

Observation Report for the Bighorn National Forest, August 2022

We have made observations and talked with Forest Service staff on the Bighorn National Forest in 2013, 2014, 2021, and 2022 on rangeland health concerns, lack of rangeland management, and poor watershed condition. On June 15th and 17th 2022, we toured the north and south ends of the forest with the district rangers from the Tongue and Powder River Districts.

We continue to be concerned about the health of the rangeland on the south end. Livestock stocking levels have been reduced on the north end, and the rangeland condition is improving. In contrast, there has been little change in management on the south end over the years.

The rangeland on the south end is showing symptoms of not being managed to consistently meet allowable use standards for rangeland vegetation and monitored to determine if present vegetation conditions are meeting the desired conditions. Our observations of the uplands show continued lack of residual vegetation left at the end of the grazing season, a higher percentage of bare ground, pedestalling of plants, and species composition not meeting desired conditions. The riparian areas show a lack of appropriate stubble height left after grazing, trampled streambanks, loss of riparian vegetation, heavy browsing on woody species (aspen and willow), and a lack of regeneration of these woody species. These conditions are symptomatic of the lack of consistent rangeland and livestock management occurring on the Powder River District.

We have shared our observations and concerns with Forest Service range staff and rangers. They admit there are allotments on the Powder River District in noncompliance and not meeting rangeland standards and guidelines or desired conditions. We have asked Forest Service staff and rangers to consider our observations and make the needed changes to the management of the allotments, but to date, only minor changes have been made on the district.

We also have concerns about the current invasive species treatment proposal for the Bighorn National Forest. During the June 15 and June 17 tours in 2022, we discussed the Forest Service proposal to use arial application of broadleaf herbicides on mountain big sagebrush to yield additional vegetation for livestock and on tall larkspur to reduce livestock mortality. We have problems with this proposal because:

- the targeted species are native not invasive;
- trying to create more vegetation for livestock grazing does not address the current lack of consistent livestock and vegetation management;
- there will be collateral loss of broadleaf forbs from the application of these herbicides with associated negative impacts to mule deer, first pollinators, butterflies, hummingbirds, and other obligates to sagebrush, larkspur, and other impacted broadleaf vegetation; and
- there is potential for mobilization of the herbicide when applied in areas with degraded rangeland condition.

A study led by the University of Wyoming (Environmental Characteristics for Three Genetic Groups of Wyoming Mule Deer, July 2022) discusses the importance of connectivity of sagebrush for mule deer. The study also identifies the importance of keeping sagebrush connectivity for nesting birds.

The herbicide proposed for use in the treatment of invasive annual grasses attaches to the top of the soil profile. With degraded rangeland health, there can be a risk of mobilization of the herbicide through soil erosion.

Based on our combined years of land management experience and these observations, we offer the following suggestions:

- Increase the amount of field time for all specialists so they can manage uses on the forest to meet the standards and guidelines in the forest plan.
- Administer grazing allotments to standards laid out in the allotment management plans and annual operating instructions.
- Monitor streams and riparian areas to insure they are meeting Forest Service Region 2 best management practices (National Best Management Practices for Water Quality Management on National Forest System Lands, April 2012).
- Assess current conditions compared to desired conditions laid out in the forest plan and other planning documents.

Time spent observing and monitoring forest conditions is critical to identifying and addressing problems in a timely manner.

Submitted by the following retired land managers:

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Clarke McClung – Rangeland Management Specialist/District Ranger, USFS/BLM

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Bob McDowell - Fisheries Specialist, WGFD

Bert Jellison – Wildlife Habitat Specialist, WGFD

JoAnne Puckett – President, Bighorn Audubon Society

David Beard - Rangeland Management Specialist, USFS

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