

12/5/2017

Dear Forest Plan Revision Team,

Thank you for your great work putting together these draft assessments. Below are some thoughts on what management changes are needed based on the *Draft Forest Assessments: Rangeland Management*.

We were glad to see in this Assessment that generally the range trend has moved in a positive direction, with only 1% considered in poor condition, compared with 38% in 1987. This suggests to me that grazing management, with other factors, has made positive improvements in range condition, and that grazing is not the dominant factor impacting the resource as perhaps it was in the 1920s. However, in the future, new factors like increased recreation, climate change, emerging sensitive species, elk populations, and concerns of the public, will impact the viability of ranching on public lands. For example, in the Summary of Public Input, grazing by domestic livestock is seen as a destructive force by members of the public, despite the positive range trends reported in your data. Climate change will also alter rangeland productivity as you note in the Assessment.

Thus, as you develop the Forest Plan, we would like livestock grazing on Forest lands to remain a priority for the GMUG National Forest. We were alarmed in the Assessment by the 80% decline in permittees statewide from 1980-2016 (Table 1), even as the resource condition improved in the Forest. This decline is likely driven by economic factors, and ranching today remains an industry with a narrow and variable profit margin<sup>1-3</sup>. The ability to graze livestock on Forest lands is an essential part of the economic viability of ranching operations<sup>4</sup>. Beyond the necessity of public lands grazing in terms of the viability of ranching in general, working ranches provide benefits to local economies, maintain connectivity for wildlife<sup>5</sup>, and ranchers help maintain infrastructure like fences and water on public lands. The ability to graze on the Forest plays an important role in the viability of ranching operations, and we encourage the Forest to keep multiple-use as a priority as you put together the Forest Plan.

### ***Monitoring is Essential to Adaptive Management***

We were glad to see Adaptive Management in the Assessment, and agree that it is a powerful tool. We would like to underscore that the efficacy of adaptive management depends on monitoring of indicators that provide information on trend. Without trend monitoring, there is almost no ability to learn if “the plan” actually had the intended impact. In terms of management changes that are needed, if Adaptive Management is adopted, we encourage the Forest Plan to include some kind of provision for monitoring trend. We see that stubble height and utilization are listed. However, these indicators are not trend indicators<sup>6</sup>. For example, you could achieve desired utilization, and still have resource issues. Or, the opposite could be true. Utilization or stubble height alone will not tell you if you are achieving resource objectives and must be coupled with trend indicators.

Monitoring is also important in terms of transparency and avoiding conflict. Though many professionals in range have the ability to view range and make a good qualitative judgment of trend based on their experience, one issue with this is that it not clear to ranchers (and others) about what exactly the assessment is based on, and they cannot participate in the assessment. In addition to its critical role in informing adaptive management, monitoring can be a place where all parties can learn and participate.

However, we understand the good reasons why monitoring sometimes does not get accomplished. Monitoring and analyzing data is time consuming. As we move forward, technologies may make this easier. As stated in my previous comments, we would welcome the opportunity to explore building a more formal relationship between Extension and the Grand Mesa, Uncompahgre, and Gunnison National Forest that would help facilitate monitoring and use of monitoring data.

### ***An Inclusive Process for Setting Desired Conditions and Climate Change Impacts***

Your efforts to engage the public with this plan have been impressive. As we move forward, we urge the Forest Plan to involve ranchers in discussions about projected impacts of climate change, site potential, and the discussion of how lands change in response to management actions. Ranchers have a lot of experience and knowledge of ecological systems<sup>7-11</sup>, and can be important sources of information. Additionally, an inclusive process for deciding on desired conditions may help create buy-in for the resource goals. Though it may seem challenging to engage ranchers in discussions of “desired condition” and “ecological potential,” we have developed resources to engage ranchers in these conversations<sup>12; 13</sup> and know that productive conversations can occur that are ultimately enlightening for all parties.

Along these lines, we caution that some plant communities, though maybe not desirable, are very difficult to change. For example, there are no examples we are aware of reducing smooth brome dominance where it is already established. While smooth brome might not be desirable from some perspectives, restricting cattle grazing to reduce it is unlikely to be effective.

Bringing people into the process, especially those who will be affected by what the desired conditions are, is one way to help prevent conflict down the road.

### ***Include Ranchers in Discussions of Drought Impacts***

We appreciate your thorough review of the literature on drought and projected impacts of climate change, and note that climate models predict a decline in productive potential (*Draft Forest Assessment: Range Management*, page 16). In addition to discussions over site potential, we urge you to include ranchers in the discussion over climate change impacts to Forest lands. Ranchers are expected to suffer economic impacts from increased climate variability<sup>14</sup>, and ranch viability will require more off-ranch income in the future given climate change<sup>14</sup>. Further, we fear ranchers may be penalized for climate impacts that they are not responsible for by reduced stocking rates.

