January 3, 2017

Virginia Kelly
Forest Plan Revision Team Leader
Custer Gallatin National Forest
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Dear Virginia:

Thank you for the opportunity to review and provide feedback on the Draft Assessment of Ecological, Social and Economic Conditions on the Custer Gallatin National Forest as well as the Draft Preliminary Need for Change. Congratulations to your team on completing this first phase in the forest plan revision process. We hope you will find our feedback useful as you finalize the assessment and begin the process of developing the various plan components in earnest.

The Wilderness Society (TWS) is a national non-profit organization established in 1935. Our mission is to "protect wilderness and inspire Americans to care for our wild places" and we strive to be a partner to the Forest Service across the country, assisting in forest stewardship, promoting landscape-scale restoration projects, conducting original scientific research, and working to protect wild places on public lands. Our Northern Rockies office staff in Bozeman includes two PhD scientists, both of whom contributed content to this letter.

Introduction:
Overall, we appreciate the work put into the Draft Assessment to make it user friendly and easy to read. The five landscape areas that the assessment describes make intuitive sense to describe and analyze such a diverse forest.

The simple bullets highlighting important benefits of the forest at the start of the assessment are useful and should be expanded. Several specialist reports reference the forest's niche and the important values of open space and unroaded, wild country as defining the CGNF. These reports highlight the significance of these landscape qualities to wildlife, recreation and aquatic ecosystems. This articulation of the forest's "distinctive roles and contributions to the local area, region and Nation," should help drive the plan revision process (36 C.F.R. § 219.2(b)). We recommend including it in the Draft Assessment and adding values such as open space and remote, unroaded wild backcountry to the bulleted list of benefits of the CGNF.

Likewise, the Areas of Tribal Importance Report was an exceptional and welcome component of the Draft Assessment. The report comprehensively establishes the historical context and history

of tribal relationships with specific places on the Forest, as well as tribal management and use of the Custer-Gallatin National Forest, with great clarity.

The connections between the Draft Assessment and specialists' reports could be strengthened. In some places, the Draft Assessment is so barebones that it doesn't clearly guide the need for change or substantively inform the plan revision process. The quality and focus of the specialists' reports is also highly variable (ranging from only a two-page discussion of climate to a very thorough and thoughtful examination of terrestrial wildlife). The final assessment could be strengthened in several ways, while still retaining the general readability and conciseness of the document:

- Improving some of the summaries so they more fully capture the specialists' reports. For example, the wildlife summary makes little mention of the extensive discussion about wildlife connectivity within and across the CGNF landscapes. Similarly, the aquatics summary discusses the relatively high functioning condition of the forest's watersheds but includes no discussion of why these watersheds are in good health.
- Better cross-referencing of information between the assessment and the specialists reports, and more clearly articulating that the specialist reports are key components of the assessment, containing the best available scientific and other information that is required under the planning rule. This will ensure the assessment serves the purpose of providing one-stop-shopping for the best available science that will inform the plan revision.

Specific recommendations for changes and additions

Aquatic and Riparian Ecosystems

We appreciate the care and informational rigor that went into the development of the Aquatic and Riparian Ecosystems Report. The clear communication of geospatial scale within which each species, etc. is discussed is very helpful (and found in the Wildlife Report and other specialist reports as well). We would like to request that the Beaver Habitat Suitability analysis – which is a superb idea – be shared with the public as part of the Assessment.

We also ask that the Planning Team complete and share its analysis of the human-created barriers to longitudinal connectivity – including detailed maps – for the Forest. This information – in combination with the climate impacts assessment and Watershed Condition Framework – is critical for the geospatially-located identification of potential management interventions and strategies to sustain native salmonids through the life of this next Forest Plan. This analysis will also facilitate work to effectively consider and address the very real threat posed by aquatic invasive species. Please also provide maps of the montane portions of the Custer-Gallatin NF that have the potential to serve as coldwater refugia for native salmonids (p. 30).

