic and locations frequently change from year to year (due to blow-down, new construction, etc.). Additionally, raptor breeding productivity may undergo large inter-annual fluctuations related to changing densities of prey availability. A nest that is unoccupied during a period of low prey density may be occupied when prey levels increase.	See Response.	Comment noted and the applicant is aware of the need for such a permit.



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			Therefore, a subsequent eagle nest survey is recommended in the year prior to construction to locate previously unidentified nests or unoccupied nests. If bald or golden eagle nests occur within 0.5 mile of project activities, the Service recommends project proponents consult with the Service's Migratory Bird Management permit office regarding potential disturbance/take and the subsequent need for an eagle or eagle nest take permit.		
USFWS	17		One golden eagle nest was identified 0.2 miles north of the south access road. The nest is sufficiently close to warrant consultation with the Service regarding potential disturbance and the need for an eagle take (including disturbance) permit. Although the nest was identified as inactive in 2018, the nest could be active in subsequent years, triggering the need for an eagle take permit to conduct activities within 0.5 mile of the nest.	See Response.	Comment noted and the applicant is aware of the need for such a permit.
USFWS	18		The Service highly recommends that any potential eagle or eagle nest permit applications	See Response.	Comment noted and the applicant is aware of the need for such a permit.

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			be submitted as far in advance of the project start date as practicable. Once issued, the permit may be updated with the most recent survey data (gathered within 1 year of the start of construction activities). This will help avoid any delays to the project that may be associated with eagles and their take, and help ensure legal coverage of any previously unidentified eagle nest or eagles potentially taken by project activities.		
USFWS	19		It is unclear why shorebirds are included in the definition of waterbirds, but then included independently in their own section. Many of the methods used to survey waterbirds (e.g., aerial surveys) are not appropriate for shorebirds. Supporting documentation of shorebird use of Amakdedulia Cove and Kamishak Bay does not include shorebird use of these areas during autumn migration. In addition, supporting documentation is 20 to 40 years old and thus likely outdated. We recommend shorebirds and waterbirds be analyzed as two different categories. Additionally, we recommend using the most current data available or collecting new information where possible.	See Response.	The text has been updated to clarify that shorebirds are not lumped with waterbirds.
USFWS	20		Analyses should incorporate all	See Response.	Cooperating agencies and the public

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			<p>available data, not just the most recent surveys. Ground based surveys do not necessarily indicate higher-quality data, especially if they were poorly timed, utilized inappropriate methodology, or were based on a non-statistical sampling design, etc. It is not clear what data were included in this assessment. No figures were available and few references were provided, and of those that were, no documents or reports were made available (e.g., reference ABR 2011a, NDM 2004, 2005).</p>		are provided access to documents cited in the DEIS which are available on the project website. Figures will be provided in the DEIS.
USFWS	21		<p>The DEIS contained a comparison between the North Fork Koktuli and Upper Talarik Creek drainages, both of which support a large number of waterbirds. Only information on scaup and “broods” are presented. Please describe what other migratory bird species occur in these drainages. The document fails to describe the resources that are at risk. For example, what are the anticipated impacts to black scoters in the Pebble Mine study area, including the mine site and</p>	See Response.	Waterbird species present in the mine survey area are broadly described in Section 3.23 with reference to the specific details which are provided in the Environmental Baseline Document (ABR 2011a). Specific life-history traits for each waterbird species are not included. Black scoters are an uncommon breeder in the mine survey area (4 broods were detected) and were not documented breeding in the transportation corridor. Please provide the Stehn 2009 and 2010 references if they apply to the analysis area. Information on impacts is provided in

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			transportation corridor where they occur in relatively high abundance (Stehn 2009, 2010)?		Section 4.23.
USFWS	22		<p>The Service provides the following comments for survey methods used to evaluate bird resources in the project area:</p> <ul style="list-style-type: none"> <li>• A variable circular-plot point count method was used to survey breeding landbirds and shorebirds; this method is not appropriate to survey many breeding shorebirds.</li> <li>• Information describing the locations and numbers of breeding landbird and shorebird survey points is insufficient. This information is needed to evaluate whether sampling effort is adequate to make inferences of species densities and distributions across larger spatial scales.</li> <li>• Point-count surveys were conducted between 4:30 a.m. and 4:00 p.m. Breeding landbird surveys should begin 30 minutes after sunrise (sunrise in Anchorage, Alaska on June 15 is approximately 4:30 a.m.) and end no later than 5 hours after sunrise, to account for declining song rate and detectability (ALMS 2004</li> </ul>	See Response.	<p>Comment noted. Avian surveys were conducted and the methodology followed has been briefly described within the DEIS. Surveys were conducted by biologists and were geared towards determining presence/absence versus obtaining a precise density estimate.</p> <p>Direct and indirect impacts of alternatives are discussed in Section 4.23.</p>

