Custer Gallatin National Forest
Attn: Forest Plan Revision Team
P.O. Box 130 (10 E Babcock)
Bozeman, MT 59771

Submitted online at:
https://cara.ecosystem-management.org/Public/CommentInput?project=50185

Re: Draft Revised Forest Plan and DEIS

June 6, 2019

Dear Forest Planning team,

Thank you for the opportunity to comment on the Draft Revised Forest Plan (draft plan) and the Draft Environmental Impact Statement (DEIS) for the Custer Gallatin National Forest (CGNF). The Wilderness Society has provided comments during each phase of this plan revision, including our scoping comments submitted in March 2018.

The Wilderness Society is the leading conservation organization working to protect wilderness and inspire Americans to care for our wild places. Founded in 1935, and now with more than one million members and supporters, The Wilderness Society has led the effort to permanently protect 109 million acres of wilderness and to ensure sound management of our shared national lands.

For much of our history, The Wilderness Society has been keenly interested in the conservation and management of the Greater Yellowstone portion of the Custer Gallatin National Forest. Our comments focus on this priority landscape and key areas of forest wide direction important to our organization and its members.

## Forest wide Direction

### Recommended Wilderness

The 2012 planning rule requires the Forest Service to "identify and evaluate lands that may be suitable for inclusion in the National Wilderness Preservation System and determine whether to recommend any such areas for wilderness designation." (36 CFR 219.7(c)(2)(v)). Land allocations and allowed uses – including allocation of recommended wilderness areas -- were identified as among the main issues driving the development of the alternatives considered in the DEIS. Accordingly, the draft plan presents a range of alternatives for recommended wilderness and other land allocations, by geographic area.

For recommended wilderness, the alternatives presented are: Alternative A (No Action) which proposes 7 RWAs totaling 33,741 acres; Alternatives B and C which both propose 9 areas with 113,952 and 146,555 acres respectively; Alternative D which proposes 39 areas totaling 711,425 acres; and Alternative E which proposes no RWAs. Land allocations such as backcountry areas and recreation emphasis areas also vary by number and acreages across the alternatives.

We appreciate that the DEIS does not identify a "preferred alternative." Most of the draft plan is the same across all action alternatives, with differences among alternatives shown in highlighted text. Consequently, reviewers of the draft plan and DEIS have the opportunity to understand and evaluate the relative merits of providing varying levels of wilderness protection.

As a member of the Gallatin Forest Partnership (GFP), we fully endorse the GFP agreement and incorporate the comments of the GFP here by reference. We appreciate the incorporation of the GFP's proposed land allocations into Alternative C as it applies to the Gallatin and Madison Ranges, including recommended wilderness. With some modifications discussed in the GFP comments and our Geographic Area comments, we support this alternative for these specific mountain ranges.

Recommended wilderness management: We also strongly support the forest wide plan direction (FW-SUIT-RWA 02 and 04) for RWA management reflected in alternatives C and D which makes RWAs not suitable for motorized or mechanized recreation and not suitable for commercial communications facilities. With regard to the management of RWAs, the 2012 planning rule directs the agency "to protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation." In addition, the desired conditions across all alternatives reflect this direction (FW-DC-RWA 01). By finding nonconforming uses not suitable within RWAs, these alternatives best achieve the desired conditions for RWAs and implement the direction of the 2012 planning rule.

We believe it is essential to prohibit motorized and mechanized transport in RWAs. The Custer Gallatin is very familiar with the conflicts that arise when motorized and mechanized use become established in recommended wilderness. One need only look to the Lionhead RWA designated in the 1987 plan to understand the need for strong protection of the RWAs from motorized and mechanized recreational use moving forward.

We also recommend a new standard be incorporated into the RWA forest wide direction (FW-STD-RWA) that is consistent with forest wide direction provided for Backcountry Areas at 2.4.46 (FW-STD-BCA 07) which reads: *"New access to and development of minerals shall minimize impacts to backcountry areas."* The Recommended Wilderness Analysis included in Appendix D of the DEIS (p. 231-233) identifies outstanding and reserved mineral rights as well as oil and gas leases present in a number of the RWAs considered in the DEIS. This standard would ensure that protection of the values leading

to a wilderness recommendation in this forest plan will be a priority if access to these rights and leases is requested.

