



The Wyoming Department of Agriculture is dedicated to the promotion and enhancement of Wyoming's agriculture, natural resources and quality of life.

January 24, 2019

Grand Teton National Park
Attn: Goat Management Plan
PO Box 170
Moose, WY 83012

To Whom it May Concern:

Following are the Wyoming Department of Agriculture (WDA) comments regarding National Park Service's (NPS) Grand Teton National Park Mountain Goat Management Plan (Plan) Environmental Assessment (EA).

Our comments are specific to our mission: dedication to the promotion and enhancement of Wyoming's agriculture, natural resources and quality of life. As the proposed project could affect our industry, citizens, and natural resources it is important that you continue to inform us of proposed actions and decisions and continue to provide the opportunity to communicate pertinent issues and concerns.

The WDA has worked closely with the Wyoming Governor's Office, Wyoming Game and Fish Department (WGFD), and the Wyoming State Veterinarian/Livestock Board on bighorn sheep management and conflict related issues over the last several years. NPS policy describes when exotic plant and animal species find their way into parks, "*Control or eradication will be undertaken, where feasible, if exotic species threaten or alter natural ecosystems; [or] seriously restrict, prey on, or compete with native populations* (NPS 1991 – Natural Resource Management Guideline)."

The Grand Teton National Park is wrought with non-native species impacting habitats and ecosystems, which include spotted knapweed, leafy spurge, houndstongue, thistles and others (brook trout, brown trout, rainbow trout), but yet the control and eradication of these species is largely ignored. More specifically, the WDA does not support the use of the risk of contact model being used in any management decisions regarding bighorn sheep management. The misapplication of this model has created significant impacts to livestock grazing producers and livestock grazing industry. It is now being used as the tip of the spear to remove an entire population of valued big game species. The precedence of this decision may be felt throughout Wyoming, its agriculture industry, as well as other states across the West.

The WDA is very concerned the NPS is setting a precedent by prematurely removing mountain goats in Western Wyoming. The EA analysis could indirectly impact the domestic sheep industry, and implies domestic sheep are passing on pathogens to mountain goats. Page 31 specifically states, "*The existing domestic sheep allotments overlap with mountain goat range and disease testing indicated that mountain goats from Wyoming and Idaho populations in the Snake River Range are positive for all the pathogens associated with polymicrobial pneumonia.*"

This statement illustrates three erroneous assumptions by the NPS and thus improperly estimates impacts. First, the NPS assumes mountain goat ranges are clearly and defensibly identified. Second, those ranges directly correspond to

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domestic sheep allotment boundaries. Third, mountain goats are not only carrying pathogens, but are passing them on to other species.

The NPS has taken liberty to not only assume mountain goat ranges are identified and have direct overlap with domestic sheep allotments, but also based on limited testing of mountain goat, they are positive for ALL pathogens. Domestic sheep grazing has occurred on the landscape for over a century, yet according to the EA, the Teton Range bighorn sheep herd is "immunologically naïve" and have not been previously exposed to the pathogens.

Furthermore, on page 35, the EA concludes *"Retirement of domestic sheep allotments on the west side of the Teton Range have had a beneficial effect on the bighorn sheep by reducing the risk of contact and resulting pathogen transmission between domestic and bighorn sheep. However, domestic sheep grazing occurs on USFS lands in the Snake River Range directly south of the Teton Range and mountain goats there test positive for pneumonia-causing pathogens. The potential exists for mountain goats to disperse from the Snake River Range to the Teton Range. Although the likelihood of dispersal is unknown, it is likely related to population size: higher likelihood at higher population size. Although the risk of contact for new goats that disperse is unknown, the impacts of any contacts between mountain goats and bighorn sheep could be significant."*

First, the risk of contact is a model, not a scientific fact proven through verifiable observations. The risk of contact model simply identifies possible physical contact a bighorn sheep could make on a domestic sheep allotment. It does not definitively equate to nose-to-nose contact between domestics and bighorns, nor does it result in pathogen transmission as stated above.

Second, the EA takes liberty to now incorporate the risk of contact model and apply the model's concept and intent to mountain goats and bighorn sheep, by concluding in this analysis, direct contact between the two species will result in significant impacts. The risk of contact model in this case is now based on population increases of mountain goat and possibility of dispersal. To our alarm, this is not only a gross misapplication of the risk of contact model, but use by an agency not intended to use the model. The risk of contact model was developed by the US Forest Service (USFS), for USFS use, not by the NPS. We are also concerned the NPS is attempting to manage the State of Wyoming's wildlife, which is well outside of the NPS jurisdiction.