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			<p>available online at:  <a href="https://ecos.fws.gov/ServCat/DownloadFile/111623?Reference=70866">https://ecos.fws.gov/ServCat/DownloadFile/111623?Reference=70866</a>).</p> <ul style="list-style-type: none"> <li>• Survey timing often does not include migration or staging periods, a time period that is important for shorebirds in this region.</li> <li>• Survey timing may not be appropriate for all species, as timing of nesting is variable among species. Timing of nesting is also impacted by annual weather conditions. More information is needed to determine if surveys were indeed conducted during what the DEIS refers to as “peak” breeding periods.</li> <li>• Landbird and shorebird survey information is only provided for the Iliamna Spur Road. Fifteen point-count surveys were conducted in 2005 in proximity to the Newhalen River. Instead of conducting surveys for the majority of the proposed transportation corridor, the authors make comparisons to montane surveys conducted in Katmai National Park and Preserve and Lake Clark National Park and Preserve (Ruthrauff et al. 2007).</li> </ul>		

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			<p>Such comparisons are potentially inappropriate based on differing survey methods used or real differences in species assemblages in the two areas.</p> <ul style="list-style-type: none"> <li>• Survey data presented in the document appears to be based on aerial surveys (fixed-winged aircraft and helicopter). Aerial surveys are not an ideal method to census seabird species, because smaller birds (e.g., murrelets) can be missed or not identified to species, or their numbers underestimated. In addition, the report documents that the majority of the ABR surveys were only conducted over land or at the mouth of bays. The survey data do not account for the offshore component of the seabird population in the region of Kamishak Bay and the Lower Cook Inlet.</li> <li>• No surveys were performed (aside from aerial raptor nesting platform surveys) pertaining to the natural gas pipeline corridor from Ursus Cove to Diamond Point, and Diamond Port is not discussed separately. It is difficult to assess impact</li> </ul>		

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			without information for the entire impacted area. This chapter does not adequately assess the potential direct and indirect impacts of either action alternative in this area because no wildlife studies were conducted or no substantive information for the area is available for review.		
USFWS	23		This chapter section uses minimizing language, such as, <i>“No shorebirds were considered common breeders.”</i> It is not clear how <i>“common breeder”</i> is defined. Additionally, the DEIS states, <i>“In summary, the majority of the mine site supports landbird species that are common in similar vegetation communities across Alaska. Shorebird species are not particularly numerous as breeding residents in the mine site.”</i> The DEIS does not include data describing how these conclusions were reached.	See Response.	The text is from the Environmental Baseline Document (ABR 2011a) based on their field observations, but has been modified to make it less subjective in the DEIS. Subjective text has been removed.
USFWS	24		If bird densities were calculated from point-count data collected by ABR, then how many birds are estimated to be directly impacted due to loss of habitat at the mine site? How many are estimated to be directly impacted due to the construction of 75 miles of new	See Response.	Information related to project impacts by alternative is included in Section 4.23, Wildlife Values (Chapter 4). The text was refined to state that the average occurrence of birds for specific habitat types was calculated, but densities were not. Specific numbers of individual birds/territories were not calculated, but total acreage loss is provided.

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			road? How many birds would be indirectly impacted due to the loss of home range or territory in adjacent areas? How long are these impacts anticipated to last? This information should be included in the DEIS.		
USFWS	25		<p>The construction of the proposed road corridor would destroy approximately 110 hectares of waterbird breeding habitat. Because no waterbird, shorebird, or landbird surveys were completed in this area, the magnitude and scope of the potential impacts to migratory birds in this area are unknown. Survey data are lacking within the majority of the transportation and natural gas pipeline corridors. As the transportation and natural gas pipeline corridors traverses a variety of habitats, the avian community is likely different throughout the region. Without data throughout the entire region, the relative impact on the bird community cannot be assessed. Because “<i>waterbird data were only collected north of Iliamna Lake,</i>” additional data should be collected outside of the</p>	See Response.	Additional data from field surveys during the spring, summer, and fall 2018 have been included in the DEIS.



