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First name: Clinton

Last name: Nagel

Organization: Gallatin Wildlife Association

Title:

Comments: Please accept the following comments from the Gallatin Wildlife Association.

April 17, 2021

Dear U.S. Forest Service:

The Forest Service is presently proposing a set of Directives for its livestock grazing program. These Rangeland Management Directives have the potential to affect millions of acres of public land, including Wilderness. Even with the 60-day extension, the Gallatin Wildlife Association just learned of this comment period. Due to the fact we received such short notice, we feel the agency needs to improve upon their public notice or awareness campaign. We find this disconcerting at least, but we will try to comment the best we can in the time frame we have. Gallatin Wildlife Association (GWA) is a local, all volunteer wildlife conservation

organization dedicated to the preservation and restoration of wildlife, fisheries, habitat and migration corridors in Southwest Montana and the Greater Yellowstone Ecosystem, using science-based decision making. We are a non-profit 501-c (3) organization founded in 1976. GWA recognizes the intense pressures on our wildlife from habitat loss and climate change, and we advocate for science-based management of public lands for diverse public values, including but not limited to hunting and angling. To be blunt, GWA has a hard time with the grazing program, at least the way it has been

administered over the years. We feel the Federal Government is basically providing a federal subsidy to the private sector, especially in terms of the resources lost. According to the Congressional Research Service¹, report dated March 4, 2019, Grazing Fees: Overview and Issues, page 8 states the following.

[Idquo]The BLM and FS grazing fee has generally been lower than fees charged for grazing on other federal lands as well as on state and private lands, as shown in studies over the past 15 years.

For instance, a 2005 Government Accountability Office (GAO) study found that other federal agencies²⁹ charged \$0.29 to \$112.50 per AUM in 2004, when the BLM and FS fee was \$1.43 per AUM. While BLM and FS use a formula to set the grazing fee, most agencies charge a fee based on competitive methods or a market price for forage. Some seek to recover the costs of their grazing programs. GAO also reported that in 2004, state fees ranged from \$1.35 to \$80 per AUM and private fees ranged from \$8 to \$23 per AUM.[rdquo]

GWA will not dwell on this issue as we think the point has been made. This has been an issue for decades and the subject is not new to the Forest Service or the Bureau of Land Management. We strongly suggest that federal agencies increase costs and reinvest those dollars back into the proper maintenance and improvements of the rangeland and riparian areas that have been degraded due to grazing. The following statement on page 3 of that same report states it best.[Idquo]Conservation groups generally assert that low fees contribute to overgrazing and deteriorated

range conditions. Critics assert that low fees subsidize ranchers and contribute to budget shortfalls because federal fees are lower than private grazing land lease rates and do not cover the costs of range management. They further contend that, because some of the collected fees are used for range improvements, higher fees could enhance the productive potential and

environmental quality of federal rangelands. On a side note, we think there should perhaps be a re-education program with the public, including and especially those landowners participating in the grazing program. These lands belong to the entire public population, not just a few. It is a privilege for those to participate in the program, not a right. Stakeholders who participate in the program do not own the lands whereby they should not be permitted to overrule or govern their own practice. By not acknowledging the privilege, we believe it enables stakeholders to take matters into their own hands showing a disrespect for the Forest Service, the landscape and the public's will. The Degradation of the Resource: Overtly and paramount however, our overall concern is that grazing causes a whole list of negative impacts upon the landscape. GWA could spend hours documenting and providing scientific research on each one of these issues, but again due to time, that will not be practical. We urge the Forest Service to trust us when we say the science is out there. You shouldn't need us to tell the Forest Service what the science is. But basically, in terms of commercial livestock grazing, the practice has had major repercussions to soils and water, biological integrity and biodiversity, and negative impacts to wildlife. There is science to prove these points. GWA would like to refer the Forest Service to this statistic. According to report

"Accounting for the World's Rangeland" by Gyde Lund², on page 4, there is this statement. Threats to rangelands include climate change, overuse, and land conversion. Desertification is a global issue and can now be seen on every continent. However, perceptions of the condition of rangeland vary in accordance with the statistics used to evaluate it. Estimates of degraded rangeland vary from 680 million ha⁸ to 3.3 billion ha.⁹ The amount of the world's rangeland that one considers to be degraded ranges from 20% to 73%. It should be pointed out that this source is utilizing seven sources to rate rangeland health. Six (6) of those seven (7) rates the degradation of rangeland between 50% - 73%, with two (2) of them at 73%. Only one (1) of the seven (7) were below 50%, an outlier for sure. This highlights the case that commercial grazing is not an effective method for solving the world's food supply. It comes at a high cost, more on this later. The following is a list of resource related issues where grazing causes negative impacts

upon the natural landscape. We would like to acknowledge many of these bullet points and the format came from the comments of Anne Millbrooke³. Some of hers have been removed, but some have been added by GWA. But in all honesty, these concerns have been ours and many other conservation organizations for decades.

