The Honorable Deb Haaland, Secretary Department of Interior 1849 C Street NW Washington, DC 20240

Dear Secretary Haaland:

Thank you for your continued attention to the plight of gray wolves in the Northern Rocky Mountains. We write to share our concern based upon recently obtained information¹ that indicates Idaho's wolf population is in increased jeopardy. Given Idaho's unrestricted hunting season on wolves through the upcoming denning season in April, it is imperative that the Department of Interior (DOI) utilizes its legal authority to issue an emergency relisting now before more breeding adults and their pups are killed for bounties.

Idaho Senate Bill 1211—which went into effect on July 1, 2021—removed regulations protecting wolves and significantly increased incentives for hunters and trappers. This includes deregulation of quotas, allowing the killing of wolves year-round and regardless of age, widespread bounty payments, highly increased hunter and trapper efforts, and more.²

We are deeply concerned that DOI has not yet enacted emergency relisting for Northern Rocky Mountain wolves primarily because the U.S. Fish and Wildlife Service had not observed a spike in the number of detected wolf kills in recent months (2021-2022). That is a very poor criterion on which to base emergency listing because fundamentals of population biology indicate that an increase in the number of kills is a deeply unreliable and inappropriate basis for inferring whether a population's abundance is low or collapsing due to unsustainable mortality. Basic principles of population biology specify that the population dynamics are driven by per capita rates of mortality (the proportion of a population that dies per unit of time), not the number of individuals killed.^{3,4,5} These basic principles also signify that a *declining number* of kills can correspond to devastating *increases in the rate of mortality*, when abundance is declining.

This concern is compounded by a closely related principle of population biology known as "catch per unit effort" (CPUE). Briefly, when a population declines greatly, the effort required to maintain the same number of kills increases greatly.⁶ Idaho's gross relaxation of regulations that limit killing and incentives of bounties to hunters and trappers have triggered a surge in effort.^{7,8} That such a large increase in effort was not accompanied by a substantial increase in the number of kills is reason to be deeply concerned that increased mortality *rate* is driving steep declines in abundance. In simpler terms, a likely explanation to why the *number* of wolf kills have not increased drastically is that there are fewer wolves left in Idaho. One would expect an increase in the *number* of wolf kills if the population were healthy and abundant; yet Idaho maintaining a similar number of wolf kills despite the increased effort is indicative of population decline.

Beyond those concerns about CPUE and the misinterpretation of trends in the number of wolves killed, emergency relisting is necessary because reliable wolf population estimates in Idaho do not currently exist. Reliably accurate estimates of abundance and trends in abundance are essential for understanding how Idaho's ongoing unregulated killing is affecting the wolf population.⁹ Yet, the Idaho Department of Fish and Game's method for estimating abundance in the face of its unregulated killing is not reliable. Specifically, the method described in the *Camera-Based Estimation of Statewide Wolf Abundance in*

Idaho 2019–2021 Interim Report would allow a large population decline to go undetected. ¹⁰ In the absence of reliable estimates, the best-available science indicates that one should expect Idaho's intense unregulated harvest to endanger the wolf population in the Northern Rocky Mountain Distinct Population Segment (DPS). By augmenting bounties and encouraging adult and pup killing during the breeding season¹¹, Idaho's unregulated wolf-killing program gravely risks overexploitation without adequate regulatory safeguards necessary for protecting wolves. Even if Idaho wanted to curtail its overexploitation, it could not do so in a timely manner because that would require a lengthy process of changing state law. Federal action is the only mechanism available to protect the wolf population in Idaho now.

The concerns outlined here are heightened when contextualizing Idaho's current bounties to encourage wolf killing – \$2,500 per wolf. These payments are on the order of five times greater (in real dollars) than bounties that drove wolves to extinction across large areas of the United States in the 19th and 20th centuries.¹²

Both Montana and Wyoming ended their wolf hunting seasons in March, *before* the denning season. However, wolves in Idaho remain under the most serious threat. Killing whole packs along key corridors between the subpopulations that constitute the Northern Rockies metapopulation threatens the integrity of the regional wolf population. Urgent action is required to stop the eradication that is underway in Idaho.

As Secretary of the Department of the Interior, you have the authority to enact an emergency relisting. We urge you to immediately issue an emergency regulation to restore federal protections through the Endangered Species Act (ESA) to the Northern Rocky Mountain DPS of the gray wolf. This action will provide protections for wolves in the Northern Rockies for 240 days—especially in Idaho where they are at greatest risk—while USFWS completes its 12-month review. Declining to intervene could have catastrophic implications for Idaho's wolves, and by extension the Northern Rocky Mountain distinct population segment.

Sincerely,

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¹ Idaho Department of Fish and Game. 2022. *Camera-Based Estimation of Statewide Wolf Abundance in Idaho 2019–2021 Interim Report*. February 2022.

² Foundation for Wildlife Management. October 2021 Cooperative Agreement Report to Idaho Department of Fish and Game and the Wolf Control Board.

³ Fukasawa, K., Osada, Y. and Iijima, H., 2020. Is harvest size a valid indirect measure of abundance for evaluating the population size of game animals using harvest-based estimation? *Wildlife Biology*, 2020(4).

⁵ Cougar Management Guidelines. By the Cougar Management Guidelines Working Group: Tom Beck, John Beecham, Paul Beier, Terry Hofstra, Maurice Hornocker, Fred Lindzey, Kenneth Logan, Becky Pierce, Howard Quigley, Ian Ross, Harley Shaw, Rollin Sparrowe, Steve, Torres. Publisher: WildFutures 2005. <u>https://www.jstor.org/stable/3785167</u>

⁶ Skalski, J.R., Ryding, K.E., and Millspaugh, J.J. (2005). 8 - Analysis of Population, Wildlife Demography, Academic Press, Pages 359-433, ISBN 9780120887736, <u>https://doi.org/10.1016/B978-012088773-6/50009-2</u>.

⁷ Idaho Senate Bill 1211. 2021. Sixty-sixth Legislature of the State of Idaho. <u>https://legislature.idaho.gov/wp-content/uploads/sessioninfo/2021/legislation/S1211.pdf</u>

⁸ Foundation for Wildlife Management. 2022. F4WM February 2022 Newsletter.

⁹ Conservation Measures Partnership. 2020. Open Standards for the Practice of Conservation V4.0.

https://conservationstandards.org/wp-content/uploads/sites/3/2020/10/CMP-Open-Standards-for-the-Practice-of-Conservation-v4.0.pdf

¹⁰ Creel, S. 2022. Methods to estimate population sizes of wolves in Idaho and Montana. Unpublished report. March 31, 2022.
¹¹ Ausband DE, Stansbury CR, Stenglein J, Struthers JL, Waits LP. 2015. Recruitment in a social carnivore before and after harvest. *Animal Conservation* 18: 415-423.

¹² Freakonomics Radio Network. 2022. "Can the Big Bad Wolf Save Your Life". March 23, 2022.

https://www.pbs.org/wnet/nature/the-wolf-that-changed-america-wolf-wars-americas-campaign-to-eradicate-the-wolf/4312/

⁴ Garshelis, D.L., and Hristienko, H. 2006. State and provincial estimates of American black bear numbers versus assessments of population trend. *Ursus* 17:1–7.