February 21, 2023

Okanogan-Wenatchee National Forest Domestic Sheep 215 Melody Lane Wenatchee, WA 98801

Thank you very much for the opportunity to comment on the proposal to amend the Okanogan–Wenatchee Forest (OWNF) Plan(s) to provide guidance for where domestic livestock grazing might be feasible and appropriate, and to develop site–specific allotment management plans for grazing of domestic livestock. I write as independent wildlife biologist with 40 years' experience in the field. From 2012 through 2019, I was employed by the Washington Department of Fish and Wildlife, where my responsibilities included statewide coordination of survey, inventory, research, and management of bighorn sheep. While in that position, I interacted with OWNF staff frequently on bighorn sheep and domestic sheep management issues, and also discussed the issue frequently with USFS Regional officials.

I would draw you attention to the letter to the OWNF Forest Supervisor dated June 27, 2019 signed by Gray Thornton and Kevin Hurley on behalf of the Wild Sheep Foundation. I have seen this letter, and believe that it honestly and objectively lays out the situation regarding domestic and bighorn sheep on the Forest. I concur with all the presentations of fact in that letter, and support those signers in urging that the new Forest Plan acknowledge the science, Congressional Direction, and the identified risk of contact represented by the status quo. To the points made and issue raised in that letter, I would add just 3:

First. the USFS has pioneered the use of a Risk-of-Contact model to help managers predict how the spatial juxtaposition of domestic and wild sheep is likely to play out over some years into the future. Although no model is perfect, this model has been thoroughly examined and remains a very useful tool. To my understanding, both OWNF and Washington Department of Fish and Wildlife (WDFW) biologists have run this model numerous times, updating it and refining it.

I would be concerned, however, if further runs of the model are used to adjust the predictions made a few years ago. One of the influential parameters in that model is an updated estimate of the number of bighorn sheep on the landscape. My understanding is that that number has declined in recent years, largely because of pneumonia. Although we can never be 100%

certain, it seems exceedingly likely that this pneumonia had as its origin contact with commercially-grazed domestic sheep. Thus, it is likely that updated iterations of the existing model using the lower number of wild sheep would — perversely — indicate a lower risk of contact than earlier iterations. If so, this would be precisely because contact between the 2 species – and thus, the damage the model is intended to minimize — has already occurred. The intent of the model is to estimate risk of contact under conditions in which it is has not yet occurred, and in which bighorn sheep populations are at an abundance that does not reflect recent pneumonia–related declines.

Bighorn sheep populations in the models should also include a reasonable estimate of the now-defunct Tieton Herd, which was removed by WDFW because of a particularly lethal strain of bacteria, but which WDFW intended to reinstate when risk of spillover from domestics was sufficiently low.

Second, I've been unable to find more details about the preliminary alternatives mentioned in the NOI. That said, I am concerned by some language suggesting that alternatives will include those in which domestic grazing is permitted in closer proximity to bighorns than suggested as having low risk by the Risk of Contact model, but in which adaptive management, or site–specific activities (e.g., requiring experienced sheepherders, conducting full counts, trucking in water, reporting strays), will be relied upon to achieve a low risk of inter–species contact. The notion that active management can keep domestic sheep from transmitting bacterial pathogens to bighorns in the absence of considerable geographic separation has been considered for many years. However, to my knowledge there is no empirical evidence that any can be effective.

My experience while at WDFW was the permittees were quite sincere in both their intention and efforts to minimize contact between their animals and wild bighorns.

Unfortunately, even their best efforts have evidently not been sufficient. If alternatives are considered that envision domestic sheep grazing closer to wild herds than otherwise recommended – with the risk presumably mitigated by other measures – the new Plan must demonstrate, using empirical evidence, that those measures would be effective. Simply asserting that site–specific measures would provide the desired safety despite close proximity, in the

absence of empirical evidence, would not constitute using the best available science, as I believe the OWNF is required to do.

Finally, the multiple use mandate of the USFWS is laudable, and generally, domestic livestock grazing can be a beneficial use of forest lands. That said, there are limited places where bighorn sheep can exist without risk of lethal pneumonia outbreaks. In central Washington, the OWNF provides the vast majority of such lands. The benefits of having bighorn sheep on the landscape accrue to all citizens of the country (not merely, as may be asserted, those with opportunity to hunt them). The benefits of having commercial herds of domestic sheep on the landscape accrue almost entirely to the private company that uses public lands as part of its business model. In an ideal world, no trade–offs between those benefits would be needed. In the actual world, achieving benefits typically requires costs. In this case, it seems clear that the cumulative benefits are vastly greater from providing safety to wild bighorn sheep on OWNF lands than are the cumulative costs of inconveniencing a private company, even one as responsible and respected as the existing permittee.

Again my thanks for providing the opportunity to comments.

Sincerely

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