The draft plan should address future trail development in the recommended wilderness areas proposed for the Gallatin and Madison Ranges as suggested by the Gallatin Forest Partnership. As the communities of Bozeman, Big Sky and Livingston continue to grow, it will be increasingly important to protect recommended wilderness from unplanned trail proliferation. The DEIS discusses the impacts of roads and trails on wildlife habitat and connectivity in several places throughout its analysis of the impacts to wildlife and their habitat of the various alternatives (DEIS 3.10). Limiting trail density will ensure these RWAs maintain their effectiveness as core secure habitat for wildlife. Managing RWAs in this landscape like designated Wilderness will also ensure that areas retain the ecological and social wilderness characteristics that warranted their designation as recommended wilderness as well as the opportunity for designation by Congress. We recommend adding the following guideline to the plan components for the RWAs in the Gallatin and Madison Ranges:

- To maintain areas of undeveloped wilderness character, there should be no net increase in miles of system trails within recommended wilderness. Trail re-routes for resource protection or after natural occurrences such as fire, floods, windstorms, and avalanches should utilize the best long-term sustainable routes with minimal trail infrastructure.

Implementation of RWA suitability component: As we discussed in our March 2018 scoping comments, we are concerned that the draft plan does not provide a pathway for implementation of the suitability determination in FW-SUIT-RWA-02. If nonconforming uses are currently occurring in the plan's proposed RWAs, the suitability plan component will not have the immediate effect of excluding those uses. This could allow nonconforming uses to continue for years if the applicable travel management plan is not promptly amended. Therefore, additional plan direction is necessary to implement the suitability determination and ensure compliance with the 2012 planning rule's requirement to "protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation."

We recommend that the Forest Service issue an order, concurrently with the forest plan revision, closing the RWAs to motorized and mechanized transport. Issuing such an order concurrently with the plan revision is authorized by the planning rule directives (FSH 1909.12, section 21.8) and would be the most straightforward and efficient way to implement the suitability plan component prohibiting non-conforming recreational uses. Site-specific travel management planning will still be necessary but issuing a concurrent order would ensure that allowable use is not in immediate conflict with the revised forest plan.

The DEIS appears to provide some of the necessary site-specific information about the effects of the RWA and WSA alternatives on motorized and mechanized uses to support a concurrent decision to support such a concurrent order. For each alternative, the DEIS

shows the specific miles of open road, motorized trail, and nonmotorized trail, along with acres of motorized over-snow area, that would be closed to motorized and mechanized means of transportation (see, e.g. DEIS, p. 738 and pgs. 818-883). In the FEIS, this analysis should be augmented as necessary to support this issuance of a closure order when the final plan and ROD are released.

We also recommend that the CGNF include a forest wide objective with an appropriate timeline to complete the appropriate travel plan amendments necessary to implement the RWA suitability determination. Section 1.6 (p. 11) briefly states that travel plans must be consistent with the final forest plan and will be updated if necessary. Including an objective in the forest wide direction for RWA management will hold the agency accountable to conducting this work in a timely manner.

Outside of the GFP proposal, we have identified some additional areas that should be included in the final RWAs on the Custer Gallatin National Forest. These are discussed by geographic area later in our comments.

## Wilderness Analysis

Ecological Representation: We are disappointed that the CGNF did not consider ecological representation in its evaluation and analysis of RWAs. Wilderness areas currently do not adequately represent the full range of ecosystems that occur in the U.S. (Dietz et al. 2015). Diversifying the ecosystems represented in wilderness has emerged as an important component of conservation planning for the future (Aycrigg et al. 2016). Data for the Custer Gallatin National Forest are readily available and could have informed recommendations for wilderness. TWS also provided our ecological representation analysis of the CGNF wilderness inventory units with our scoping comments and are resubmitting this analysis with these comments.

The recent Flathead National Forest (FNF) plan revision provides a good model of how ecological representation can and should be factored into the wilderness analysis. The Flathead's wilderness analysis specified the amount of land with underrepresented ecosystem types within each RWA. For example, the brief summary of factors considered for the Alcove-Bunker RWA states, "This area represents an opportunity to add 1,621 acres of underrepresented ecological groups to the National Wilderness Preservation System" (Flathead Plan Revision FEIS, App. 4, p. 4-160). The Flathead EIS factored the RWA ecological representation data into its comparison of alternatives, which the CGNF DEIS fails to do.

Judging by the CGNF wilderness analysis, the only RWA with notable ecological value is a portion of the Line Creek Plateau area, because it contains a research natural area. In the "Other Features of Value" section of the Line Creek Plateau wilderness analysis, the Forest Service notes that the research natural area "is characterized by extensive areas of alpine tundra vegetation, a cirque basin with alpine lakes and ponds, and many unique plant species … that are disjunctive from the main portion of their range in the arctic."

