Department of Fish and Game





OFFICE OF THE COMMISSIONER Headquarters Office

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August 13, 2019

Mr. Rick Steiner Anchorage, AK

Dear Mr. Steiner:

After reviewing both your request for me to use my emergency order authority and the petition presented on behalf of yourself and numerous other parties to close an area adjacent to Denali National Park (DNP) to the taking of wolves under both hunting and trapping regulations I have determined that the best available information and facts do not constitute an emergency. The issuance of an Emergency Order or need for an emergency Board meeting is not warranted at this time.

According to 5AAC 96.625(f), an emergency is an unforeseen, unexpected event that threatens a fish and game resource, or an unforeseen, unexpected resource situation where a biologically allowable resource harvest would be precluded by delayed regulatory action and such delay would be significantly burdensome to the petitioners because the resource would be unavailable in the future. With respect to your requests the department has determined that there is no biological threat to the wolf population at this time.

The Alaska Department of Fish and Game (Department) has no conservation concerns regarding wolves in Unit 20C, including the area requested to be closed. The Department's management goal for wolves in the Fairbanks area (Units 20A, 20B, 20C, 20F, and 25C) is a fall density of 4.2 wolves/1000 km² (11 wolves/1000 mi²). The Department is meeting this goal at this time. Annual wolf harvest in the proposed closed area is low and does not compromise our wolf population goal.

Information pointing to continued low numbers and densities of wolves inside the park is not a conservation concern. Such low population levels and killing of wolves by other wolves are not unprecedented in the Interior Alaska ecosystem. The low wolf population is commensurate with the low population of ungulates in the park on which wolves depend for food. This does not constitute a threat to the wolf population and is aligned with the NPS management philosophy of allowing natural processes to occur. In Unit 20A immediately adjacent to the east side of the park, the moose population is high, resulting in a wolf population density approximately four times higher than in the park.

In general, wolf populations in Alaska are regulated by prey abundance and availability, natural mortality, and emigration. The take of wolves that spend much of their lives inside the park by hunters and trappers outside the park is not sufficiently large to regulate the DNP wolf population.

The petition cites Borg et al. (2015), which points to wolf harvest outside DNP as causing a decline in wolf viewing opportunities. However, the authors published a corrigendum (correction) to this paper (Borg et al. 2017) which states that "the effect of the cause of mortality (*i.e.*, harvest) and season of breeder loss on pack maintenance were not supported by the data and their effects should not have been interpreted" (emphasis added.) Thus, the petition's argument incorrectly implicates harvest and subsequently the proposed buffer in affecting wolf population dynamics (*i.e.* social structure).

The petition also cites Borg et al. (2016) as pointing to loss of wolf-viewing success. However, the 2016 publication is a correlative study that cannot establish causation and presents marginal evidence of a correlation between increased "sightings" and the presence of a buffer. However, other variables (i.e. pack near road index) presented affected "sightings" orders of magnitude more than the buffer variable (Table 4 in Borg et al. [2016]). Moreover, supplemental table 3 in Borg et al. (2016) shows that harvest adjacent to the park was actually higher during buffer years than when no such closure was present. Borg et al. (2016) explicitly includes multiple types of sightings (i.e. buses and professional staff) and accordingly should not be interpreted as the probability that a member of the public would see a wolf.

In an email, as cited by the petition, Dr. Borg states that "As of March, we had 70 wolves in 10 packs that resided primarily in the park study area." Department review of NPS data available online (<u>https://www.nps.gov/dena/learn/nature/wolf-research.htm</u>) shows that this is well within the normal spring wolf population range (average = 71.8 wolves during 1986–2019) within DNP. Additionally, the email states that "the Riley Creek West pack was seen frequently last year because they rendezvoused close to the park road for much of the season" and that "both adults of the pack were killed by other wolves." Dr. Borg goes on to say that a second pack is ranging outside DNP, while a third typically does not travel as far south as the Park road.

In none of these instances does Dr. Borg implicate harvest as the cause of low wolf sightings. Rather, the email points to pack location as the relevant factor in wolf sightings in DNP. This corroborates Borg et al. (2016), which indicated that "pack near road index" explained 53% of the variation in their prediction models. Other factors, including effects of wolf-on-wolf predation and prey abundance, (such as cyclic hare populations) were not investigated.

The wolf sightings index graph in the petition (included below), which purports to record fewer wolf sightings due to harvest, does not show causation of changes in wolf sightings. This graph also uses a year (2010) with an unusually high percentage of wolf sightings but an exceptionally small sample size as the benchmark. Although this graph shows that 45% of trips in 2010 resulted in wolf sightings, averaging the sightability numbers from NPS reports for 1997–2018 yields an average sightability of 15%. Wolf sightings depicted in the petition's graph during 2017 and 2018 are slightly higher than this long-term average.



The request to eliminate wolf hunting and trapping in this area is fundamentally allocative in nature. That is, the allocation of wolves between possible harvest and possible viewing opportunities for DNP visitors. These allocation issues are the purview of the Alaska Board of Game and were not unforeseen by them when they last took action on this issue.

The Department concludes that there are no unforeseen effects of regulations allowing wolf harvest in the proposed buffer area on wolf viewing opportunities in DNP. Wolf harvest is not unforeseen, is biologically sustainable, and the population remains healthy. Neither approval nor denial of the requested closure is likely to appreciably affect the population of wolves in or near Denali Park or viewing opportunities. Therefore, no emergency exists.

Two proposals were submitted to the Alaska Board of Game regarding wolf hunting and trapping seasons in this area and will be considered at the March 2020 board meeting. The public has come to rely on this regularly scheduled participatory process as the basis for changing game regulations. The Department recognizes the importance of public participation in developing wolf management regulations and recognizes that public reliance on the predictability of the normal board process is critical in determining regulatory changes, especially when the issue does not threaten the resource but is a question of allocation between resource users. I encourage you to participate in the March 2020 board meeting.

Thank you for your interest in wolves in this area and for taking the time to share your thoughts and concerns. I recognize and appreciate your values for Alaska's wildlife.

Sincerely,

Doug Vincent-Lang Commissioner

Literature Cited

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- Borg, B. L., S. M. Arthur, N. A. Bromen, K. A. Cassidy, R. McIntyre, D. W. Smith, and L. R. Prugh. 2016. Implications of harvest on the boundaries of protected areas for large carnivore viewing opportunities. PloS one 11: e0153808.
- Cc: Kristy Tibbles, Alaska Department of Fish and Game Eddie Grasser, Alaska Department of Fish and Game Cheryl Brooking, Alaska Department of Law Ted Spraker, Alaska Board of Game Stosh Hoffman, Alaska Board of Game Larry Van Daele, Alaska Board of Game Tom Lamal, Alaska Board of Game Jerry Burnett, Alaska Board of Game Al Barrete, Alaska Board of Game Orville Huntington, Alaska Board of Game