In studies on the Colorado Plateau, grasses were less resilient to drought compared with shrubs, with cool-season grasses having the greatest mortality<sup>15; 16</sup>. This suggests that given climate alone, and irrespective of grazing management, grasses may decline, which will impact ranching operations, and potentially will lead to a reduction in AUMs. We suggest proactive conversations about drought, climate change, and likely impacts to avoid conflicts and impacting livelihoods for producers.

### ***Managing for a Range of Seral Stages***

In the range management poster used at your summer open house events, there was a section on managing for a range of seral stages. We did not see that explicitly addressed in the Assessment, but would like to reiterate our support for this concept. Heterogeneity benefits wildlife, and some assessments find that managing for uniform utilization might actually negatively impact species that require extreme conditions<sup>17; 18</sup>.

Along these lines, while high-intensity, short-duration grazing, may provide useful solutions in some areas, it also can be costly for ranchers<sup>19</sup>, and in one study, it may have contributed to reduced weight gain in cattle compared to continuous grazing<sup>20</sup>. In other cases, it can produce positive outcomes for cattle and landscapes. We urge the USFS to provide the necessary support for ranchers to make this change, and follow up monitoring to see if the intended benefits are realized, if advocating this as a strategy for rangeland management. Rather than high-intensity, short-duration *per se*, perhaps an “outcomes based grazing approach,” like the new initiative at the Bureau of Land Management, would allow for innovation and better ecological outcomes, while not being prescriptive about the specific practices needed to get there.

### ***Allowable Use***

We were glad to see that you may allow for exceeding utilization goals in areas dominated by Kentucky bluegrass, where the resource goals may be benefitted by grazing (*Draft Forest Assessment: Range Management*, Chapter 5). This supports our observations of analyzing 50+

years of data from a paired plot inside an enclosure versus outside. Inside the enclosure, Kentucky bluegrass increased, while it did not increase outside. In this case, bunchgrass cover was equal inside the enclosure compared to outside, over the 50+ years of the study (Bruegger, unpublished data).

### ***Wildlife and Cattle Management***

As the Assessment states, conflicts over elk and cattle use, and the relative ease of managing cattle versus elk must be addressed. We know that elk management can be a source of frustration for ranchers, since there is high dietary overlap between elk and cows. The Forest must protect the resource, but there must be attention paid to making sure elk are managed in such a way so that cattle grazing is still viable.

### ***Managing for Multiple use***

We would also like to respond to some of the comments in the Summary of Public Input. There were concerns brought forth by the public over the grazing fees, cattle grazing in general, and damage by cattle to riparian areas. Though grazing fees appear low, the margin of profit in ranching is also low<sup>1-3</sup>, and access to public lands is critical in a ranch's ability to stay in business<sup>4; 5</sup>. Even if fees appear "low" raising them might have drastic consequences for the economic viability of ranching. Further, beyond fees, ranchers often invest in and benefit public lands through infrastructure maintenance and development, including fences and water<sup>21; 22</sup>.

Increasing grazing fees would have a detrimental effect on ranchers, and potentially the larger landscape. Studies have shown that intact, working ranches maintain the rural nature of communities, and associated benefits, such as corridors for wildlife<sup>4; 5</sup>. Loss of grazing rights on public lands could impact private lands as ranchers may go out of business and potentially sell private lands to development. We encourage the Forest Plan to consider the role that access to public lands plays in maintaining working landscapes, the rural character, the vistas, and wildlife corridors in western CO. There are many, perhaps unseen, public benefits provided by the reality that we have ranching and ranches, and access to public lands is an important part of the viability of the ranching system.

In terms of the public perception of damage caused by cattle grazing, the Assessment indicated an upward trend in most of the Forest, with only 1% considered to be in "poor" condition (although 58% is unassessed in the Gunnison National Forest). To us this indicates that proactive management has occurred over the last 30 or so years resulting in positive trends. We recommend that the Plan addressing specific issues with cattle grazing, as the Forest trend appears positive overall.

### ***Increased Need for Collaboration***

With increasing recreational use and population growth on the west slope, there is potentially a growing divide among livestock operators and members of the public who also use Forest lands. Rather than see this as a negative, we would support efforts to bridge the gap. Members

of the public and USFS staff alike would benefit from understanding more about range nutrition and the livestock industry, and we encourage USFS staff to pursue this type of education. Please consider Colorado State University an ally in developing educational materials which can bridge knowledge gaps between land managers and livestock producers and would benefit all collaborative public lands management.

***In conclusion***, the ability to use public lands is necessary for many livestock producers to stay in business. Thus, public lands grazing also plays an essential role in maintaining communities, and the rural nature of western Colorado. Further, working landscapes can help maintain conservation values and connectivity for wildlife beyond public lands. We urge the GMUG Forest to continue to support and facilitate the grazing program within the GMUG National Forest.

Thank you for your consideration of these comments.

Sincerely,

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