(DEIS App. D, p. 193). For the vast majority of the other RWAs, the Other Features of Value section simply says: "none noted."

Since this is clearly not the case, and many of the proposed RWAs in the Greater Yellowstone portion of the CGNF contain globally significant ecological value, the FEIS should identify more of the ecological values in each RWA, including underrepresented ecosystems, in the final wilderness analysis. It should also clearly connect the dots between these values and the rationale for selection of RWAs in the final plan.

Wildlife: Appendix D also gives glaringly short shrift to the wildlife values of the RWAs. In fact, amidst the 97 pages of the wilderness analysis, there is not even a single mention of wilderness-associated wildlife that inhabit the areas. On the other hand, the presence of cattle is carefully noted in the analysis of many areas.

The total absence of wildlife from the wilderness analysis is both unfortunate and puzzling. The CGNF gathered a considerable amount of wildlife data during the wilderness evaluation process. For example, the evaluation of the Henrys 39 area displays specific habitat acreages for grizzly bear, lynx, elk, goshawk, sage grouse, and bison. (Proposed Action App. D, p. 421-22). Yet, none of this important information was carried forward into the wilderness analysis in the DEIS.

The lack of information about wildlife and other ecological values of RWAs in the Appendix D wilderness analysis is clearly reflected in the RWA section in Chapter 3 of the DEIS. The only mention of ecological values of RWAs is found in one sentence: "Recommended wilderness areas are also important for species diversity, protection of threatened and endangered species, protection of watershed, scientific research, and various social values." (DEIS, p. 813).

The complete absence of wildlife values in the CGNF wilderness analysis contrasts with the wilderness analysis for the Flathead plan revision. For example, the summary of factors considered in the Flathead analysis for the Alcove-Bunker RWA included the following:

- This area has critical habitat for Canada lynx …. This area has very high-quality grizzly bear habitat, a very high amount of maternal denning habitat for wolverines, and high-quality habitat for mountain goats.
- Bull trout and westslope cutthroat trout are present in Bunker Creek, which is designated as bull trout critical habitat. (Flathead Plan Revision FEIS, App. 4, p. 4-160).

We strongly recommend that the Forest Service correct this serious oversight in the Appendix D wilderness analysis and DEIS Chapter 3. It is certainly not unrealistic to include concise summaries of information about the wildlife and other ecological values of the RWAs, since the Proposed Action's wilderness evaluation already contains the information needed for each area.

## Inventoried Roadless Areas

We are concerned that the Draft Plan's management direction for Inventoried Roadless Areas (IRAs) is not entirely consistent with the Roadless Rule. Specifically, plan component FW-SUIT-IRA 02, on p. 120 of the Draft Plan reads:

> "Inventoried roadless areas are not suitable for road reconstruction or new *permanent* road construction, except for the exceptions listed in the 2001 Roadless Area Conservation Rule." (emphasis added).

By specifying that "permanent" road construction is not allowed in IRAs, this statement incorrectly implies that non-permanent or "temporary" road construction may be allowed in IRAs.

The 2001 Roadless Rule is clear that both permanent and temporary road construction are prohibited in IRAs. The Rule's road-building prohibition states, "A road may not be constructed or reconstructed in inventoried roadless areas of the National Forest System," with certain exceptions – none of which include temporary road construction. (36 CFR §294.12(a)). The Rule's definition of "road" specifies that "[a] road may be classified, unclassified, *or temporary*." (§294.11, emphasis added). The preamble to the Rule states that "the definition of 'road' has expanded to include 'temporary road'…" (66 Fed. Reg. 3251). Similarly, the Rule defines "road construction" as "activity that results in the addition of forest classified *or temporary* road miles" (§294.11, emphasis added). The Roadless Rule also makes it clear that the Rule's requirements cannot be changed by forest plans: "The prohibitions and restrictions established in this subpart are not subject to reconsideration, revision, or rescission in subsequent project decisions or land and resource management plan amendments or revisions undertaken pursuant to 36 CFR part 219." (36 CFR §294.14(e)).

We recommend that this plan component be changed to read as follows: *"Inventoried roadless areas are not suitable for road construction or reconstruction, except for the exceptions listed in the 2001 Roadless Area Conservation Rule,"* removing the word "permanent" from the draft plan component. Alternatively, the words "or temporary" could be added after "permanent" so that the plan component would read: "Inventoried roadless areas are not suitable for road reconstruction or new permanent *or temporary* road construction, except for the exceptions listed in the 2001 Roadless Area Conservation Rule."

