



ALASKA WILDLIFE ALLIANCE

Letting Nature Run Wild

May 10, 2020

JBER Public Affairs
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RE: JBER Mortar and Artillery Training at Richardson Training Area EIS

To Whom It May Concern,

On behalf of the Alaska Wildlife Alliance and its supporters, I am providing the following comments as part of the scoping process regarding the Department of the Air Force's and the Department of the Army's intent to prepare an Environmental Impact Statement (EIS) to assess the potential social, economic, and environmental impacts associated with modifying the conditions under which indirect live-fire weapons training can be conducted at Joint Base Elmendorf-Richardson (JBER), for the purposes of meeting Army training standards at home station.

The Alaska Wildlife Alliance is a non-profit organization based in Anchorage, founded more than 35 years ago, and speaks for more than 1,500 supporters of Alaska's wildlife. We advocate for healthy ecosystems, ethically and scientifically managed to protect our wildlife for present and future generations. In the scoping documents made available online, the preferred alternative is to expand the impact area by 585 acres and to remove the winter-only restrictions thus allow firing activities to occur year-round. These proposed changes pose concerns for the health and sustainability of sensitive wildlife dependent upon essential habitat provided by the wetlands of Eagle River Flats (ERF) and the waters of Eagle River and Eagle Bay, namely migratory waterfowl and endangered Cook Inlet beluga whales. We request you thoroughly consider the following comments during your development of a draft EIS.

1) The public comment period was insufficient.

The time period to submit comments was limited to 45 days. Given the federal emergency declaration due to the unprecedented COVID-19 pandemic, and life as we know it being turned upside down, 45 days was woefully inadequate for stakeholders to be able to review all the available information online, and develop thorough and substantive comments. While the agencies recognized detrimental effects of the pandemic, and cancelled the two public scoping meetings, there was a failure to employ virtual meeting technologies to at least present the information verbally, with the agency representative providing clarifying comments in an effort educate the public about the activity as would have been done during an in-person event. This would have allowed for the development of more informed comments. While we were able to quickly develop some basic comments, they are not as comprehensive as we would have developed had the public comment period been longer.



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2) *The limited range of alternatives identified is not reasonable.*

In addition to the status quo / no action alternative, the agency has only presented two alternatives: one involves allowing firing activities to occur year-round, and the other allows year-round firing while also expanding the impact zone by 585 acres. These three alternatives seem to present an all-or-nothing approach, with no real “middle of the road” alternative. This is not a reasonable consideration of alternatives. There are no explanations about the development of these alternatives, whether other alternatives were considered and dismissed, or why the preferred alternative in the draft EIS developed in 2010 is now deemed insufficient and has been relegated as the token other alternative. The current preferred alternative is actually more environmentally damaging than what was preferred in 2010. These questions need to be explained in the new draft EIS. Unfortunately, the 2010 draft EIS was not included in the background or reference documents available on the project website (<https://jber-pmart-eis.com>).

There are other alternatives that appear to be a compromise between the all-or-nothing approach presented in the scoping materials. For example, it seems reasonable that training opportunities may be expanded while wildlife are still being afforded protections if:

- the requirement for ice to be a certain thickness be removed, while also adding a restriction which prevents activities during peak times when sensitive wildlife use ERF or Eagle River/Eagle Bay; such a restriction should encompass the spring and fall migration periods of migratory waterfall, and peak beluga whale presence in Eagle River and Eagle Bay August - October; or
- current winter firing restrictions are maintained, with additional acreage added to expand the impact area in the winter.

We caveat that these are just examples of other alternatives that seem reasonable and which should be considered in the draft EIS, but at this time Alaska Wildlife Alliance does not have the information available to determine whether we support any alternative other than the no action alternative. Significantly more information about each alternative, and how it varies from the no action alternative, is necessary to make an informed decision and should be included in the draft EIS (e.g., if year-round, how frequently will activities occur; how many more munitions and types would be expended onto ERF; etc.).

Additionally, there is no clear explanation regarding why these specific alternatives were selected, other than a very vague statement that they are necessary to meet the Army’s home station training requirements. An online search did not clearly explain what those requirements may entail, but the most readily obtained results regarding the Home Station Training Initiative focused on training soldiers in the use of technology such as communications and surveillance, not mortar and artillery firing. The lack of details of such requirements impairs our ability to provide adequate comments regarding the suitability and potential effects of each alternative and its ability to meet the purpose and need. We urge clarity in the draft EIS regarding these home station training



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requirements as they specifically pertain to mortar and artillery training at ERF so as to allow for a more informed position when assessing alternatives.

3) The NEPA analysis must consider the current status, trends, and a realistic assessment of cumulative effects on wildlife.