- * introduction of invasive species
- * disease transmission between domesticated animals and wildlife species
- * increased soil exposure, drying, compaction, erosion, and sedimentation
- * disturbs soil biota
- * creates the need for off-road vehicle trails, thereby disturbing soils and wildlife
- * creates the need for road construction
- * construction of infrastructure such as water lines, roads and fences
- * damage to riparian areas, wetlands, and watersheds
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- * damage to aquatic habitat and species
- * cumulative contributions to the desertification of the public land
- * grazing causes a lack of biodiversity
- * grazing causes a loss and displacement of wildlife
- * fragmentation of wildlife habitat
- * disruption of wildlife migration

- * provides an excuse to slaughter predatory species, such as bears and wolves
 - * disturbance of bird breeding, roosting and feeding
 - * removal of native flora species, such as pinyon juniper
 - * degradation of native plant communities
 - * reduction of nature's carbon storage capability
 - * exacerbation of climate stresses and thereby contributing to climate change
 - * public subsidies for commercial operations on public lands
 - * unfair advantage given to subsidized operations versus operations on only private land
 - * unsustainable production of agricultural commodities on public lands
 - * general over-burdening of fragile arid lands
 - * exclusion of other uses, including habitat and wildlife conservation
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- The overall metric which should be used on rangeland management is to acknowledge

grazing (if not properly managed and even when it is) is degrading to the land, water and wildlife resource. Grazing has caused insurmountable harm to the landscape. The wildlife lost is irreplaceable. The loss of wildlife habitat and migratory connectivity has altered the character of the West as we know it. Perhaps we can regain some of what we lost, but it has to come with changes to the program as we know it today.

The Harm to Wilderness: Understanding that grazing is permitted in wilderness thanks to the Wilderness Act of

1964, it has not lessened the damage done to the resource. It has only magnified the impacts across the forest and range landscape. We urge the Forest Service to heed the following comments GWA4 submitted on behalf of the Custer Gallatin National Forest Revised Forest Plan in 2019.

[Idquo]the research paper found online through the National Center for Biotechnology Information entitled [Idquo]Impact of summer cattle grazing on the Sierra Nevada watershed: aquatic algae and bacteria[rdquo] by (Derlet, RW, et al;

2012)5:[rdquo]<https://www.ncbi.nlm.nih.gov/pubmed/22505950>As noted in the Introduction and Methods paragraph, it states the approach and purpose

of the work:[Idquo]We evaluated periphytic algal and microbial communities to assess the influence of human and cattle impact on Sierra water quality.64 sites (lakes and streams from Lake Tahoe to Sequoia National Park,

California) were sampled for suspended indicator bacteria and algae following standardized procedures. The potential for nonpoint pollution was divided into three categories: cattle-grazing areas (C), recreation use areas (R), or remote wildlife areas (W).[rdquo]

The conclusion stated on the website is simple:[Idquo]Higher periphytic algal biomass and uniform presence of periphyton-attached

E. coli corresponded to watersheds exposed to summer cattle grazing. These differences suggest cattle grazing compromises water quality.[rdquo]

This study of 2012 was apparently a follow up study to a similar study performed in 2006

by the same lead author. That study presented here as [Idquo]Coliform bacteria in Sierra Nevada wilderness lakes and streams: What is the impact of backpackers, pack animals and cattle?[rdquo] states the premise of the report in its abstract (Derlet, RW; Carlson JR; 2006)6.<https://www.ncbi.nlm.nih.gov/pubmed/16538940>

[Idquo]Objective: The presence of coliform bacteria indicates a watershed risk for

harboring microbes capable of causing human disease. We hypothesized that water from watersheds that have different human- or animal-use patterns

would have differing risks for the presence of coliform bacteria. METHODS; Water was collected in wilderness areas of the Sierra Nevada range in California. A total of 60 sites from lakes or streams were selected to statistically differentiate the risk categories: 1) high use by backpackers, 2) high use by pack animals, 3) cattle- and sheep-grazing tracts, and 4) natural areas rarely visited by humans or domestic animals. Water was collected in sterile test tubes and Millipore coliform samplers during the summer of 2004. Water was analyzed at the university microbiology lab, where bacteria were harvested and then subjected to analysis by standardized techniques. Confirmation was performed with a Phoenix 100 bacteria analyzer. Statistical analysis to compare site categories was performed with Fisher exact test. Results: Only 1 of 15 backpacker sites yielded coliforms. In contrast, 12 of 15

