Data Submitted (UTC 11): 6/6/2019 6:00:00 AM First name: Len Last name: Broberg Organization: Title: Comments: See attached comment

Dear C-G Forest Plan Revision Team:

Thank you for this opportunity to comment on the proposed Custer-Gallatin Forest Plan Revisions. I will focus on just a one specific issues in the forest plan that can use improvement: sage grouse management.

The 2012 Forest Planning Regulations of the USFS set obligations for the USFS to meet in the development of any forest plan. Most importantly for my comments are the following provisions:

(b) Additional, species-specific plan components. (1) The responsible official shall determine whether or not the plan components required by paragraph (a) of this section provide the ecological conditions necessary to: contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area. If the responsible official determines that the plan components required in paragraph (a) are insufficient to provide such ecological conditions, then additional, speciesspecific plan components, including

standards or guidelines, must be included in the plan to provide such ecological conditions in the plan area. (2) If the responsible official determines that it is beyond the authority of the Forest Service or not within the inherent capability of the plan area to maintain or restore the ecological conditions to maintain a viable population of a species of conservation concern in the plan area, then the responsible official shall: (i) Document the basis for that determination ([sect] 219.14(a)); and (ii) Include plan components, including standards or guidelines, to maintain or restore ecological conditions within the plan area to contribute to maintaining a viable population of the species within its range. In providing such plan components, the responsible official shall coordinate to the extent practicable with other Federal, State, Tribal, and private land managers having management authority over lands relevant to that population.

(c) Species of conservation concern. For purposes of this subpart, a species of conservation concern is a species, other than federally recognized threatened, endangered, proposed, or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species[rsquo] capability to persist over the long-term in the plan area.

The CGNF is mandated to plan for the sage grouse as a species of conservation concern per the letter from the Regional Forester and for the Canada lynx as a species listed as threatened under the Endangered Species Act. Thus the terms of this section are mandatory for CGNF forest plan revision.

Sage Grouse

The proposed forest plan revision has the following standards and guidelines for sage grouse conservation:

Standard (FW-STD-WLSG)

01 In greater sage-grouse priority and general habitat, vegetation management shall result in no net loss of habitat or be beneficial to greater sage-grouse.

Guidelines (FW-GDL-WLSG)

01 In greater sage-grouse habitat, fire management tactics and strategies should minimize loss of existing sagebrush habitat using the safest and most practical means as determined by fireline leadership and incident commanders.

02 Wildfire rehabilitation projects in greater sage-grouse habitat at high risk of annual grass invasions should seed with an appropriate mixture to reduce the probability of cheatgrass establishment

03 New power transmission corridor infrastructure development should not be located in priority habitat unless the infrastructure can be buried without permanent damage to or loss of established sagebrush communities. The intent is to minimize habitat loss, avoid disturbing sage-grouse on breeding grounds, and limit the risk of sage-grouse mortality from collisions with infrastructure or from predators using infrastructure for hunting perches.

04 To avoid adding disturbance and mortality risk of sage-grouse, new recreation facilities such as roads, fences, campgrounds, picnic areas, etc. should not be constructed in priority or general sage-grouse habitat unless the development results in a net conservation gain to the species and its habitat.

05 Vegetation management projects in general or priority sage-grouse habitat should be designed to remove or reduce invading conifers, control or stop the spread of invasive annual grasses, and reduce the extent of existing nonnative plants.

06 New range management structures (such as, fences, stock tanks, etc.) should be designed and located to be neutral or beneficial to greater sage-grouse.

07 New energy developments should not be located in priority sage-grouse habitat, subject to valid existing or statutory rights.

The Custer-Gallatin lacks effective standards or guidelines to protect sage grouse particularly from energy development. Oil and gas development and wind power development can threaten the integrity of priority AND general sage grouse habitat. Particularly the phrase [Idquo]no net loss of habitat[rdquo] is ambiguous and provides no specific guidance to measure compliance with the standard. How is net loss measured, figuring in both spatial and temporal scales? As habitat becomes fragmented due to anthropogenic disturbance, fire, noxious weed invasions, and other factors, habitat effectiveness will eventually be lost. While restoration plans can be put into place to mitigate habitat that is lost and fragmented, what is the time scale that is deemed appropriate for this return of habitat to the sage-grouse? What other habitat will be rehabilitated to replace habitat that is lost even temporarily to changes whether natural (fire), invasive species (i.e., cheatgrass etc), or manmade (energy development)?