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			mine site, including the proposed road corridors, power-generating station, wastewater treatment  plant, administrative offices, housing and support services, port facilities, gas pipeline  corridor, as well as other associated infrastructure.		
USFWS	26		Because “ <i>no project-specific waterbird surveys have been conducted to date for areas south of Iliamna Lake,</i> ” insufficient information is available to adequately evaluate the environmental consequences of the proposed action to migratory birds or understand potential differences in the affected environment among the various alternatives.	See Response.	Additional data from field surveys during the spring, summer, and fall 2018 have been included in the DEIS.
USFWS	27		The proposed port, lightering facilities, and gas pipeline from Anchor Point to Kamishak  Bay would pass through an area of high-quality habitat supporting high bird densities.  Kamishak Bay is known to support thousands of waterbirds, seabirds, and shorebirds  <i>(Pebble Project Environmental Baseline Studies, 2004-2008, Technical Summary),</i>  comprising some of the highest	See Response.	Additional information on seabird colonies has been included along with a new figure that shows the locations of these colonies in relation to project components. Data specific to the natural gas pipeline corridor which crosses Cook Inlet is only briefly mentioned because the only impacts would be during summer installation of the natural gas pipeline. This would avoid the period when most of the mentioned seabirds are present. Seabird colonies in the vicinity of the natural

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			marine-oriented waterbird densities in Cook Inlet. The marine waters in the vicinity of Anchor Point provide important habitat to multiple waterbird species, including thousands of Steller's eiders, common eiders, king eiders, black scoters, and long-tailed ducks (Larned 2004, 2005, 2006a, 2006b, 2006c). We recommend these data be considered and included in the analysis.		gas pipeline corridor are shown on the new figure (Figure 3.23-10).
USFWS	28		The DEIS should evaluate the impacts of benthic disturbance due to pipeline construction on seabirds and waterbirds that use the area. In addition, it should evaluate behavioral disturbance to shorebirds (e.g., phalaropes), seabirds, and waterbirds due to increased shipping activity and potential impacts from accidents and spills.	See Response.	Impacts are discussed in Section 4.23, Wildlife Values (Chapter 4) and information on vessel disturbance is included.
USFWS	29	3.23 3.23-23	On Page 3.23-23, the last paragraph addresses seabirds and should be moved to the waterbird section to remain consistent in the document.		This section of text has been moved to the waterbird section.
USFWS	30		The Pebble Partnership contracted ABR to conduct boat-, airplane-, and helicopter based surveys for birds and mammals in	See Response.	This data is included in Section 3.23, Wildlife Values, since the source document and not the Technical Summary was referenced. The full Environmental Baseline Document

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			Cook Inlet near Kamishak Bay in 2004 and 2005, recording 69 species of marine-associated birds. The document fails to incorporate survey data as summarized in <i>Pebble Project Environmental Baseline Studies, 2004-2008, Technical Summary</i> into this assessment.		for marine wildlife in Cook Inlet is referenced (ABR 2011d).
USFWS	31		Waterfowl and seabirds comprised the majority of observations recorded by ABR;  however, in May tens of thousands of shorebirds also occupied the extensive mudflats in the region. Bird densities were greatest in the near-shore zone ( <i>Pebble Project Environmental Baseline Studies, 2004-2008, Technical Summary</i> ), which would be most affected by the proposed gas pipeline, port terminal, lightering barge activities, mooring sites, and handsize bulk carriers weighing up to 60,000 tons. Bird densities were generally greatest in the fall, winter, and spring; however, more than 4,100 birds of 8 species were estimated to be breeding in the study area. Please revise the analyses using all available data.	See Response.	Review of the Technical Summary confirmed that this data is already included. Note it is split into different sections depending upon the project component and alternative. Some of the waterbird data is under the transportation and natural gas pipeline corridor section and other data is under the Amakdedori Port section. The data is primarily discussed under Alternative 2, as that is where the ABR surveys were conducted. Data that was recorded in the 1970's is mentioned, but more recent data from ABR waterbird surveys is presented.
USFWS	32		Kamishak Bay supports thousands of	See Response.	Data on Steller's eider abundance in

