

June 6, 2019

Mary Erickson, Forest Supervisor
Custer Gallatin National Forest
Attn: Forest Plan Revision Team
P.O. Box 130, Bozeman MT 59771

Re: Custer Gallatin National Forest Plan Revision

To the Forest Plan revision Team,

After reviewing the draft plan and Environmental Impact Statement I am in favor of Alternative D. The alternative's emphasis on maintaining resiliency of natural systems and ecological restoration makes this alternative potentially most responsive to the changed and changing social/economic and ecological conditions affecting the Forest and areas around the Forest. It has the potential for a more holistic approach to maintaining resilient ecosystems in response to stresses from the effects of climate change and increased outdoor recreation uses over the next 10-30 year lifespan of the Plan.

I would suggest strengthening wording in Alternative D emphasizing the National Forest's role in the maintenance and restoration of habitats needed to support diverse plant communities and populations of plant and animal species. As predicted effects of climate change become more pronounced and land use changes on private lands continue to shrink and fragment habitat, large blocks of public wildlands and the National Forest in particular, will become increasingly important to the conservation of biodiversity through maintenance and restoration of key habitats and linkages within a network of protected wildlands.

Under Alternative D I would include targeted grazing by sheep or goats after a risk assessment for weed control under Alternative D. In some situations, biological control through targeted grazing, may be the only viable tool to controlling invasive plant species, including cheatgrass, other annual grasses, smooth brome, and timothy and allowing for the re-emergence of native species.

The Plan should provide additional guidelines and standards for seasonal closures to mitigate the effects of outdoor recreation, particularly motorized and mechanized activities, and hikers with dogs on wildlife during critical seasonal periods, such as winter range, migration routes, and calving areas. A recent article reported on a study by Bruce S. Thompson on the effects of hiking on wildlife displacement that was presented at the Northern Rockies Conservation Cooperative's biennial Wildlife Symposium titled "The Ecological Impacts of Recreation on Wildlife & Wildlands". It was reported:

A single hiker walking down a trail causes wildlife displacement of 150 feet. But a hiker with a dog on leash results in a wildlife displacement of 280 feet in one direction. When the panoramic radius on both sides of the trail is combined a hiker with a dog creates a displacement zone of 560 feet.

Additionally, seasonal closures should be considered for motorized and mechanized activity to spring thaw, when roads and trails are wet and soft and subject to disturbance and erosion.

Desired Conditions (FW-DC-GRAZ)

I support the idea of forage reserve allotments or grassbanks. Grassbanks can be an important climate adaptation tool and providing flexibility to grazing allotment management during periods of prolonged

drought or provide for post fire recovery of grasslands. Grassbanks also serve a dual purpose of providing rest and recovery of rangeland plant communities and opportunities for enhancing habitat quality for grassland and shrubland birds, during periods of rest from livestock grazing.

Standards (FW-STD-GRAZ) and Guidelines (FW-GDL- GRAZ)

Rangeland health criteria should be added and used to provide measures that can be monitored and used to determine trend towards desired conditions over time. Rangeland health is a holistic approach which incorporates measures of soil, biotic, and hydrological function and has gained acceptance for monitoring rangeland ecosystem function and health over the past 25 years. See Rangeland Health, New Methods to Classify, Inventory, and Monitor Grasslands, 1994 National Research Council; Monitoring Manual for Grassland, Shrubland, and Savanna Ecosystems, Vol. 1 and 2, Herrick et al, 2017 and 2009, Joranda Experimental Range; Interpreting Indicators of Rangeland Health, Pellant et al ver 4.0 2005. Rangeland health assessments appropriately recognize the relationship between soil, biotic (above ground and below ground), and hydrologic components important to a functioning ecosystem and should be incorporated as plan components for soils, grasslands, shrublands, and permitted livestock sections of the plan.

A standard should be added that all new or revised allotment management plans will include a baseline inventory and description of terrestrial and riparian plant communities and health assessment. Without a baseline inventory and assessment of current conditions, it is not possible to determine trend or if management objectives are being met or is moving vegetation towards allotment desired conditions.

Soils

The soils section appears to be exclusively focused on forested soils and effects of timber harvest activities on detrimental soil disturbance. Desired conditions, guidelines, and standards under soils should incorporate soil health attributes and indicators as part of an integrated approach to managing for functioning grassland and shrubland ecosystems. The plan should recognize that rangeland health and soil quality (soil health) are interdependent, characterized by functioning soil and plant communities, which together affect ecological processes associated with the capture, storage, and redistribution of water, cycling of nutrients, carbon storage, and plant productivity. Following the literature cited above A suggested desired condition (FW-DC-SOIL) for soil should state, key attributes important to functioning grassland and shrubland ecosystems, soil/site stability, hydrologic function, and biotic integrity will be maintained and restored where degraded.

2.3.13 Carbon Storage and Sequestration (CARB)

I appreciate the inclusion of carbon sequestration in the Forest Plan. The discussion should be broadened beyond forests and wood products to include grasslands. Within healthy grassland ecosystems, two thirds of biomass occurs below ground in the root system. Grasslands and shrublands also have potential for carbon storage within the root system, other soil biotic organisms, and as soil organic matter. I suggest adding a statement acknowledging the role healthy and diverse grassland plant communities can play in carbon storage and sequestration.

2.3.14 Invasive Species (INV)

Cheatgrass is already present and increasing in abundance and extent, especially on dry sites. The Plan should acknowledge the problem it and other annual and perennial invasive grass species (timothy, smooth brome) currently pose to plant species diversity and ability to alter fire regimes.

Thankyou for the opportunity to review and comment of the draft Forest Plan.

Jeff DiBenedetto

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