Under the 2012 Planning Rules, a standard is [Idquo]a mandatory constraint on project and activity decisionmaking[rdquo] to [Idquo]maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements.[rdquo]5 In order to allow the Custer Gallatin USFS an ability to account for [Idquo]no net loss of habitat[rdquo] within sage-grouse priority and general habitat areas, a more specific definition is needed. Implementing effective management tactics could benefit from greater direction. This standard lacks the coherence and definition needed to comply with the 2012 planning regulations cited above, allow adequate analysis under NEPA and to provide clear and rational guidance under the APA statute (5 U.S.C. [sect] 706(2)(A)).

Under the Custer Gallatin Draft Forest Plan, the Greater sage-grouse is designated as a Species of Conservation Concern. This requires species specific plan components, as per the 2012 Forest Planning Rules, that provide [ldquo]ecological conditions necessary to[hellip]maintain a viable population of each species of conservation concern[rdquo] ([sect]219.9). In [sect]219.12 of the 2012 Forest Planning Rules, the USFS is required to develop a monitoring program for the plan area. While the draft plan does set up the required monitoring questions and measurement indicators for invasive species, non-forest vegetation, and sage-grouse, it is the lack of data that the Custer Gallatin currently has to go on that creates a potential weakness for the draft forest plan and DEIS. During the planning and development period for the draft plan, there was no data available for cheatgrass populations on the Ashland, Sioux, or Pryor geographic areas within the Custer Gallatin.6 As cheatgrass is a known invader of Wyoming big sagebrush habitats3 such as those found in the Ashland and Sioux geographic areas, it would seem that the possibility of cheatgrass occurring in these areas is more than zero. In 2012, fires burned over 300,000 acres of land within the Ashland geographic area, and beyond, at high intensities, destroying sagebrush cover within general and priority areas of habitat for sage-grouse. Wyoming big sagebrush is inherently slow recovering from fires (35-100 year recovery time), and is more [ldquo]experienced[rdquo] with fire regimes that are longer in duration (35+ years).[1] It is common for invasive grasses such as cheatgrass to be able to invade after fire; while sagebrush is intolerant of fire, cheatgrass can recover and increase just two years after fire.3 As the Ashland geographic area has had increasing fire occurrences since 2007, and the largest fires within the management area in the last 10 years, to have no cheatgrass data after probable restoration efforts seems like a lack of monitoring effort under the current forest plan. This could pose a problem for management direction of habitat to be infested with invasive weeds, based on those species that have been inventoried. Cheatgrass has not been inventoried on this habitat, which represents a hole in data that should receive some discussion in the DEIS in relation to sage-grouse concerns, but does not. As cited by Lamont and Reid within their 2016 assessment of invasive species on the Custer Gallatin:

An updated weed inventory is needed to provide a more accurate description of the invasive weed population. Due to limited funding, weed inventories often occur if time allows and if accessible. Without an updated inventory, the assessment in this report probably understates the true infestation level.[rdquo][2]

Monitoring data for sage-groupe lek populations also represents a hole in knowledge present for the draft plan period. Historic leks exist within the Ashland geographic area [ndash] these leks have been reported to not contain sage-grouse breeding activity within the past ten years, but the most recent survey utilized by the Forest Service is from 2015 for one of the lek areas, and 2000 for the other two historic lek areas.[3] The DEIS cites activity on these leks as being [ldguo]unconfirmed, but inactive[rdguo] (412) and the monitoring to be [Idquo]surveyed sporadically in recent years, with no sage-grouse detected[rdquo] (412). Active leks have been reported outside the Ashland; all leks within or near the Ashland area are within 6 miles of the management boundary10. Active leks have also been reported near the Sioux geographic area boundary in South Dakota.10 All of the priority habitat for sage-grouse that exists within the Custer Gallatin lies within grazing allotments, along with 88% of the general habitat.10 According to Dixon et al. in the Draft Terrestrial Wildlife Report [Idquo]Domestic livestock grazing has had impacts on sage-grouse habitat within the plan area. While some impacts continue, which will require monitoring and possibly management actions[hellip][rdquo] Looking into the [Idquo]Monitoring and Evaluation Report[rdquo] for the Custer National Forest, completed for the Ashland, Beartooth, and Sioux Ranger Districts in 2000, it is undetermined as to the influence of livestock grazing on sagegrouse habitat in the Ashland Ranger District.[4] Although current prescribed stocking rates and use levels are far below what existed before the Custer Gallatin Forest designation[5], the lack of connection is unsettling, seeing as how literature and the DEIS itself states overgrazing as a threat to sage-grouse habitat. When combined, having no data on cheatgrass infestations, old data on lek populations, and a perceived lack of knowledge on how livestock grazing is affecting sage-grouse habitat all within the Ashland area, a lack of information seems present that is not necessarily being discussed in the DEIS in terms of management concerns for the sagegrouse. Again, with a no net loss of habitat standard, this would seem that planning was being based on somewhat arbitrary and capricious terms, violating APA statute (5 U.S.C. [sect] 706(2)(A)). In addition, [Idguo]the use of best available scientific information to inform the planning process[rdguo] as required by [sect]219.3 of the 2012 Forest Planning Rules would be difficult for the Custer Gallatin draft plan to follow, as some of this needed data to evaluate habitat potential and usage is either not there or outdated. As assessments required for the forest planning process are to consider monitoring reports along with other sources under [sect]219.6 of the Forest Planning Rules, it was noted within the assessments for Invasive Plants as well as Terrestrial Wildlife that monitoring for population data was a need moving forward to help better inform management. Knowing the status of leks and invasive plant infestations would seem to be key in determining what direction was needed in