Climate:

Our staff is genuinely puzzled by the extreme brevity of the Climate specialists report (2 pages) that accompanies the Draft Assessment. Not only is climate change – and its impacts – an exceptionally complex and scientifically-dense subject, it is also one with which the public

struggles on many levels. We believe, at a minimum, the specialists report should more completely reflect the science of climate change to meet the mandates and requirements around climate change and connectivity in the 2012 Planning Rule (e.g. such as the requirement to sustain ecosystems processes and wildlife species as the climate changes through a variety of land and habitat management and protection strategies that reduce risk; 36 CFR § 219.9; and to take into account the way in which forests fit into the "broader landscape influenced by the plan area" with respect to connectivity; 36 CFR § 219.8(a)(1)(iii)). To address this concern, we suggest adding the following information to the climate section of the assessment:

- documented and projected impacts from climatic shifts at multiple temporal scales;
- information about potential climate adaptation strategies for application now and in the future (ranging from land protection of core habitat for reasons such as vulnerable species, climate refugia, and key connectivity zones/ riparian travel corridors) to targeted restoration activities and specific adaptation tactics (e.g. translocation of cold-water native salmonid populations to potential climate refugia, for example).

The Forest Planning Team should use the opportunity created by the assessment phase to lay these elements of climate change out very specifically in the Climate Report by species, forest type and disturbance type. We recommend using a separate table for <u>each</u> of these natural resource targets and disturbance types to carefully lay out the known (i.e. current) and projected (i.e. future, say 2030 or 2050) impacts, as well as general climate adaptation strategies and specific climate adaptation tactics. In this way, the Forest Planning Team will establish critically important groundwork for the next phase of forest planning and development of the draft plan. The alternatives that the team will ultimately lay out under its DEIS could then include the list – for each of the natural resource targets/ disturbance types – of climate adaptation strategies that would be applied under each option. The presentation of this information will help the public understand and evaluate - with great clarity – the potential consequences and outcomes that different alternatives may have for the species and places that they value in the Forest.

<u>Designated Areas:</u>
After reviewing the Draft Assessment, the Existing Designated Areas specialist report, and Research Natural Areas specialist report, we would like to suggest some changes and additions to these components of the assessment.

The 2012 planning rule and final directives require that the draft assessment evaluates the "potential need and opportunity for additional designated areas." (36 C.F.R. § 219.6(b)(15)). The final Forest Service planning handbook provides additional direction regarding the types of available information the CGNF should evaluate at the assessment stage, including information that will describe the potential need and opportunity for additional designated areas. (FSH 1909.12 Chapter 10, p 66-67).

This evaluation is intended to inform the plan revision requirement to determine whether to designate, or recommend for designation, any additional areas, including recommended

wilderness, eligible wild and scenic rivers, and other designated areas. Neither the Draft Assessment nor the specialist reports include much discussion about the potential need and opportunity for future designations. Indeed, the Draft Assessment does not even mention this requirement, and the Special Designations report acknowledges that this has "not been thoroughly evaluated by the interdisciplinary team (p. 4)." Any potential additional designations will be fully vetted with the public through the plan revision process (including both the Wilderness Inventory and Evaluation and the Wild & Scenic Rivers eligibility processes). However, the planning rule requires that the assessment identify *potential* needs and opportunities to provide additional protection to portions of the CGNF's vast complex of largely undeveloped roadless and natural areas. This shortcoming is inconsistent with the planning rule's direction.

There are numerous social, economic and ecological benefits associated with a protected network of designated conservation lands. The Draft Assessment includes only a generalized paragraph describing some of these benefits (p. 87). The designated areas specialist report includes short discussions of the benefits to people but lacks more robust information about the ecological benefits (see TWS pre-assessment letter). These social, economic and ecological benefits all contribute to the potential need and opportunity for additional designated areas on the Custer Gallatin National Forest. They could be better described, drawing information from additional specialists reports and sections of the assessment (wildlife, aquatics and recreation), into this section.

The assessment and specialist report also don't do a very complete job of distinguishing the varying levels of protection among the different designations. For example, it isn't clear how a roadless designation differs in terms of management direction from other administrative or Congressional designations.

