

Technical Working Group – Marine Bird and Mammal TWG

Pebble Project

November 21, 2008

Atwood Building Room 1270

Draft Minutes Recorded by Charlotte MacCay/Pebble Partnership (PLP)

PRESENT:

Andrea Meyer (ADNR)
Scott Maclean (ADF&G)
Michael Rehberg (ADF&G) (Sitting in for Bob Small)
Barbara Mahoney (NMFS)
Leah Durocher (USACE)
Ellen Lance (USFWS)
Bill Larned (USFWS)
Douglas Burn (USFWS/MMM)
Jean Zodrow (EPA) (by phone)
Charlotte MacCay (PLP)

Brian Lawhead (ABR)
Adrian Gall (ABR)
Robert Day (ABR)

PROPOSED AGENDA

- Introductions
- Review Agenda
- Review of protocols/guidelines
- Formal Selection of Lead
- Clarification of Characterization of the *Affected Environment for NEPA and preterm monitoring* and how that relates to studies at Pebble
- Clarification that input at a TWG meeting does not exclude further input or change of direction after data is developed and released.
- 2009 Study Plan delivery and comment schedule
- Presentation by ABR???
- Setting the agenda and information packet for the next TWG meeting
 - ABR consultant's issues needing TWG input
 - Agencies' issues to clarify for input into the 2009 Study Plans
 - Information needs for the next TWG meeting
 - Setting a date for the next meeting

ADMINISTRATIVE

- The agenda was reviewed
- It was stated that the goal was to have the minutes written, distributed and reviewed for posting on the web within one month of the meeting.
- The contact matrix is being updated and will be sent out.
- Scott Maclean was appointed interim lead. He would like someone to lead the group who has a stronger background on the subject. PLP stressed that leadership skills are the most important skills for a lead.

CHARACTERIZATION/MONITORING

(PLP) PLP would like to clarify the types of data it is collecting to facilitate future discussions. The data collected to date have been collected for site characterization. The data are meant to be used to write the Affected Environment section of a NEPA (EIS) document. Because NEPA calls this "baseline information," PLP has also been referring to this data as baseline data, leading to some confusion. PLP is trying to avoid any further use of the word "baseline" to minimize confusion. To scientists, "baseline" means something quantifiable that can be used for comparison with data collected during operations to see if there have been any impacts. That was not the explicit intent of the data that we have collected to date, although PLP hopes that some of these data will be useful for monitoring purposes as well. PLP is finishing up the characterization phase and moving into monitoring, which will be used for comparative purposes with data collected after operations begin, but this term is causing confusion as well. Some people interpret monitoring data to be the data collected during operations. PLP considers data collected prior to operations for the intent of comparing it with monitoring data collected during operations to also be 'monitoring data'. For the sake of clarity we will start calling it 'preterm monitoring'.

(PLP) This is a new change in the use of the terms, and the clarification of use of terms needs to be incorporated by the consultants in the future as well. There are times when PLP and the consultant are hoping that the characterization data may be useful for monitoring as well, and we need to be clearer in stating those circumstances.

(Agency) Consultants need to be clearer on what is characterization and what is preterm monitoring.

NON-BINDING INPUT

(PLP) PLP would also like to clarify that we are asking for speculative input at this time. We are aware that you do not have the data from the studies done to date to learn how they are working. We fully expect that, as the data become available and the agencies complete their review, the agencies may have new input or want to change their mind about previous recommendations. There is nothing binding about any of the recommendations you make during the TWG meetings—you always can refine your input based on data as they become available. PLP is trying to establish open dialogue and set studies up as best as possible.

STUDY PLANS

(PLP) In response to the comments from the agencies that study plans were not available for review until too late in the season, PLP has scheduled its budget review process earlier in the year, allowing consultants opportunity to develop their study plans earlier. We expect study plans to be ready sometime in January. At the Steering Committee, it was discussed that the agencies should have one month to review the study plans prior to having a TWG meeting to discuss them. It would be helpful if the agencies put their requests for changes to the study plans in writing along with their rationale for the change. PLP will respond in writing to comments on the study plans within approximately 2 weeks of the TWG meeting, explaining which revisions are being incorporated and, when revisions are not being incorporated, the reason(s) why those suggestions were not incorporated. There can be further discussion on the study plans and proposed revisions at subsequent TWG meetings.