maintaining habitat, especially for a sage-grouse population that has been deemed of genetic connectivity importance and [ldquo]at-risk[rdquo].1

Moreover, the lack of at least guidelines to prevent the construction of tall structures avoided by sage grouse in priority or foraging habitat from activities other than recreation (especially energy development) is a serious defect in the plan. Energy development represents a potential for fragmentation of habitat within sage-grouse priority and general habitat designations, and is a primary threat to sage-grouse habitat within the management region in and surrounding the Custer Gallatin forest.1 The DEIS recommends new energy developments to occur OUTSIDE of priority habitat, unless there are pre-existing mineral rights (FW-GDL-WLSG-07). In Appendix A (Management Approaches) of the DEIS, it states:

Where new energy development activities cannot be avoided in priority or general sage-grouse habitat due to pre-existing rights, development can be located in non-habitat inclusions (e.g. non-vegetated areas) or in the least suitable habitat possible. New structures can be consolidated where possible to minimize impact of infrastructure. (24)

The issue here may reside in the reference to [Idquo]least suitable habitat possible[rdquo]. Priority habitat designations for sage-grouse denote areas that are most likely to contain sage-grouse and represent a high use category[6]. As per the Draft Plan standard of no net loss of habitat, locating development even on the [Idquo]least suitable habitat possible[rdquo] still results in a potential loss of habitat for sage-grouse. Location of energy structures within priority habitat could potentially disturb movement to and from active lek areas that are located just outside of management boundaries in specifically the Ashland geographic area. The active well sites within the management area exist in the Sioux geographic region, which contains priority habitat as well. Currently, the Custer Gallatin plan includes a buffer area of 200 feet for roads and facilities from leks and 0.25 mile buffers that prohibit ground disturbing activity during primary lek activity periods in March and April9. It has been found that disturbances within 200m (almost 660 feet) have resulted in loss of lek attendance.3 There is no discussion in the DEIS given to these current buffer zone stipulations within the existing plan. There is also no discussion given to emerging scientific reports from groups such as Environmental Defense Fund, which has provided Habitat Quantification Tools (HQT) to states to begin to quantify gains and losses of sage-grouse habitat caused by anthropogenic development. Data results of these HQT simulations are expressed as Functional Acres that are lost or gained based on the development type.[7] This tool was used to generate a draft report, through the collaboration of various stakeholders from private and agency entities, that was intended to inform state regulatory agencies, the Montana Sage Grouse Habitat Conservation Program, and other groups involved in conservation of sage-grouse habitat.16 Results of the draft HQT report, released in October 2018, show a negative impact on sage-grouse habitat based on the density of well pads within 1 km of lek areas, as well as a negative impact of tall infrastructure within 1 km of leks (101-104). The discussion with the DEIS for the Custer Gallatin does not include mention specifically to density or height of new energy structures to be built on or near sage-grouse habitat. The Guideline FW-GDL-WLSG-07 within the Draft Plan and the proposed strategies within DEIS Appendix A concentrate more on the proper location of the energy units, which is appropriate, but does not also take into account the impact of these variables presented by new science. Suggested consolidation of new energy structures, as advised in discussion of potential strategies, could be construed as actually creating higher density. No discussion is provided on the impact of density within the DEIS. Tall structures can inhibit grouse from moving between habitat areas, and highly concentrated structures can produce noise inhibitions as well as openings for invasive plants. While taller structures such as powerlines and are briefly addressed within the Draft Plan Guidelines (FW-GDL-WLSG-03), no discussion is given to height of energy structures, which may or may not be a concern based on current designs of oil and gas wells. While height terms could be applied to wind turbines, there are currently no wind projects on the Custer Gallatin.