Recommendations: To address this deficiency in the draft assessment, we suggest the following:

- Add a short summary of key information about the various social, economic and ecological benefits of protected areas. This should include some of the information submitted in our pre-assessment letter regarding the relative wildness of the CGNF and ecosystem types not well represented in the Wilderness system, as well as peer reviewed research by Headwaters Economics on the economic benefits of protected public lands. Some of this crucial information is missing from the 'Key Findings' summary provided at the end of the Designated Areas Report (p. 13, third bullet point), which fails to mention the pivotal and well-documented role that the Hyalite-Porcupine Buffalo Horn WSA plays in providing "important refugia and habitat for a large number of plant, wildlife and fish species" (in addition to the Absaroka-Beartooth and Lee Metcalf Wilderness Areas which are mentioned). The third paragraph under "The Value of Custer-Gallatin Wildlife" on p. 38 of the Draft Assessment conveys this information in a very accessible, more general way, but we see the need for more detailed, wildlife-specific descriptions to be included in the specialist reports as consistently as possible.

- Include cross-references to information already in the draft assessment and specialists reports that illustrates a need and/or opportunity for additional designated areas. A few examples include:
    - increasing visitation levels in existing designated wilderness and impacts of crowding at (see p. 88, Draft Assessment and p. 13, designated areas specialist report);
    - Inventoried Roadless Areas – which inherently represent an opportunity for additional designated areas - cover 30% of the forest (see p. 93, Draft Assessment and p. 17, designated areas specialist report);
    - the importance of protecting Bozeman's municipal watershed in the WSA (see p. 98, Draft Assessment).

- To satisfy the ecological, economic and social need for additional designated areas, potential opportunities should focus on areas that enhance wildlife connectivity (again, per 36 CFR § 219.8(a)(1)(iii)), provide important habitat for species, contribute to ecosystem representation and biological diversity, and provide quality opportunities to connect people with nature. These areas may include, but are not limited to: the Gallatin Range, the Lionhead area, and portions of the Madison Range.

Infrastructure:

The planning rule requires assessments to address forest infrastructure, including "recreation facilities and transportation and utility corridors." 36 C.F.R. § 219.6(b)(11). The planning handbook recognizes that "[i]nfrastructure in the plan area can have a substantial impact on social, cultural, economic, and ecological conditions both within the plan area and in the broader landscape." Forest Service Handbook 1909.12, ch. 10, § 13.13. Given the extensive and decaying nature of the Forest Service road system and its significant aggregate impacts on landscape connectivity, ecological integrity, water quality, species viability and diversity, and other forest resources and ecosystem services, a robust assessment of transportation infrastructure is necessary to ensure the forest plan revision complies with the relevant substantive provisions of the 2012 planning rule, 36 C.F.R. §§ 219.8-219.10 and other regulatory requirements, including subpart A of the travel management regulations.[1]

Neither the assessment nor the infrastructure specialist report adequately address the significant fiscal and ecological impacts of the combination of a deteriorating road system, declining maintenance budgets, increasing deferred maintenance needs, and climate change stressors. Both documents are missing important specific information regarding the physical and fiscal condition of existing roads and trails as well as the effects of this infrastructure on the

[1] Current Forest Service policy requires the agency to: (1) "identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands," and (2) "identify the roads . . . that are no longer needed to meet forest resource management objectives and that, therefore, should be decommissioned or considered for other uses, such as for trails." 36 C.F.R. § 212.5(b). With forest plans determining the framework for integrated resource management, the plan revision is the appropriate place to establish direction for identifying and achieving a sustainable minimum road system over the life of the plan.

ecological integrity of aquatic and terrestrial ecosystems. Collectively, the infrastructure (Ch. 14, pp. 618-619, 624-625) and system drivers and stressors (Ch. 9, pp. 469-472) chapters of the Gila National Forest's recent draft assessment report provide a relatively thorough assessment of the fiscal risks and trends and ecological impacts associated with the forest transportation system. The included literature review also catalogues much of the best available science on the impacts of Forest Service roads. This information should be integrated into the final assessment report and infrastructure specialist report.