POTENTIAL PROJECT DESIGN

- A brief review of the potential port project design was provided for the group, although it was clarified that PLP has not yet finalized its design for the port.
 - There are two potential road routes under consideration; one through the "Y Valley" and one involving more fill along the eastern coast of Iliamna Bay, similar to the road realignment construction that was done near Girdwood several years ago.
 - The ore concentrate probably will be transported to the port in a slurry pipeline.
 - The concentrate would need to be dewatered, and the water would be piped back to the mine site.
 - A powerline probably will be brought over from the Kenai Peninsula.
 - Year-round shipping will occur, with up to several ships a day.
 - Helicopters are not expected to be a major component of operations.
 - A port man camp is a possibility, but its location and size are undecided.

- Supplies to be brought in through the port include, fuel, concentrate reagents, and other general supplies.
- Submarine blasting is not anticipated during construction.

"TAKE" PERMITS

(ABR) Out of 26 helicopter-based surveys, there were 9,900 cumulative Sea Otters. The highest count/survey was approximately 1,400 otters.

(Agency) NMFS and USFWS may require "Incidental Take" authorization under the Marine Mammal Protection Act (MMPA).

(Agency) You can't be pile-driving or creating noise without a large safety zone of about 2000'. If marine mammals come within that safety zone, it will be necessary to stop work until the marine mammal leaves again.

(Agency) Permits could allow "take," which includes harassment; although there is a provision for lethal take, applicants seldom apply for this.

(Agency) There is a threshold for underwater noise but not for above water noise. At the Port of Anchorage (primary concern Beluga Whales), there is a 160-dB threshold for noise in water. They have created an attenuation map of the noise based on substrate, water depth, and the frequency of the noise source.

(Agency) For Sea Otters, there is a greater concern about the effects of above-water noise. Above-water noise could also harass seals that have hauled out in the area, such as they do around the mouth of Iniskin Bay. There is not a set level or research about thresholds for above-water noise, which does not travel as far out of water as it does underwater.

(Agency) If a noise causes a Sea Otter to alter its behavior, such as raising its head, that might be considered a "take" under the Marine Mammal Protection Act.

(Agency) Take is defined under the MMPA as "harass, hunt, capture, or kill, or to attempt to harass, hunt, capture or kill" any marine mammal. The term "harassment" means any act of pursuit, torment, or annoyance which: 1) has the potential to injure a marine mammal (Level A); or 2) has the potential to disturb a marine mammal by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

(Agency) It's hard to prove definitively that the reason the otter lifted its head was due to the noise. If there were several otters resting, or sleeping, and they all suddenly swam to another bay, that would be a clear-cut case of harassment (i.e., "take").

(Agency) The MMPA has a prohibition on "take"; the rest of the act is a list of exemptions such as subsistence, research, and commercial fishing. There are a couple of ways to authorize an incidental take.

(Agency) In the case of an ESA-listed marine mammal, the two statutes (ESA and MMPA) intersect. Whichever act is more prohibitive trumps the other act. An ESA permit can be authorized for the life of a project, whereas a MMPA Permit can be for 1 year or for 5 years.

(Agency) The USFWS can't authorize a Sea Otter incidental take unless it has also been authorized under the MMPA. (The same is true for NMFS and belugas and sea lions.) This would be an interesting case to do a joint ruling for multiple species with a long-term commitment.

(Agency) Birds fall under ESA only, so, if the MMPA authorization were in place first, we could write birds and otters together in the same permit. If the MMPA authorization had not already been completed, we could write the ESA authorization just for the birds and leave a place-holder to add in the otters after the MMPA authorization.

(Agency) The two authorizations (ESA and MMPA) have different processes. MMPA is published in the federal register and is associated with a NEPA process and subsequent EA and/or EIS. ESA does not go through the NEPA process.

(Agency) NMFS pulls out sections of an applicant's NEPA document for use in the MMPA permitting.

(Agency) USFWS permits: The one-year option is an Incidental Harassment authorization (IHA), which does not require a response to comments. The five-year option does require the extra effort of a response to comments, but the effort is worth not having to reissue a permit every year.

(Agency) In the case of incidental take, the MMPA trumps the ESA, but you are still required to get an ESA permit.

(Agency) When you look at the history of regulations, this intersection was not addressed and there is a special Federal Register notice explaining why both are needed. If you need an ESA incidental-take permit, you must have a MMPA permit in place first. The two standards are out of whack, but the Agencies have made no efforts to bring them into better alignment.