While we recognize there are a plethora of wildlife in the vicinity of the ERF impact area (bears, belugas, birds, fish, moose, river otter, seals, sheep), our comments are focused on endangered Cook Inlet beluga whales and migratory waterfowl given their elevated conservation concerns. We are aware that JBER has been conducting wildlife surveys for quite some time, and we urge that information be made readily available to the public to better understand the current status of wildlife and their use of ERF and Eagle River/Bay. We support the inclusion of the best available data in the draft EIS, not only from the JBER surveys, but also research from private, state, and other federal agencies and encourage a thorough exploration of relevant studies.

A report was released by NOAA Fisheries this past December indicating that the 2018 population abundance surveys revealed that the population is declining at 2.3% per year, much faster than previously anticipated, and there are only an estimated 279 belugas remaining in Cook Inlet¹. This suggests that situations which previously might not have been considered to significantly adversely affect the population must be evaluated in a new light – the status quo of continuing to introduce noise into their environment and continuing to increase human activity is not sustainable for the beluga population.

While it is well documented that the beluga whales forage in Eagle River year-round, it's important to recognize their numbers surge in August through October², a time when they may have newborn or young-of-the-year calves with them, making this a critical time period for protection. Allowing mortar and artillery training activities to occur year-round will result in more noise being introduced into beluga whale habitat, and expose more whales to this stressor. NOAA Fisheries has identified anthropogenic noise as a threat of high concern to the recovery of Cook Inlet beluga whales³, and established that noises in excess of 160 dB_{RMS} re: 1 µPa resulting from activities such as explosions cause behavioral disturbance and harassment to the whales. A June 2007 seismic acoustic experiment conducted at ERF artillery impact range involved setting off fixed explosions to determine the seismic and acoustic effects of the live-fire detonation of 155-mm high-explosive

¹ Sheldon and Wade 2019 (Aerial surveys, distribution, abundance, and trend of belugas (*Delphinapterus leucas*) in Cook Inlet, Alaska, June 2018). Available at: <https://apps-afsc.fisheries.noaa.gov/documents/PR2019-09.pdf>

² Castellote et al. 2020 (Seasonal distribution and foraging occurrence of Cook Inlet beluga whales based on passive acoustic monitoring). Available at: <https://www.int-res.com/articles/esr2020/41/n041p225.pdf>

³ NMFS 2016 (Recovery Plan for the Cook Inlet Beluga Whale, *Delphinapterus leucas*). Available at: <https://www.fisheries.noaa.gov/resource/document/recovery-plan-cook-inlet-beluga-whale-delphinapterus-leucas>



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artillery rounds⁴. Instrumentation was set up from the detonation line to the Eagle Bay and parallel to the shore at the edge of the Flats. Hydrophones recorded the sound levels in the water just off shore of the sensor array to determine the noise levels beluga whales may be exposed to during the course of an exercise. The results of the study were that the detonations of equivalent blast levels to 155mm ordnance exceeded 160 dB, despite all shot locations being greater than the 500m "safety zone" from the shore of Eagle Bay. Results also indicate that the peak sound pressure levels in the Eagle River will yield even higher peak pressures as the river cuts directly into the artillery impact zone.

Given the cryptic nature of belugas, and the high levels of turbidity obscuring accurate and reliable visual observation of belugas below the water surface, it should be presumed that belugas may be present in Eagle River/Bay any time, but especially during peak use August - October. Planning artillery and mortar training exercises coinciding with documented peak beluga presence, knowing that sounds from artillery may transmit into the waters making up beluga habitat at levels exceeding the NOAA Fisheries acoustic harassment thresholds, might be construed as violating firing restrictions which state that "no wildlife will be purposefully killed, injured or targeted, and that training units immediately cease fire if major mammal species are present in the target area." Any potential acoustic effects to critically endangered beluga whales must be thoroughly analyzed and mitigated against in whichever alternative is ultimately selected.

Furthermore, the Cook Inlet beluga whale recovery plan has also identified cumulative effects as a threat of high concern to the recovery of these whales. NOAA Fisheries stated that "Although individual activities might be deemed insignificant when considered independently, creeping normality⁵ (e.g., death by a thousand cuts) can cause substantial adverse effects to nearly any entity, including Cook Inlet belugas, at both individual and population levels...But the high level of human activity in Cook Inlet has increased such that cumulative effects of multiple activities must be appropriately accounted for." Unfortunately, the ESA section 7 consultation process does not allow for a meaningful assessment of cumulative effects as intended in the recovery plan and instead, by definition for consultation purposes, limits the assessment to only future non-federal activities co-located within a project's immediate action area. This means all the other stressors that these whales encounter will not be adequately considered in the consultation's cumulative effects session. Cumulative effects also include synergistic effects, which the recovery plan defines as the case when two stressors interact to cause greater harm than the sum of the effects of the individual stressors. An example that is of concern for belugas is the potential for synergistic effects to occur as a result of co-exposure to certain chemical pollutants and noise. Studies have documented that exposure to ototoxic chemicals in the presence of noise can result in greater hearing damage than exposure to either in isolation. Cook Inlet has tested positive for numerous