Given the importance of recreation and access on this forest, it is important that the assessment do a better job of making the connection to the need for plan direction aimed at achieving an ecologically and fiscally sustainable road system. While the travel analysis and travel management planning processes on the CGNF identified system roads and trails that are available for public use, as well as those that should be decommissioned, the forest assessment should include a short summary of relevant information from the travel analysis report and travel management plan, as well as progress made toward "right-sizing" the roads and trails system to be more sustainable.

Land Status and Ownership, Use, and Access Patterns:

We appreciated the focused, information-based discussion of the national and regional problems associated with a lack of access to public lands (p. 22), and the Gallatin NF's identification of "46 locations where public access to the national forest boundary was inadequate" (on 21% of the forest's land base) (p. 23). We would appreciate the addition of a detailed map that shows these 46 locations. Without such a map, the public will find it difficult to engage in a discussion about potential solutions to this challenge within the context of the other components of the emerging Forest Plan.

Similarly, there is an extremely important and pressing need for a map (for inclusion in this section and/or the Terrestrial Wildlife Report) that depicts known barriers to connectivity across the Custer-Gallatin National Forests. More specifically, a map that includes data layers for road systems, motorized trails, utility rights of way and communication sites, historical right of way acquisition data, as well as active hard rock or leasable mineral claims, campgrounds, dams, large-scale (e.g. more than 5,000 acre) high severity burns, etc. Such a map would facilitate valuable discussion between the National Forest and the public regarding potential management alternatives and interventions of strategic importance in resolving or reducing barriers under the new Forest Plan to meet the mandates and directives about connectivity under the 2012 Planning Rule (e.g. 36 CFR § 219.8(a)(1)(iii) and 36 CFR § 219.9).

Timber

The Timber Specialist Report raises a variety of concerns. First, throughout the Timber Specialist Report, the use of the term "tentatively suitable" acres is a cause for concern because it is not clear how it is being defined nor is there a clear discussion over the relevance of that designation and those acres to the forest plan revision process. The term is not used in the 2012 Planning Rule. The Handbook requires the assessment to provide "information relevant to identifying land that may be suitable for timber production." The specialist report would

benefit from a thorough explanation of how the Forest Service will use the provided information, including the "tentatively suitable" acreage, to carry out that responsibility. Further, the assessment and report must make more explicit that the lands inappropriately classified as "tentatively suitable" timber lands in Tables 1 & 2 and Figures 2 & 3 reflect existing conditions based on current forest plan direction and database records. Timber suitability will be reanalyzed through the plan revision process pursuant to the direction in § 219.11 of the 2012 planning rule and Chapter 60 of the Forest Service Land Management Planning Handbook. Therefore, lands that may be suitable for timber production might look very different from the Draft Assessment maps (Figures 16 and 17) which are labeled "Tentatively suitable timber land."

On Page 12, paragraph 1 under Forest Service Management Actions Influencing Timber Production in the specialist report, the last sentence of this paragraph again incorrectly defines areas as tentatively suitable, in part, as those areas where management of forest stands for timber products "is compatible with the area's desired conditions and objectives." This seems to put the cart before the horse because desired conditions and objectives will be set during this plan revision process but not during the assessment so it would not be appropriate to use these yet-to-be-set desired conditions and objectives as part of the determination of the status of these lands. Please correct this statement of process or clarify what is meant by the text as drafted.

Under the planning rule, lands also must be identified as not suited for timber production where statute, executive order, or regulation prohibits timber production; where the lands are withdrawn from timber production; or where production would not be compatible with achievement of desired conditions and objectives. 36 C.F.R. § 219.11(a)(1)(i)-(iii); FSH 1909.12, ch. 60, § 61.1.

Inventoried Roadless Areas (IRAs) must be found not suited because the Roadless Area Conservation Rule (a regulation) generally prohibits timber harvest (subject to certain limited exceptions). 36 C.F.R. § 294.13(a).

Similarly, the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area (WSA) must be found not suited because the Montana Wilderness Study Act (a statute) impliedly prohibits timber production within the WSA by requiring that it be administered to maintain its wilderness character and potential for inclusion in the National Wilderness Preservation System. Pub. L. No. 95-150, § 3(a), 91 Stat. 1243 (1977). The WSA should also be found not suited because timber production would be incompatible with achieving the desired conditions and objectives mandated by the Montana Wilderness Study Act.