(Agency) You could use the same information for the biological evaluation for the NEPA process in an MMPA permit as is used for the ESA permit Biological Assessment. There are a few differences to add in, such as cumulative effects.

(Agency) An ESA incidental-take permit allows the activity to go forward but minimizes the impact, sets conditions, sets monitoring requirements, and also gives the USFWS information about the species to help in subsequent determinations. The process can be mutually beneficial between industry and USFWS. USFWS has 14 information needs it requires as part of the permit application that is published in the Federal Register.

(Agency) An MMPA incidental-take permit may be required for construction and operations. The USFWS ESA incidental-take permit may also be required, depending on the outcome of the biological opinion.

(Agency) Requests for Incidental Harassment authorizations (IHA) under the MMPA are published within 45 days of receipt of a complete application; there are 30 days for public comment and 45 days after public

comment to issue a decision. (A five-year permit may have a longer associated process.) If construction is anticipated to start in about two years, the application process for incidental take permits should start now.

(Agency) A combined effort may be beneficial; maybe there is precedent in California with sea lions or Florida with manatees.

(Agency) There also is the Migratory Bird Treaty Act to consider.

(Agency) The MMPA process usually needs to precede the ESA process.

(Agency) Observers are one condition that may be required in the incidental-take permits to minimize impacts. No blasting would be allowed when eiders were within a distance of approximately $\frac{1}{4}$ mile of the blasting site (not sure of that distance—USFWS also uses 400 m at times).

(Agency) USFWS and NMFS could schedule a separate meeting to discuss the possibility of a joint incidental-take permit process. The research done for NEPA should be adequate for both permits.

(Agency) We are not sure what level of sound affects Sea Otters when they are above water. We know that noise disturbs sea otters, but we don't have a threshold sound level that elicits a disturbance response.

(Agency) If you are surveying otters at a kelp forest with an inflatable boat and a low level motor going slowly, the otters will start to spy hop, dive, and swim away, but we are not sure if this is a visual response or an audio response. A shipping corridor is likely to result in some level of harassment. A buffer route of perhaps a kilometer on either side may be needed to be covered for incidental take.

(ABR) Wildlife tour boats have not applied for incidental take authorization under the MMPA.

(Agency) Under incidental harassment, you don't need an incidental take permit as long as you never have a "take". I have heard stories of a specific cruise ship/trimaran that blasts through the ice where there are females with pups, but USFWS so far has not issued any citations for take of sea otters. We could send an undercover agent to issue a citation, or if they applied for an incidental take permit, we could set conditions; then, if they followed conditions, it would be ok, and if they ignored the conditions, they would be liable.

(Agency) There are 14 permitting information needs that you can access on the NMFS web page. Another way to approach determining information needs would be to start filling out a draft application form.

MARINE MAMMALS

(ABR) Sea Otters are in the bays by the site mostly in middle and late winter. Seal pupping occurs mid-May to late June.

(Agency) Are timing windows for blasting at the site a possibility—where no blasting would be allowed during winter?

(PLP) It is not feasible to have a seasonal window of no activity; it's too big of a construction project. They need to be able to work year round.

(Agency) Aerial surveys of sea otters have demonstrated changes in distribution associate with the tides at Port Moller. At low tide, the animals would be further from shore.

(ABR) Sea Otters move into the bays in numbers in winter; they mostly use the Iniskin Islands, which lie about $\frac{1}{2}$ mile from the potential port site. No surveys were done farther offshore (e.g., over possible shipping lanes) for safety reasons.

(ABR) Helicopter-based marine-mammal surveys were conducted within 2 hours on either side of high tide; no surveys showing habitat use at low tide, although Harbor Seals haul out primarily at low tide.

(Agency) It might be helpful to survey along the shipping route and document otter presence in that area. Otters typically prefer shallow water.

(Agency) A proposal to designate Critical Habitat for Sea Otters is expected to be delivered to the Federal Register by this Friday. There should be a final decision by October 1, 2009. Critical Habitat in the Iliamna/Iniskin Bay areas will likely be based on water depth. Biological features essential for conservation may require special management consideration. Features may include area that provide cover and/or shelter from predators such as Killer Whales which can heavily impact otter populations.