## Designated Wilderness

Consistent with the 2012 Planning Rule (36 CFR 219.10(b)(1)(iv)), the Draft Plan includes plan components, including standards and guidelines, to protect congressionally-designated wilderness areas. The Draft Plan incorporates key safeguards from existing wilderness management plans for the Absaroka-Beartooth and Lee Metcalf Wilderness Areas, including limits on numbers of livestock and people within portions of the wilderness areas.

These standards (FW-STD-DWA 05-07) as well as FW-STD-DWA 03 are unusually specific for a forest plan, however. We are concerned that if Limits of Acceptable Change monitoring required them to be modified that would require a forest plan amendment. Given the increasing recreational pressure on the western part of the forest, we could envision a need to reduce group sizes during the life of this plan. The DEIS shows that visits to designated Wilderness on the forest have more than doubled from 2008/2009 to 2013/2014 National Visitor Use Monitoring surveys (p. 731, Table 148). Continued increases in use may pose a threat to wilderness character over time, requiring adaptative management to protect the essential qualities of wilderness, including opportunities for solitude.

The DEIS also notes that "The Draft Wilderness Management Plans have not been finalized as a comprehensive management plan to date" (p. 733). We encourage the CGNF to include an objective with a time line for revising these overarching wilderness management plans as a means to address the need for these unusually specific standards. For example, an objective to complete new wilderness management plans for the Absaroka Beartooth and Lee Metcalf Wilderness Areas within 2 years of the forest plan decision would ensure wilderness management can adapt to changing conditions over time without requiring forest plan amendments.

We appreciate that the Draft Plan eliminates the Proposed Action's overly restrictive prohibition on commercial still photography. As we pointed out in our scoping comments, the Wilderness Act permits commercial activities where necessary to realize the recreational and other wilderness purposes of the area, and detailed agency regulations guide implementation of these decisions.

However, the revised draft removes any guidance with regard to commercial video and still photography in designated wilderness. We suggest adding the guideline FW-GDL-RWA 02 included in forest wide direction for recommended wilderness areas to the designated wilderness plan components as well. This will make clear that such activities are only allowed for the purpose of promoting wilderness values.

Similarly, we appreciate the Draft Plan's description of the desired condition for zone class 1 wilderness areas as a "trail-less zone" (p. 117 FW-DC-PRISTINE-01), but we think a clear standard is needed to reinforce this point. We recommend that you emphasize the importance of keeping zone 1 wilderness free of trails by including a standard, similar to FW-STD-DWA-11, clearly stating that within wilderness zone 1 there shall be no system trails.

We noted an apparent duplication of FW-STD-DWA-1 and 2, regarding the prohibition of recreational livestock grazing within mapped closure areas.

## Other Designations:

Backcountry Areas (2.4.46):
The Wilderness Society generally supports the CGNF's use of the backcountry area designation as a means of adding clear conservation direction for specific remote areas where natural processes prevail while also accommodating types of recreational use not allowed in designated and recommended wilderness. Backcountry recreation is highly valued by many different user groups, and we support managing these high-quality roadless lands to protect their undeveloped character while providing mechanized and motorized recreation opportunities where suitable.

We appreciate that the Forest has developed this designation with an eye toward protecting the ability to refine management direction based on the specific geographic area. There are still some elements that these areas share which we believe should be reflected in the forest wide direction for backcountry areas. As many of these areas provide critically important wildlife habitat and clean water due to their undeveloped nature, the forest wide desired conditions for backcountry areas should reflect the need to manage to protect these values.

Recreation Emphasis Areas (2.4.47):
The Wilderness Society generally supports the use of the designation of recreation emphasis areas as a way for the forest plan to address specific areas where many different recreational uses are concentrated. These areas receive more visitors than other areas of the forest and require special management direction to ensure that recreation within these areas is sustainable – both in terms of the public enjoying specific recreation opportunities, and so that recreation uses do not degrade the natural environment.