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by pack animals are at risk for containing coliform organisms. Areas exclusively used by backpackers were nearly free of coliforms. This brief excerpt from GWA's previous comments is presented only to show an example

of how grazing within wilderness areas is still harmful to the resource. This should not be overlooked. It most likely was not considered back at the time of the established Wilderness Act in 1964. The Harm to Wildlife and Predatory Species: GWA wants to make one more random selection as to our concern over grazing. GWA

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about the interruptions of their food supply, about bear/human conflicts, about habitat fragmentation, about the lack of connectivity to other ecosystems, and about livestock grazing which preempts connectivity and increases the excuse for mortality. Even livestock grazing has interfered with carcass supplies as livestock can become

easy prey which leads to mortality on the grizzly bear. Finally, there is the issue of habitat fragmentation. Whether it be recreationist, timber harvesting, highways or the effects of the wildland/urban interface, man has intruded on and into grizzly bear habitat. It is usually the bear that comes out on the short end of that contact. Of all the reasons GWA finds fault with grazing, it is based upon these two overpowering

reasons; water quality and harmful effects to wildlife. In times of climate change, both are harmful to the biodiversity and biological integrity of the forest and range ecosystems. They are not positive steps to be taken, given that why take them? In Summation: GWA believes that grazing programs on public land is a privilege, not a right. But the

privilege has come at a high price. It has been taken for granted and it has been misused and abused. The resource of forest and range lands have paid the price. Wildlife have paid the price. Commercial grazing should not ever rise to the degree where it supersedes the concern over the quality of the Nation's public land, water, or wildlife. Yet it has. Over the years, grazing has been the causation of many damaged riparian

habitats, wildlife loss and habitat fragmentation. Because of the potential of environmental consequences, all changes to the grazing program should comply with federal laws, including the National Environmental Policy Act. And then there is this. In January 2021, the Biden Administration issued a series of

Executive Orders. One of them, Executive Order 14008, pertains to climate change and the mitigation efforts which should be enacted to mitigate the negative impacts from a warming climate. Grazing exacerbates the effects of climate change on an already weakened ecological system. The two actions, commercial grazing and combating climate change, are not compatible. The more grazing a natural riparian system experiences, the more soil compaction, increased erosion, and bank disturbances will occur. After which, the more degraded the water quality will be impacted in terms of increased temperature, sediment load and bacteria pollution. These types of impacts are not what you want to see when combating a warming climate. On those lands determined to be sensitive to wildlife habitat or designated wilderness or wilderness study areas, there should be an all-out effort to allow grazing permits to expire.

The Forest Service also needs to spend more resources on the recovery of imperiled or threatened species. A good example of this can be found in the Greater Yellowstone Ecosystem (GYE). In this ecosystem, the Grizzly Bear Primary Conservation Area has been established to protect the viability of the grizzly bear. Yet, lands have been set aside to accommodate the needs for recreation and grazing, both activities which are not conducive to the survivability of the species. We need to rethink our tendency to over commit our resources. Some uses are not compatible and some resources are not conducive to those uses. There needs to be a serious review of the whole grazing program and hopefully that will be done during this opportunity to revisit the Rangeland Management Directives.

Within that review, the Forest Service needs to seriously consider raising grazing fees and returning those funds back into the resource to counteract previously damaged resources. A lot of these actions will not be popular, especially in a very divided political world, but they are necessary. An educational program should be initiated by the Forest Service on this as well as other issues. There is much more to say and much more science to be stated, but it is the Forest

Service which must do the right thing for our public lands and wildlife. Remember grazing was not the original rationale for the protection of this Nation's forests and range. It should be done only when it can be done without harm to the ecosystem and then only under the most scrutinization. There are many other uses of our forests and range which should receive a higher priority. Thank you for the opportunity to comment. Sincerely,

Cited References: 1. Grazing Fees: Overview and Issues, Congressional Research Service, March 2019.

<https://fas.org/sgp/crs/misc/RS21232.pdf> 2. Lund, Gyde, [Idquo]Accounting for the World[rsquo]s

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<https://journals.uair.arizona.edu> 3. Anne Millbrooke, comments to U.S. Forest Service, Proposed Rangeland

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