(Agency) The Service will be proposing 5 critical habitat units for this population of otters. The unit the potential port site is in is not an area that has had a dramatic decline. The question would be, do the activities affect the functionality of the protective nature of this habitat? To make an adverse-modification call on the potential project, it would mean that the activity would affect the whole population, not just the critical habitat unit. The fact that there may be Critical Habitat in this area may or may not have a large impact on this project. There is about a 1500-mile range of otter habitat. This management unit likely meets the criteria of being recovered. There is a potential for "take" if the loss of habitat would result in there being nowhere else where they could live or feed.

(Agency) Otters forage up to depths of 100 m maximum, although they prefer 40 m or less. If it is an enclosed bay, they may feed at deeper depths, but they especially prefer shallow depths in exposed waters. A likely permit condition could be that, as vessels approach shallower water, they must slow down.

(Agency) There are a lot of boat strikes in the harbor at Homer. It is probably some function of speed. The boaters are probably assuming that the otters will dive as they approach, but they don't. Boat strikes probably are less of a factor for bigger boats, which move more slowly.

(Agency) We conducted a study in Kachemak Bay, putting radio transmitters on 44 otters in 2007. It was a cooperative effort with the Kachemak Bay Research Reserve. There are about 36 transmitters that were not used in that study that are being kept in storage. It may be possible to put together a capture project in this area to monitor otter habitat use and movements. The radios last about 2 years. They are VHF and have to be implanted surgically in the body cavity. The fur and tissue attenuate the signal, so they cannot be tracked by satellite—they require aerial tracking. They have colored flipper tags for visual identification. There may be opportunity for collaboration between USGS and USFWS. The permits for capture are already in place. The abundant numbers of animals at the Iniskin Islands may accommodate their capture for tagging. The study would help to determine if the otters are using the sheltered area in winter and Kamishak Bay in summer. It also would help to determine if they are coming in and out of the bays daily or if they were resident there in the winter. There are a lot of marine organisms in the area to serve as food for a lot of animals.

(Agency) There are times when flights to track otters are extremely limited by daylight.

(Agency) In some studies, we are finding otters at certain locations only at night. Otters can feed at night if there is a lot of foraging competition or scarcity of food during the day.

(ABR) The study could provide insights for the probability of interaction between otters and ships. It would tell us if they move off the islands every day to forage across the shipping lanes. There may be some opportunity for scheduling ships temporally or seasonally to avoid the otters.

(Agency) There may be potential to triangulate on radios vs. flying over by putting a receiver at the potential port site and several other locations. It would be cheaper than flying. Whether or not we need a plane depends on how tight the reception is despite the attenuation. It would provide an ellipse of location information, rather than exact locations that are dependent on visually locating colored fin tags.

(ABR) An ellipse would still be helpful for determining the time of presence.

(Agency) The data collected so far have really improved our understanding of how otters use western Cook Inlet. The information from the studies has already been extremely useful.

EIDERS

(Agency) We haven't discussed eiders much.

(ABR) They are also in both bays. In Iniskin Bay, they are near the head of the bay in the area approaching the port.

(Agency) There is a lot of good food in there for them.

(ABR) It is hard to do boat-based studies in that area of Iniskin Bay—the boat work is perilous. In Iliamna Bay, they appear to like a cobble-bottom area the most. It may be associated with a difference in food sources between sites.

(Agency) The listed population is tanking, so techniques such as telemetry are too risky to apply. Concerns for eiders will include: collision with infrastructure and petroleum hydrocarbons associated with the port. Some of the first oil discovered in Alaska was in the Iniskin Peninsula. If hydrocarbons are naturally occurring in the area, you should take PAH samples in sediments, water, and mussels to document the natural presence and background levels.

(Agency) Approximately 60 km south of the project site, in southern Kamishak Bay, is where most eiders in the Cook Inlet population spend their time. They are a population vulnerable to spills.

(Agency) Does the project intend to do oil spill trajectory work?

(PLP) Yes, it already is underway.

NEXT MEETING

(ABR) There will be no 2009 Marine Wildlife Study Plan because the studies have temporarily been put on hold.

(Agency) Is there need for another meeting then? Is there any likelihood that future projects will be funded?

(PLP) Yes, the probability of future studies is high. We want to make sure they are the right studies first. We also had to delay some studies due to budget constraints, but we will likely do them in future years.

ACTION ITEMS

Ask ABR if aerial surveys ever show schools of fish.

Ellen Lance needs copies of the presentation and a map of the port site area.

PLP