

Project Name: Pebble Project EIS
Date: November 22, 2019
Time: 8:30am-12pm
Location: The Megan Room, 6591 A Street, Anchorage
Subject: Cooperating Agency Technical Meetings, Day 5
Introduction: Safety, housekeeping, opening remarks

Attendees and Affiliation:	
AECOM and subcontractors	Bill Craig, Elizabeth Bella, Jessica Evans, Jon Isaacs, Sasha Forland, Wes Cornelison, Nancy Darigo, Lindsey Flagstad, Arika Mercer, Keely Craig
ACHP	No attendees
BSEE	John McCall
Curyung Tribal Council	No attendees
EPA	Molly Vaughan, Matt LaCroix, Betsy McCracken, Palmer Hough, Patty McGrath, Kate Scofield, Michael Kravitz, Tim Maley, Joe Ebersole
LPB (Jade North)	No attendees
Nondalton Tribal Council (represented by NARF)	Wesley Furlong
NPS	Sharon Kim, Kerensa King, Buck Mangipane, Amy Miller, Kelsey Griffin
State of Alaska (SoA)	Kate Harper, Todd Rinaldi, Lee McKinley, Dick Shideler, Lisa Olson
USACE	Shane McCoy, Katie McCafferty, Sheila Newman, Heather Markway, William James, Jennifer Moyer, Jason Brewer
USCG	David Seris
USFWS	Douglass Cooper, Catherine Yeargan, Angela Matz
PHMSA	Robert Guisinger, Dustin Hubbard

Agenda/Discussion
<p>Day 5 Agenda</p> <p>AECOM – Safety Moment</p> <p>USACE – Introduction, asked about timeframe for revisiting SOC topics not covered in the Day 4 meeting</p> <p>USACE to reschedule discussion on commercial and recreational fisheries and aesthetics and public health.</p> <p>EPA – asked about delaying water quality/treatment discussion until RFIs 21 e, f and g (water treatment) can be reviewed.</p> <p>USACE – suggested second week in January. Asked USCG to provide availability for a follow-up meeting.</p> <p>EPA – asked if EPA could participate in future fish discussion</p> <p>USACE – yes</p> <p>Morning Session – Wildlife and Wetlands</p> <ul style="list-style-type: none"> Barriers to movement <p>SOC: <i>Wildlife – Bears - Baseline Data Limitations (row 734)</i></p> <p>AECOM – introduced topic, noted concerns on timing of bear surveys, specifically the low snow conditions during den survey</p> <p>ADFG – asked if the USACE will require additional denning survey. Voiced concern that den sites are not fully captured, hoped that this deficiency could be addressed during state permitting.</p> <p>NPS – noted timing of surveys, that 30-40% of bears will move large distances (approx. 60 miles) within the season, stressed importance of disclosing that the short period of observation time may underestimate bear abundance and activity.</p> <p>ADFG – requested that underestimates be noted in the document</p> <p>EPA – asked how data limitations were translated to impact analysis</p> <p>AECOM – explained that section 4.24 has been revised.</p> <p>Action Item – AECOM/USACE to add additional bear den survey prior to construction as a suggested mitigation measure to Appendix M.</p>

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SOC: Wildlife – Bears - Impacts – General (row 722)

AECOM – solicited feedback on big concerns regarding brown bear impacts

NPS – concerned that geographic scale of analysis is too restricted to capture the range of bear movement across the landscape, would like to see more data and predictions on bear-human interactions.

Action Item – AECOM/USACE to revisit size of analysis area to ensure that is defensible for mobile species.

ADFG – stressed the importance of mitigation measures (e.g. bear feeding, waste management) so that problem bears are not created. Importance of a wildlife interaction plans, but more important is company policy, enforcement and attitude towards wildlife.

AECOM – requested wildlife interaction plan examples

Action Item – ADFG to provide examples of successful wildlife interaction plans.

ADFG – reiterated the potential for bears to become habituated due to human error

AECOM – asked what the appropriate analysis area size is

NPS – noted that bears have been shown to range over 100 miles, gave recent Lake Clark NP 4-year study as an example. Also noted that some individuals moved less than 8 miles.

NPS – asked what pathways bears would be expected to be used within the project area.

NPS – noted that bears in Lake Clark basin often moved up river corridors, movement patterns are plastic to conserve energy and avoid confrontation; 30-40% of population moved approximately 60 miles. Wolf and bear tend to follow trails and roads. Noted that study was not designed to capture bear movement.