As with Backcountry Areas, plan components unique to each Recreation Emphasis Area must be developed to guide sustainable recreation management, which includes balancing increased recreation use with other values such as municipal watersheds and/or critical wildlife habitat. The forest wide suitability plan component for REAs (FW-SUIT-REA 01) which identifies REAs as suitable for "a high density of recreation development" may not be appropriate in all REAs depending on the definition of "high density". We suggest the final plan clarify whether "high density" means suitable to absorb a lot of people or suitable for more paved campgrounds or developed facilities. In a place like Hyalite, which is also the City of Bozeman's municipal watershed, the former may be appropriate while the latter may be less desirable.

## Watersheds

Appendix C of the draft plan accurately describes the 2012 Planning Rule's mandate to protect the ecological integrity of watersheds: "The 2012 Planning Rule requires all plans to include components to maintain or restore the structure, function, composition, and connectivity of aquatic ecosystems and watersheds in the plan area, taking into account potential stressors, including climate change, and how they might affect ecosystem and watershed health and resilience." The Draft Plan employs a mix of strategies to address

the Planning Rule's requirement to maintain or restore the ecological integrity of watersheds, including the creation of a Conservation Watershed Network and use of the Watershed Condition Framework.

Conservation Watershed Network

We strongly support the concept of the Conservation Watershed Network in forest planning to protect high quality water and fish habitat. Especially in this era of climate change, we concur with the Custer Gallatin planners that "conservation watershed networks represent the best long-term conservation strategy for native fish and their habitats" and that the network should consist of "watersheds that have the capability to be more resilient to ecological change and disturbance induced by climate change" (Draft Plan App. C, p. 69).

We are concerned that the Draft Plan may not provide adequate safeguards to ensure that the Conservation Watershed Network will in fact fulfill its intended purpose. The CWN section of the Draft Plan only contains three plan components – one desired condition, one objective, and one guideline. Viewed independently from the rest of the plan, these plan components clearly do not amount to a scientifically credible "long-term conservation strategy for native fish and their habitats."

Presumably, most watersheds in the CWN are well protected by virtue of the more detailed plan components (along with statutory or regulatory requirements) for the designated Wilderness Areas, Recommended Wilderness Areas, Inventoried Roadless Areas, and other protective designations within those watersheds. According to the DEIS:

> *Many watersheds … that support the healthiest populations of native trout and other aquatic species, currently have their headwaters protected through lands managed as Congressionally designated wilderness areas (Lee Metcalf and Absaroka Beartooth) or inventoried roadless areas. These areas are the building blocks of a conservation network. Naturally functioning headwaters have a large influence on the function of downstream reaches and would be particularly important as refuge habitat for cutthroat trout, and other species, in light of potential effects of climate change. The best remaining trout habitat conditions are found in wilderness and unroaded landscapes. Across the west, roadless areas tend to contain many of the healthiest of the few remaining populations of native trout, and these are crucial to protect. Roadless areas are a source of high-quality water essential to the protection and restoration of native trout. The high-quality habitats in roadless areas help native trout compete with non-native trout because degraded habitats can provide non-natives with a competitive advantage. Roadless areas tend to have the lowest degree of invasion of non-native salmonids. Therefore, forest plan allocations such as recommended wilderness areas backcountry areas, and eligible wild and scenic rivers that limit road building can be expected to contribute to naturally functioning headwaters. (DEIS, p. 95-96, citations omitted).*

However, the DEIS does not specifically analyze the extent to which the CWN watersheds are covered by protective designations.

We recommend that the Forest Service conduct a GIS overlay analysis to evaluate the extent to which CWN watersheds – both individually and collectively – are protected by the plan components of designated Wilderness Areas, Recommended Wilderness Areas, and other plan designations within those watersheds. This would be an appropriate "coarse filter" analysis of whether the revised plan adequately addresses the 2012 Rule's requirements to maintain or restore the ecological integrity of watersheds and ecosystem diversity, as well as to sustain at-risk aquatic species. If the analysis reveals any significant gaps in protection for CWN watersheds, the revised plan should provide additional forest-wide or geographic area plan components for those watersheds.

Incidentally, we noted two minor wording problems in the Conservation Watershed Network section of the Draft Plan (p. 29). First, plan component FW-DC-CWN -- "Conservation watershed networks have high quality water…." -- incorrectly implies that there are multiple networks in the Custer-Gallatin. We suggest that this plan component be revised to say, "Watersheds in the conservation watershed network have high quality water…." Second, in FW-OBJ-CWN, the term "critical watershed network" should be changed to "conservation watershed network."