Because the current tentatively suitable timber lands identified in the specialist report appear to include IRAs and portions of the WSA, this may result in confusion or misinterpretation by the public. The final assessment and timber specialist report should clarify that these areas (and potentially others) will be found not suited in the upcoming timber suitability analysis based on legal constraints.

Overall, the specialist report should include the available information relevant to making suitability determinations and not simply reference an information need that exists and is yet unmet. For example, information regarding current forest conditions that will be used to project future harvest volumes (like age distributions) should be included here.

Similarly, the assessment should provide the specific information on how "other conditions" (such as wildlife habitat) may affect timber harvest. Now is the time to provide this information, and the assessment needs to do this in a way that will be useful to the planning process for accurately projecting timber volume. The Handbook (13.33) lists 10 things that the planning team "should" look at for timber. The two that are most important to wildlife were not addressed:

- The ability of timber harvest to maintain or restore key ecosystem characteristics of ecological sustainability
- The impacts of timber harvest on ecological integrity and species diversity

The discussion of the interrelationships between wildfire, climate change, ecosystem resiliency and potential timber production seems incomplete and/or confusing. For example, among the Key Findings are the following statements: “Forests within the geographic landscapes are showing decreased resiliency to natural disturbance events, such as insects and disease and wildfires,” and “Current forest plan direction addressed forest health objectives but the assessment indicates that forest resiliency to disturbance agents such as wildfire, insects, and disease has decreased and therefore the forest health objectives have not been effective.” However, the specialist report does not clearly present the data that support these conclusions nor does it cross reference other parts of the assessment where the data might be found. The following data should be identified in this section of the assessment:

- Data used to assess fire severity and current forest conditions as they relate to timber yield projections should be included in the assessment.
- Actual data on age distributions and associated volume to provide context and substantiation for the statement that “the availability of timber products will be greatly reduced for the next few decades.”
- More current data than August 2012 for U.S. housing construction or include an explanation of why such outdated data are used here.

The timber report should reference the fire section of the assessment and more strongly connect information regarding large wildfire trends (whether addressed elsewhere in the assessment or in related literature) and timber production. Similarly, the timber report should address the likely impacts of climate change on site productivity and how climate change could affect timber volume per acre. Stating that site productivity is generally considered fixed seems to overlook the impact of climate change on productivity. Finally, the timber report should address how treatments to reduce hazardous fuels in the wildland urban interface relates to suitable acres and what impact, if any, it has on timber production.

Recreation

The Draft Assessment does a good job of painting the picture of increasing recreation pressure and demands on the CGNF combined with declining budgets to manage the resource impacts of various recreation uses and infrastructure. However, it also glosses over the more robust information included in the Recreation specialist report regarding recreation niche (p. 4-5), key benefits to people (p. 26) and the detailed visitor use data throughout the report. It also offers very little discussion of the ecological and economic conditions conveyed in the specialist report.

This information captures the reasons people recreate on the CGNF, including the ecological values that draw recreationists to this specific landscape for their outdoor adventures. We recommend incorporating summaries of these topics into the recreation section of the Assessment. They are major drivers of the popularity of the CGNF and therefore should be the underpinnings of forest plan decisions regarding Recreation Settings, Opportunities, and Access.

Wildlife & connectivity

We greatly appreciate the thoughtful approach to the Terrestrial Wildlife Report, including:

- The long-term framing and history of wildfire - and its influences – across short- and long-term climatic cycles in the region (pp. 8-9);
- The nuanced discussions around wildlife habitat, species diversity, keystone species, and habitat diversity;
- The highly-sophisticated treatment of numerous components and sub-topics embedded within the topic of habitat connectivity (pp. 11-18);
- The critically important role of protected lands in sustaining habitat connectivity for a wide array of wildlife species; and
- The national importance of the Custer-Gallatin National Forests in protecting and sustaining iconic landscapes, forests, and wildlife species.