NPS – asked for an explanation on study areas around Amakdedori, and what the data limitations mean for the long-term project.

AECOM – reiterated the importance of disclosing data limitations.

- Exposure to human activities

SOC: Wildlife – Bears - McNeil River State Game Sanctuary (row 721)

AECOM – considers the biggest issue at McNeil River to be the potential to alter the bear/human relation and subsequently the wildlife viewing experience.

NPS – noted that this is a valid concern, noting that bears experiencing a negative interaction with human(s) outside of McNeil River could carry that into the sanctuary.

ADFG – noted that two staff run the entire McNeil River sanctuary – point being that they are not staffed to deal with problematic bears. Also noted that the mission of McNeil River game sanctuary was not fully captured in the EIS

Action Item – AECOM/USACE to check that the language regarding the mission of the sanctuary has been updated

NPS – noted that both bears and humans expect certain behavior of each other

ADFG – noted that the key is not to allow conditioning to human food, this is a greater concern than a bear that has been hazed. Bears on the North Slope that have been hazed typically avoid facilities but do not entirely leave the area, they adjust well to new situations. New bears at McNeil are initially wary of human presence, become habituated through the course of the season.

NPS – noted that bears are also attracted to petroleum products (antifreeze) plastics, camping gear, important to address this in any wildlife interaction plan.

ADFG – followed on with: bears are curious, as it is how they make their living

USACE – asked for the agencies to give specific comments on the applicant's Wildlife Interaction Plan

ADFG – asked about ADNRP permitting

ADFG – could not think of anything specific to bears, however that waste management permits would address bear interactions;

SPO - any lease of state land for pipeline construction would require a wildlife interaction plan

ADFG – also noted that wildlife interaction plans typically require a zone of no activity around den sites

SOC: Wildlife – Wildlife Interaction Plan (row 749)

AECOM – noted RFI 122 is not the full plan but the document outlines some wildlife interaction measures and commits to the future development of a wildlife interaction plan

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Action Item – AECOM/USACE to revise reference to the plan in the SOC response.

USCG – brought up bear/human interactions along the Greens Creek Mine road, noting a current proposal to restrict traffic along road and access within a wider mine buffer, see 5 AAC 92.5106

EPA – noted a general reliance in the DEIS on the future plans for minimization of the potential adverse impact, without an assessment of a plan's likely effectiveness, it is difficult to draw conclusions on impact.

ADFG – noted that it was unclear from SOC responses how concerns have been addressed, reiterated that while hazing of bears is appropriate in some situations, it may not be appropriate for Pebble due to the risk of that altered bear/human relationship being carried over to wildlife viewing stations. Stressed that it is absolutely important to keep camps clean and free of attractants. Also noted general inadequacy of bear data.

USACE – asked about bear baseline data – are there already opportunities for bears to have negative interactions with humans?

ADFG – noted that it is unclear if hazing takes place in surrounding communities, hazing does not happen at McNeil

NPS – explained that hazing is rare in the national parks, agreed that it is hard to know what the bears have experienced, exceptions are coastal bears, which largely travel in protected areas.

EPA – noted that bear-human interactions are additive

ADFG – regarding Mulchatna Caribou Herd (rows 544, 724), concerned that interpretation of radio collar data was not appropriate in the DEIS

AECOM – noted that the intent of the radio collar data has been disclosed in the document

Action Item noted that construction of transportation corridors could increase subsistence harvest of caribou

NPS – asked about the new alternative at Eagle Bay, which is a shallower freshwater environment and thus more susceptible to the establishment of invasive species

Action Item – AECOM/USACE to ensure that impact analysis addressed the greater potential for invasive species (freshwater aquatic nonnative species) establishment at Eagle Bay

- Wetlands

SOC: *Wetlands – Wetlands-Downstream-Indirect Effects (row 715)*

AECOM – introduced topic, explained that field-verified mapping is now available for entire analysis area, and that indirect impacts from fugitive dust, fragmentation, and dewatering are now evaluated

EPA – asked how indirect effects are being characterized, is it purely by acreage or are you able to capture the level of functional impairment

AECOM – explained that there isn't a functional assessment as there is no accepted methodology for this ecoregion of Alaska, as an alternative the acreage of hydrogeomorphic type has been quantified, impacts also presented by relative abundance of wetland type within the watershed

AECOM – explained that indirect impact to wetland function was evaluated through the intersection between indirect footprints and wetland type, which allows a semi-quantitative evaluation in so far that we can talk about wetland type and hydrogeomorphic (HGM) class and area and then tie the intersection of wetland type and HGM to function and the relative abundance of wetland type within a watershed. In this way we can talk about the percent of functional decrease on the watershed scale

EPA – asked about dust, how dust impacts were being evaluated, asked specifically if the amount of dust deposition being measured

AECOM – explained that literature sources provided by the NPS and others have been incorporated into the document; explained that area of dust deposition is defined but not the amount of dust deposited within that zone. Gave further explanation on how indirect impacts due to dust deposition are being evaluated, specifically noting plant community shifts being greater in acidic plant communities and non-vascular species being more susceptible to dust.