Watershed Condition Framework

We appreciate the extensive discussion of the Watershed Condition Framework (WCF) in Appendix C of the Draft Plan and in the DEIS. Especially now that Congress has permanently authorized the WCF (see below), the Forest Service should be utilizing the WCF classification system to evaluate the ecological integrity of watersheds in the planning process. Likewise, the selection of priority watersheds and the development and implementation of watershed restoration action plans pursuant to the WCF should be reflected in forest plans.

As of 2016, according to Appendix C and the DEIS, 82 percent of the Custer Gallatin's 269 watersheds were in properly functioning condition, while 18 percent were in at-risk condition. [Note: The Draft Plan at p. 22 contains somewhat different numbers from Appendix C and the DEIS; those differences should be reconciled.] Three at-risk priority watersheds -- Pass Creek, Upper South Fork Sixteen Mile Creek, and Odell Creek – have already been restored to properly functioning condition. Three additional watersheds – Bozeman Creek, Upper Hyalite Creek, and Shields River-Bennett Creek – are currently identified as priority watersheds for restoration.

However, neither the draft plan nor the DEIS provides assurance that current or future priority watersheds will be restored to properly functioning condition. In particular, the draft plan lacks an objective to restore any of the priority watersheds, nor does it contain a desired condition for the priority watersheds, such as "Priority watersheds are restored to properly functioning condition." The WCF priority watersheds are also not mentioned in the monitoring program. (Draft Plan, p. 196). We recommend that the final plan

include desired conditions, objectives, as well as monitoring indicators and measures for implementation and completion of watershed restoration action plans in priority watersheds.

Following are examples from the final plan revision for the Flathead NF of objectives that specifically address the WCF and the CWN:

- Objective 01 "Complete all essential work identified within the Class 2 priority watersheds as identified under the watershed condition framework (see appendix E).
- Objective 04: "Improve watershed conditions on 4,000 to 8,000 acres, with an emphasis on priority watersheds under the watershed condition framework and the conservation watershed network."

Please note that the WCF was recently written into statutory law in Section 8405 of the Agricultural Improvement Act of 2018 (a.k.a. the 2018 Farm Bill). The law permanently authorizes the Forest Service to develop and maintain the Watershed Condition Framework, using the agency's existing processes and criteria. The Final Plan should acknowledge this significant change in the legal status of the WCF which has occurred since publication of the Draft Plan. For example, the statutory authorization of the WCF should be added to the laws listed under "Regulatory Framework" in the Watersheds section of the DEIS starting at p. 61. The new legal authority should also be noted in the discussion of the WCF starting on p. 65 of the DEIS.

<u>American Beaver</u>

The Northern Rockies Adaptation Partnership (NRAP) has joined with the U.S. Fish and Wildlife Service (e.g. Pollack et al., 2015), among others, in emphasizing the restoration of beaver populations as a critically important – and natural – climate change adaptation option for managers. Examples from Halofsky et al. (2018) include:

- "Primary adaptation strategies to address changing hydrology in the Northern Rockies include restoring the function of watersheds, connecting floodplains, reducing drainage efficiency, maximizing valley storage, and reducing hazardous fuels. Tactics include adding wood to streams, restoring beaver populations…" (Summary);
- "Primary strategies to address climate change threats to cold-water fish species include maintaining or restoring functionality of channels and floodplains to retain (cool) water and buffer against future changes, decreasing fragmentation of stream networks so aquatic organisms can access similar habitats, and developing wildfire use plans that address sediment inputs and road failures. Adaptation tactics include using watershed analysis to develop integrated actions for vegetation and hydrology, protecting groundwater and springs, restoring riparian areas and beaver populations to maintain summer base flows, reconnecting and increasing off-channel habitat and refugia, identifying and improving stream crossings that impede fish movement, decreasing road connectivity, and revegetating burned areas to store sediment and maintain channel geomorphology" (Summary).
- "Maintaining healthy America beaver populations will provide riparian habitat structure and foraging opportunities for multiple species" (Summary).

- "Maintaining or restoring American beaver populations provides a "natural" engineering alternative for cool water retention. In conjunction with restoration, road removal and relocation from sensitive locations near stream channels and floodplains can significantly improve hydrologic function and water retention" (from Chapter 5 recommendations for native salmonid fisheries).
- "Riparian habitats are important across the Northern Rockies. The primary strategy for improving riparian habitat resilience is maintaining healthy American beaver populations (Table 9.2). Beaver complexes can buffer riparian systems against both high and low streamflows and provide habitat structure and foraging opportunities for multiple species." (Ch. 9: Climate Change and Wildlife in the Northern Rocky Mountains in Halofsky et al., 2018).