Without discussion surrounding the newer science available to inform management, the DEIS is failing to take the necessary hard look required by NEPA (42 U.S.C. 4371 et seq.), and is not in compliance with [sect]219.3 of the 2012 Forest Planning Rules that require the best available science to inform the planning process.

Even though the CGNF is not the primary land manager or owner in the region supporting sage grouse habitat it has a duty to [ldquo](ii) Include plan components, including standards or guidelines, to maintain or restore ecological conditions within the plan area to contribute to maintaining a viable population of the species within its range.[rdquo] 36 CFR 219.9. The draft plan falls short of meeting this standard with respect to energy development.

With respect to the grazing management to benefit the sage grouse the plan also falls short. As all of the priority and most of the general habitat for sage-grouse within the Custer Gallatin lies in permitted grazing allotment area, it is important that guidelines and recommended management approaches properly address sage-grouse needs through consideration of all factors. Examining information provided within Appendix A of the DEIS [ndash] Management Approaches[8], permittees with fence structures should [Idquo]Consider marking fence wires within a half a mile of leks with flagging or durable vinyl markers since it makes them more visible, and can minimize grouse collisions without disrupting fences needed for livestock. When planning new fence projects, avoid building fences in these high-risk areas where possible[rdquo] (25).

This recommendation is inadequate for two reasons. First it is not embodied in the plan as a mandated requirement. Second, scientific data cited within the DEIS itself has shown that females may travel up to 3 miles from lek sites for nesting (416). The Montana management plan cites research findings that have shown two thirds of the nests in central Montana occur within 2 miles of a lek.4 This research suggests that perhaps fence structures within this radius from leks should be considered for flagging. As the active lek areas lie outside of the Ashland geographical region within a 6 mile zone of the management border, females would likely travel greater distances than 0.5 miles to nest. The DEIS increased the mileage recommendation for the all of the alternatives proposed from 0.25 miles, which was in the current plan. Agency scientists discussed the direction provided in the current Custer Plan to be outdated and that [Idquo]there is relevant new science to consider.[rdquo]10 As impacts from infrastructure such as fences could occur several miles from leks, it would seem that the DEIS should devote more discussion as to how they arrived at their recommended buffer zone of 0.5 miles for fence flagging and new fence construction within lek areas. Without this discussion, it can be assumed that the DEIS is lacking a hard look at the literature behind the Guidelines and proposed strategies for management, or else is ignoring the literature and expert advice provided in plan assessments in violation of NEPA (42 U.S.C. 4371 et seq.) and 36 CFR 219.9.

[1] USDA, Custer Gallatin National Forest. [Idquo]Draft Environmental Impact Statement for the Draft Revised Forest Plan, Custer Gallatin National Forest[rdquo], 2019. USDA, CusterGallatin NF, www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd611315.pdf.

[2] Lamont, Susan and Kim Reid. [Idquo]Draft Invasive Plants Report[rdquo], 2016. USDA Assessment Forest Plan Revision, Custer Gallatin National Forest, www.fs.usda.gov/nfs/11558/www/nepa/105060_FSPLT3_3908010.pdf.

[3] Dixon et al. [Idquo]Draft Terrestrial Wildlife Report[rdquo], 2016. USDA Assessment Forest Plan Revision, Custer Gallatin National Forest, www.fs.usda.gov/nfs/11558/www/nepa/105060_FSPLT3_3908218.pdf.

[4] USDA, Custer Gallatin National Forest. [Idquo]Monitoring and Evaluation for the Custer Gallatin Forest, 2000. USDA, Custer Gallatin NF, www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3826233.pdf.

[5] Reid, K. [ldquo]Draft Nonforested Terrestrial Ecosystems Report, 2016. USDA Assessment Forest Plan Revision, Custer Gallatin National Forest, www.fs.usda.gov/nfs/11558/www/nepa/105060_FSPLT3_3908013.pdf.

[6] USDA Forest Service. [Idquo]Greater Sage-grouse Habitat Implementation Guide[rdquo], 2016.

[7] [Idquo]Montana Mitigation System Habitat Quantification Tool Technical Manual For Greater Sage-Grouse[rdquo], 2018. Montana.gov, sagegrouse.mt.gov/documents/MT_HQT_Oct2018v1p0_09Oct2018.pdf.

[8] USDA, Custer Gallatin National Forest. [Idquo]Appendix A: Proposed Management Approaches and Possible Actions[rdquo], DEIS, 2019. USDA, Custer Gallatin NF, www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd567789.pdf.

10 USDA, Custer Gallatin National Forest. [Idquo]Monitoring and Evaluation for the Custer Gallatin Forest, 2000. USDA, Custer Gallatin NF, www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3826233.pdf.