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			<p>sea ducks, including common eider, king eider,</p> <p>long-tailed duck, scoter species, harlequin duck, and the federally-threatened Steller's eider. Large numbers of Steller's eiders were recorded in Kamishak Bay during the months of January, February, March, April, September, and December, with a high count of 4,284 birds (Larned 2004, 2005, 2006a, 2006b, 2006c). Kamishak Bay had an average monthly count of 1,713 Steller's eiders, while Anchor Point supported an average monthly count of 134 Steller's eiders.</p>		<p>lower Cook Inlet is provided in Section 3.25, Threatened and Endangered Species. Section 3.23, Wildlife Values, has been updated.</p>
USFWS	33		<p>If Steller's eiders were impacted in Kamishak Bay, the effects could be seen in surrounding areas such as Kodiak Island, due to the movement of birds between Kamishak Bay and Chiniak Bay (Rosenberg 2007). The proposed port facility, lightering locations, and pipeline corridor could impact waterbirds throughout the surrounding area.</p>	See Response.	<p>Comment acknowledged and text has been revisited for Section 4.25 as Section 3.23 does not include threatened and endangered species. Impacts from spills are discussed in Section 4.27 Spill Risk.</p>
USFWS	34		<p>Lightering cargo, fuel, and supplies between the port facility and the offshore mooring sites would require cargo to be off-</p>	See Response.	<p>Impacts to wildlife species from seven spill scenarios are addressed in Section 4.27, Spill Risk.</p>

**US Fish and Wildlife Service Comments – Pebble Project Preliminary Draft EIS, Section 3.23 – Wildlife Values**

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			loaded and transferred multiple times, likely increasing the chance of an accident or spill.		
USFWS	35		The DEIS should include a description of the nesting seabird colonies at Amakdedulia Cove, Nordyke Islands, Paint River, McNeil Cove, McNeil Islet, and McNeil Head in the vicinity where proposed and alternative lightering activities are planned (southwest and west of Augustine Island, respectively), along with potential avian impacts at these sites ( <a href="http://axiom.seabirds.net/maps/js/seabirds.php?app=north_pacific#z=10&amp;ll=59.16355,-154.10553">http://axiom.seabirds.net/maps/js/seabirds.php?app=north_pacific#z=10&amp;ll=59.16355,-154.10553</a> ).	See Response.	A new figure that shows the seabird colonies (Figure 3.23-10) in lower Cook Inlet from Kamishak Bay to the eastern side of Cook Inlet along the natural gas pipeline corridor has been added to the DEIS. Several of the referenced seabird colonies are outside of the EIS analysis area and therefore not mentioned by name in the text.
USFWS	36		The DEIS should include a description of seabird colony census methods used to estimate seabird population declines (e.g., 1,264 and 1,585 breeding birds in 2004 and 2006 respectively, compared to 4,172 breeding birds in 1976 and 1978). There do appear to be population declines of seabirds from the Lower Cook Inlet area (e.g., tufted puffin). However, documenting numbers of breeding birds for nocturnal burrowing	See Response.	Comment noted. ABR conducted seabird colony counts from boat. No additional seabird surveys are currently planned and available data was determined to be adequate for the analysis.

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			<p>species will require on-site re-census of the colonies within the affected area. The Service</p> <p>USFWS recommends cooperation and collaboration with the Alaska Maritime National Wildlife</p> <p>Refuge to conduct land-based counts using their accepted methodologies at these colony sites.</p>		
USFWS	37		<p>In Section 3.23.4 Climate Change and Wildlife, it is incorrect to say waterbird and</p> <p>shorebird species may experience an increase in habitat due to increased thawing. The</p> <p>habitat will simply become available sooner; no additional habitat will be created.</p>	See Response.	Acknowledged and text added. An increase in permafrost thaw would increase the amount of wetland habitat available. However, storm surges would erode and eliminate waterbird and shorebird habitat.
USFWS	38		<p>The DEIS should evaluate the impact the Amakdedori Port facility would have on bears.</p> <p>This facility would be located between Bruin Bay and McNeil Cove (near the McNeil</p> <p>River State Game Sanctuary and Refuge), where bears congregate each spring,</p> <p>sometimes by the hundreds, attracted by the high-quality emergent green vegetation</p> <p>found in the coastal meadows near the</p>	See Response.	Comment noted and impacts to brown bears are discussed in Section 4.23, Wildlife Values. If there are data that support the statement “where bears congregate each spring, sometimes by the hundreds, attracted by the high-quality emergent green vegetation found in the coastal meadows near the site” please provide such data.

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			site.		