The watersheds section of the Custer Gallatin draft plan includes two plan components that appropriately acknowledge the increasingly important ecological role of beavers:

- Desired Condition 09: "Beavers play an important ecological role within suitable habitat by increasing water residence time and spatial extent of water on the landscape, and aquatic and riparian habitat complexity"; and
- Guideline 03: "To protect the ecological functions that beavers provide management actions to reduce beaver threats to infrastructure should use techniques that sustain beavers (such as, using pipes to reduce water levels, notching dams to restore streamflow)."

However, neither of these plan components explicitly identifies beaver restoration and conservation as a climate change adaptation strategy. In contrast, the final revised plan for the Flathead NF contains the following desired condition: "DC 14: Beavers play an important ecological role benefiting groundwater, surface water, stream aquatic habitat complexity, and *adaptation to changing climate conditions*." (emphasis added)

TWS recommends that the Forest Service build on the consensus of NRAP (and an extensive body of scientific literature) by adding more plan components – including objectives – for the strategic management of beaver populations as a significant and positive climate adaptation tool – all of which are notably absent in the draft plan (see Pollack et al. 2015). We also recommend adding American beavers to the list of focal species that will be monitored by the CGNF in the new plan, given its key role in maintaining healthy, intact aquatic ecosystems and riparian habitat.

## Wildlife

<u>Landscape Connectivity</u>

We are pleased to see the thoughtful consideration and assessment of connectivity priorities through discussion and identification of key linkage areas in the DEIS (pgs. 477-498). We increasingly recognize the complexity of connectivity planning. Preventing and mitigating fragmenting features on the landscape is one critical step in restoring or maintaining connectivity. The national significance of the Custer Gallatin National Forest for maintaining connections between iconic protected areas (Belote et al. 2016) and serving as habitat to iconic and threatened species make this issue of critical importance.

The CGNF has used a variety of models to prioritize key linkage areas. Alternatives B, C, and D identify two key linkage areas – the northern Gallatin area and the west side of the Bridger Mountains – with specific management guidelines (FW-GDL-WL 02, 03 and 04) that limit activities that would create barriers and disturbance to wildlife movement. We see this as an important first step in managing for connectivity.

We view connectivity models as mapped hypotheses that need testing through rigorous monitoring to understand which features (including recreation use) serve to fragment movement. When monitoring of animal movements or disruption of processes are observed, adaptive management triggers should serve as a mechanism for adjusting management (*sensue* Larson et al. 2013). Establishing a rigorous approach to monitoring connectivity responses would be expensive and challenging. However, we believe the uncertainty surrounding what levels of recreation (Larson et al. 2016) or landscape condition (Keeley et al. n.d.) act as barriers that fragment the landscape and impede movement combined with the national and global significance of the forest warrant a serious commitment to developing a rigorous monitoring and adaptive management plan. Rocky Mountain Research Station scientists have pioneered monitoring programs (Heinemeyer et al. 2019) that we would like to see implemented throughout portions of the forest, especially in identified key linkage areas.

Especially with regard to management guideline FW-GDL-WL 03, which appears to prohibit the construction of any new single-track trails within the two key linkage areas, the DEIS does not clearly connect the dots to describe why this is a necessary action to maintain connectivity through this key linkage area. Neither the draft plan nor DEIS analyze whether current trails (based on density or volume of use) currently create barriers to wildlife movement through the proposed key linkage areas. Given the heavy recreation use in both the northern Gallatin and Bridger Mountains key linkage, the FEIS and plan should more clearly address the known and unknown impacts of recreation – both volume and infrastructure like trails – on wildlife.

<u>Sage Grouse</u>
We support the Custer Gallatin's identification of the Greater sage-grouse as a species of conservation concern (Draft EIS, p. 410). This identification imposes additional responsibilities for ensuring the species' protection. This designation requires the Forest Service to not only address ecosystem integrity and ecosystem diversity, but also to develop plan-specific components to yield the ecological conditions needed to support sage-grouse.

We also appreciate the Draft Revised Plan's commitment to a standard of vegetation management that "shall result in no net loss of habitat or be beneficial to greater sage-grouse" in both general and priority habitat (p. 63). This standard should be maintained, and the provisions in the Draft Revised Plan should be strengthened further to provide sufficient protections for the grouse and its habitat.

We offer the following specific recommendations to strengthen the protections for sage grouse and its habitat:

- Management of energy development and other infrastructure should protect greater sage-grouse habitat to the maximum extent practicable.