Finally, Figure 2: Observations of mountain goats in the Teton Range, 1977 – 2016 found on page 5 of the EA is misleading. If the mountain goats were introduced in Black Canyon and Palisades Creek, Idaho, there would have been observations of a substantially increasing population of mountain goats shifting from their original translocation sites, and working eastward toward Grand Teton National Park. However, page 3 states, *"Home Ranges are typically fixed throughout an adult's life and are larger for females than for males (Chadwisck 1983, Festa-Bianchet and Cote 2008)."* WDA also would point out; the observations between 1977 and 2014 were ocular only. It wasn't until 2014 when radio collars were placed on an unknown number of mountain goats (p. 3). This increase and possible shift in population could have been utilized by WGFD, as well as Wyoming guides, outfitters, and hunters for the highly sought after hunting tags.

Non-resident tags are \$2162 each, not including the additional economic loss of guide fees, hotel, food, gas, and supplies to the local communities. Title 36 Section 2.2(b)(1) of the Code of Federal Regulation does allow hunting in park areas. The enacting legislation for Grand Teton National Park Act of 1950, Section 6(a) and (b) does allow elk hunting in conjunction with the National Elk Refuge and in conformance with 16 U.S.C. § 673c, Conservation of Elk in Wyoming. We would recommend the NPS review existing legislation for removing elk from Grand Teton National Park

and propose an amendment to include additional species, not limited just to mountain goat to address any other future management needs. An amendment to Grand Teton National Park using the National Environmental Policy Act will likely take an equal amount of time as the proposed EA, while still meeting the original purpose and need.

An additional component of the EA concerning the WDA is on page 37, *“Given implementation of specific conservation measures for bighorn sheep, adverse impacts to individual bighorn sheep from management actions are expected to be minimal and population-levels impacts are not anticipated. Reducing the mountain goat population is also expected to benefit the Teton Range bighorn sheep herd by eliminating a major population-level threat. Overall, the effects of Alternative B are expected to be substantial and beneficial, effectively removing the risk of pathogen transmission (and subsequent risk of a disease outbreak) and competition for habitat and forage between bighorn sheep and mountain goats.”*

We are unaware what “specific conservation measures” the NPS has implemented to benefit bighorn sheep. Again, wildlife is under the purview of the State of Wyoming, and the WGFD. The Statewide Bighorn Sheep Domestic Sheep Interaction Working Group Plan should be referenced regarding management of bighorns. Additionally, the NPS concludes in its analysis to ultimately remove all risk of pathogen transmission (and subsequent risk of a disease outbreak), yet, the EA neglects two more important points.

First, prior to the translocation of mountain goats in eastern Idaho, WDA questions if the mountain goats were tested for all pathogens prior to their release and insist the NPS consider the potential transmission between mountain goats and bighorns over the past 40 years. Butler, et al 2018 discusses population performance of bighorn sheep in Montana and Wyoming. On page, 14 it states: *“Our findings suggest a number of growing or robust populations that have been used as source populations for translocation may have harbored respiratory pathogens that were subsequently introduced to recipient populations or geographic regions, unbeknownst to wildlife managers.”*¹

Second, if mountain goats were carriers of pathogens, regardless of how they received it, and overlap of mountain goats and bighorns has occurred over the past 40 years, removing mountain goats does not *“ultimately remove all risk of pathogen transmission or subsequent risk of disease outbreak”* as stated, because the two species may have already interacted and possibly transmitted pathogens.

Butler et al. 2018 page 15 further states: *“The common detection of M. ovipneumoniae and Pasteurellaceae indicates that resident pathogens are a plausible explanation for some proportion of respiratory disease epizootics. Spontaneous respiratory disease epizootics have been previously reported in captive bighorn sheep and numerous epizootics in free-ranging bighorn sheep have been attributed to a shift in unfavorable ecological conditions that triggered increase virulence or transmission of resident pathogens. Epizootics in populations already hosting Pasteurellaceae and M. ovipneumoniae might be caused by introduction of novel pathogen strains or changes in the host, pathogens, or environment that lead to increased virulence or transmission of resident pathogens.”*

¹ Butler CJ, Edwards WH, Paterson JT, Proffitt KM, Jennings-Gaines JE, Killion HJ, et al. (2018) Respiratory pathogens and their association with population performance in Montana and Wyoming bighorn sheep populations. PLoS ONE 13(11): e0207780. <https://doi.org/10.1371/journal.pone.0207780>

In conclusion, we urge the NPS to rescind the current draft EA and instead amend the Grand Teton National Park Act to include removal of mountain goats in cooperation with the WGFD and in compliance with 16 U.S.C. § 673c, existing process for elk removal on NPS lands. The existing EA conveys an unwarranted sense of urgency, incorrectly uses the risk of contact model, and makes subjective assumptions regarding disease transmission. The WDA would like to work closely with the NPS on this particular analysis in the near future. If you have questions, please contact Justin Williams, Senior Policy Analyst at 307-777-7067.

Sincerely,



Doug Miyamoto
Director

DM/jw

- CC: Governor's Policy Office
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Wyoming Stock Growers Association
Wyoming Wool Growers Association
Wyoming Farm Bureau Federation
Wyoming State Grazing Board
Wyoming Association of Conservation Districts
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