We were, however, surprised and puzzled by the statement on p. 20 that “many wildlife species can cause serious bodily injury, or even death to humans.” Given the complete absence of data to back this claim up (both for the idea that this concept applies to “many wildlife species” as well as the suggestion that these are common events), we recommend a revision of this statement.

The discussion of the impacts of climate change on wildlife habitat conditions of the future (p. 21) lists important topics for consideration (under the bullet points), but misses a critically important opportunity to lay out known impacts to date, which we view as a crucial first step from which future scenarios of projected impacts must flow.

We also suggest that the CGNF provide maps of current connectivity at two different scales for each wildlife species considered in the Assessment: the first within the Custer-Gallatin NF, and the second at a regional or larger landscape scale (e.g. West-wide or across a specie’s distribution). Such a series of maps for Sensitive, Threatened, Proposed for Listing, iconic, and

species of conservation concern will allow for an information-based discussion around the potential impacts of a shifting climate on connectivity as the Planning Team works to develop components around connectivity in the next Forest Plan that meet the mandates of the 2012 Planning Rule 36 CFR § 219.8(a)(1)(iii). We look forward to seeing the results of the Forest's ongoing analysis of habitat conditions/ changes over time, which will be tremendously helpful.

In addition to the discussion of potential and documented impacts to Canada lynx from motorized winter recreation through the opening up of travel routes for competing species (e.g. coyotes, bobcats, and mountain lions) on pp. 53-54, we would also ask for a thorough review of the impacts of motorized winter recreation on Canada lynx - and all other Sensitive, Threatened, Species of Conservation Concern, species of interest, etc. - due to the avoidance of snowmobiles; which is directly relevant to our understanding of current and potential levels of habitat fragmentation of their winter habitat.

Regarding wolverines, we provide data from long-term carnivore monitoring of the Southwestern Crown of the Continent Collaborative Forest Landscape Restoration Program (CFLRP) (please see two attached summary reports) that shows wolverines in this region are regularly found at much lower elevations than those cited in the Terrestrial Wildlife Report (which suggests that wolverines are generally found above 6,800 feet, or 2,100 meters). Between 2012 and 2016, wolverines in the 1.5 million acre CFLRP area immediately to the North were detected within elevation ranges of 3,346 – 7,567 ft (mean = 5,315 ft). All data and data analyses generated from this monitoring program have now been submitted to the US Fish and Wildlife Service in response to their request for new datasets as part of their ongoing review of this species under the Endangered Species Act.

As with the Canada lynx, connectivity – particularly of maternal and winter habitat – for wolverines across the region and within specific National Forests will serve as an increasingly important climate adaptation strategy for these species as the climate continues to shift. Hence, we request that the Planning Team incorporate these datasets into this planning effort as part of their best available science for wolverines in the Northern Region, particularly given the critical need to consider the correct elevational gradients during the development of regional and Forest-wide connectivity maps for this species and population.

Preliminary Need for Change

The draft Preliminary Need for Change document clearly charts a road map for developing a new plan that is consistent across the newly combined CGNF, complies with the 2012 planning rule and reflects new law and policy. It offers some examples of substantive changes in management direction under each broad category but is by no means complete.

For example, nowhere does this document identify a potential need and opportunity for new designations that would protect and connect deserving areas, meet ecological need for species and/or enhance sustainable recreation. We suggest adding this statement to the Preliminary Need for Change as this document does help define the purpose and need and proposed action in the next phase of forest planning. Similarly, the document should identify a need to develop

plan direction to ensure ecologically and fiscally sustainable transportation infrastructure, integrated with the identified need to provide for sustainable recreation.

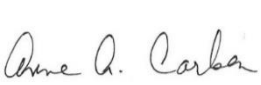
Conclusion

We appreciate the opportunity to provide feedback on the CGNF draft assessment and preliminary need for change. Please let us know if you have any questions regarding this input. Our goal is to help strengthen these foundational documents so that the public has adequate information to contribute during the plan development phase in 2017.

We look forward to continuing to participate in the revision process on behalf of our members nationwide.

Sincerely,

Barb Cestero
Gallatin Program Associate



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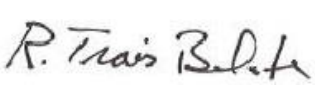

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