⁴ Information about the 2007 ERF explosives study obtained from the June 8, 2007 and June 29, 2007 records on the ADEC contaminated sites webpage for the ERF site (Site Report: JBER-Ft. Rich OUC Eagle River Flats XU022): <https://dec.alaska.gov/Applications/SPAR/PublicMVC/CSP/SiteReport/431>

⁵ Creeping Normality: the way a major negative change, which happens slowly in many unnoticed increments, is not perceived as objectionable.



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contaminants and pharmaceuticals, and is rife with human-caused noise on a daily basis. Year-round firing will introduce noise and chemicals to the beluga habitat in the summer, a period of relative quiet for belugas in Eagle River and Eagle Bay when other areas of Cook Inlet are experiencing increased noise from seasonal industrial activities. Adding summer firing activities will expose belugas to additional stressors, increase their cumulative effects, and increase the potential for synergistic effects. We strongly urge that when considering cumulative effects from this project, the NEPA analysis takes the approach as intended in the beluga recovery plan, and consider all the sources of noise and other stressors to belugas, and not rely on the ESA section 7 consultation process to adequately consider cumulative effects.

In regards to the status of migratory waterfowl, during spring and fall migrations, ERF is an important staging ground for numerous species, including ducks, geese and swans, with populations exceeding 5,000 waterfowl. If JBER is now only conducting their waterfowl surveys once every 5 years because terms of the settlement agreement of the 2002 lawsuit have been met, we strongly encourage coordination with other area biologists and management agency representatives to assess current trends in Anchorage populations and not merely assume waterfowl numbers remain unchanged since the last JBER survey. We also encourage strong consideration of the comments submitted by the U.S. Fish and Wildlife Service (USFWS) in response to the 2010 draft EIS, in which they stated that the no action alternative would maximize conservation benefits for migratory birds, relative to the other alternatives analyzed, and which provided numerous recommendations and mitigation measure should the preferred alternative at the time (allowing year-round firing) be adopted⁶.

4) *The NEPA analysis must consider the effects of Alaska's warming climate.*

Alaska's climate is warming at three times the rate of the Lower 48. Unlike other anthropogenic impacts, global warming is directional and does not respect jurisdictional boundaries. Our wildlife species and their habitats respond at different rates to this changing environment, which can lead to species extinctions, novel assemblages, and degraded ecosystems.

White phosphorus does not completely breakdown in a wet environment, such as this wetland impact area and the remaining particle is toxic when consumed by dabbling birds. In 2009, waterfowl surveys of ERF documented a rise in dabbling bird mortality as compared to the previous three years, and which was also higher than levels recorded the following year. The increased mortality in 2009 was attributed to unusually dry conditions during the first half of the 2009 fall migration season. Because of the shallower than normal water levels, ducks were able to access small unknown hot spots of contamination in the ponds that would normally have been in deeper water and inaccessible to dabbling ducks. We are in a new climate regime, where each

⁶ A synopsis of USFWS's waterfowl mitigation recommendations is available on ADEC's contaminated sites for ERF, action report dated 4/20/2010, available online at <https://dec.alaska.gov/Applications/SPAR/PublicMVC/CSP/SiteReport/431>



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year seems to be in competition with the previous to break heat records. This is particularly concerning to the health of dabbling ducks if the conditions in 2009 start to become the new normal, especially if waterfowl surveys are only conducted every few years. There may be significant die offs as a result of exposure to previously inaccessible white phosphorus in ERF.

Climate change effects are also a concern to the endangered Cook Inlet beluga whales, in that climate change is having an indirect effect on ocean noise pollution by increasing the pH levels (ocean acidification). This is expected to be more prominent in higher latitudes, such as Alaska, which would allow lower frequency sounds to carry farther and to be stronger at a given distance. This effect can be exacerbated in shallow areas because shallow channels can trap noise and allow it to travel further; upper Cook Inlet is generally shallow.

As such, we strongly encourage thorough analyses of climate change effects on wildlife species, in isolation as well as how they may be intensified should year-round firing be authorized.

On behalf of Alaska Wildlife Alliance and its supporters, I urge the Departments of the Air Force and the Army to extend the public comment period for this scoping process, to expand the list of alternatives considered, and to provide further clarifying details during the NEPA process as specified above.

Thank you for your time and consideration in regards to this matter.

Sincerely,

Nicole Schmitt
Executive Director