Action Item – EPA to provide dust references to AECOM/USACE

EPA – regarding (row 717), asked how the nature and degree of these indirect impacts to wetlands have been characterized, are all indirect impacts treated as equal?

AECOM – explained that the nature of impact is captured by wetland type, and that the degree of impact is captured in areas of impact, suggested that the SOC response should be revised.

Action Item – AECOM/USACE to revise SOC response (row 717) from 'magnitude' to 'extent'

NPS – asked if the impact of concentrate dust is evaluated

AECOM – yes, but at the mine site only because of proposed mitigation for concentrate hauling on the

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transportation corridor

ADFG – asked why a wetland functional assessment is not being performed when one was conducted at (nearby) Chuitna

USACE – explained the relative usefulness of functional assessments in the context of compensatory mitigation, if required. Noted that the lack of a functional assessment could potentially increase the compensatory mitigation imposed on the applicant.

USFWS – asked if impacts to wetlands at the mine site will be separated from impacts along the transportation corridor

AECOM – yes.

Afternoon Session – Parking Lot and Wrap Up

- Parking lot and wrap up

EPA – would like to see more time spent on SOC in (rows 705-708); and would like to request a meeting to discuss RFI 21e, RFI 21g water quality model, RFI 109f, RFI 145, and the AECOM technical memo (to be delivered next Wednesday)

USACE and EPA to figure out when RFIs will be delivered, how much time needed to review, and when folks are available to discuss.

EPA – asked if notes will stay in draft form, noted interest in the Monitoring and Adaptive Management Plan (RFI 135), thanked the group for respectful discussion, and for the work done thus far

USACE – yes, notes will stay in draft as they are meant to be used as working group notes, seconded EPA's appreciation for group effort

NPS – voiced concern about ferry passing shallow island areas in Lake Iliamna and potential for the ferry to spread any future infestation of freshwater aquatic invasive species

Action Item – AECOM/USACE to address potential for nonnative species spread by ferry within Lake Iliamna, noting the greater susceptibility of shallow lake environment at Eagle Bay and around islands at the north east end of the lake

- Closing statement

Action Items

Topic	Actions
Wildlife - Bears	AECOM/USACE to add suggested mitigation measure to Appendix M (Table M-1) for updated denning surveys prior to construction.
Wildlife - Bears	AECOM/USACE to revisit analysis area for wildlife to make sure it is appropriate for mobile species.
Wildlife - Bears	ADF&G to provide example(s) of successful wildlife interaction plan to EIS team.
Wildlife – Bears – McNeil River State Game Sanctuary	AECOM/USACE to verify that the SoA's DEIS comment regarding a statement in EIS about why the McNeil River State Game Sanctuary was developed has been addressed. Specific language to clarify establishment was previously provided.
Wildlife – Wildlife Interaction Plan	AECOM/USACE to revise response to SOC 749 to clarify that RFI 122 is not a written Wildlife Interaction Plan. The RFI response outlines some measures in the response and a commitment to prepare a written plan in the future.
Wildlife - General	AECOM/USACE to verify discussion on impacts from the transportation corridor resulting in potential increase in caribou harvest.
Wildlife – Invasive Species	Address susceptibility of shallow areas in Iliamna lake (Eagle Bay and Island archipelago at the NE end of the lake) to the establishment of freshwater aquatic invasive species and the potential for their spread by ferry traffic.
Wetlands	Revisit response to SOC row 717 to clarify how the degree of impact to wetlands functions is being characterized in the EIS, explain the consequences for compensatory mitigation due to the lack of a functional assessment.
Wetlands	EPA to provide additional dust references to EIS team

Additional Notes

Reschedule discussion with cooperating agencies on the topics of commercial and recreational fisheries, public health, and aesthetics; target the 3rd week of December.

USACE and EPA to work together to identify list of topics from the parking lot and outstanding RFIs and schedule a follow-up discussion (target date TBD). Other cooperating agencies to be invited to the discussion/meeting when scheduled.

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