  We appreciate the standard that provides: "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" (Draft Revised Plan, p. 64). This standard should be maintained and should be expanded to also include a requirement that: "New power transmission corridor infrastructure development should be avoided in general habitat."

  We also appreciate the overall standard that provides: "New energy developments should not be located in priority sage-grouse habitat, subject to valid existing or statutory rights" (Draft Revised Plan, p. 64). This standard should be maintained. However, as proposed in our scoping comments, we recommend expanding this standard to require prioritizing oil and gas leasing and development outside of all greater sage-grouse habitat. The U.S. Fish and Wildlife Service Findings associated with finding that listing under the Endangered Species Act is no longer warranted indicate the importance of this commitment, stating:

  *The Conservation Objectives Team Report made clear that "maintenance of the integrity of PACs …is the essential foundation for sage-grouse conservation." For this reason, the BLM and Forest Service plans include land allocations and management actions that avoid and minimize surface disturbance in priority habitat for identified threats (e.g., energy, mining, infrastructure, improper grazing, free-roaming equids, recreation and urbanization). In addition, efforts to prevent rangeland fires, to focus fire suppression activities, and to restore fire-impacted lands will be focused on priority habitat in the western portion of the sage grouse range, where fire is the greatest threat to the species*.[1]

  Although the Bureau of Land Management (BLM) manages oil and gas development on National Forests and Grasslands, the Forest Service has an independent responsibility to evaluate and approve or object to any such decisions. Further, the Forest Service has an independent obligation to conserve the Greater sage-grouse and its habitat, which encompasses including plan components to address the potential lack of protections applied by the BLM. *See*, 36 C.F.R. § 219.9(c). The Forest Service should incorporate this commitment into this plan.

  We also appreciate the standard that prevents construction of new recreation facilities in both priority and general habitat unless that development can result in

[1] FWS, 2015 Endangered Species Act Finding, Frequently Asked Questions: https://www.fws.gov/greatersagegrouse/findings.php

a net conservation gain to sage-grouse and its habitat (Draft Revised Plan, p. 64) This standard should be maintained.

- Use of compensatory mitigation should be reiterated.

  The BLM has issued new guidance taking the position that it can no longer require compensatory mitigation on its own initiative as a condition of permitting activities on federal land (see, Instruction Memorandum No. 2019-018) and amended its plans for managing sage-grouse habitat in a manner that reflects this new interpretation of its legal authority. While we maintain this position is legally unsupportable, the Forest Service should maintain and apply its authority to require compensatory mitigation as a condition for permitting activities that will harm sage-grouse habitat in its final plan. Compensatory mitigation is a necessary tool for achieving the net conservation gain and/or no net loss standards that are incorporated in the Draft Revised Plan.

  The importance of compensatory mitigation is underscored by the fact that Fish and Wildlife Service's 2015 "not warranted" determination was based, in part, on federal agencies' commitment to providing compensatory mitigation in all types of designated habitat throughout the species' range: "All of the Federal Plans require that impacts to sage-grouse habitats are mitigated and that compensatory mitigation provides a net conservation gain to the species. . . Any compensatory mitigation will be durable, timely, and in addition to that which would have resulted without the compensatory mitigation." 80 Fed. Reg. at 59,881 (emphasis added). Use of compensatory mitigation is necessary for the Forest Service to meet its obligations for managing greater sage-grouse as a species of conservation concern pursuant to 36 C.F.R. § 219.9(c), and for addressing the risks to sage-grouse caused by the weakening of the protections in the BLM plans, pursuant to 36 C.F.R. § 219.9(b)(2), as well for meeting the commitments in the Draft Revised Plan. The Forest Service should explicitly commit to using compensatory mitigation in this plan.

**Infrastructure – Roads and Trails, Aircraft Landing Strips (RT)**

The draft plan generally does a good job of addressing the elements of a fiscally and ecologically sustainable transportation system and should drive progress toward a well-maintained, appropriately sized system of needed roads and trails. We appreciate the inclusion of draft plan components in the infrastructure section (RT) as well as those related to watershed and aquatics (WTR), riparian management zones (RMZ) and the conservation watershed network (CWN) that are designed to minimize the impact of roads, trails, and bridges on aquatic resources and watersheds.

However, this part of the plan should be strengthened with regard to the impacts of roads and trails on wildlife habitat security and connectivity. The DEIS includes an extensive, thoughtful discussion on wildlife connectivity (3.10.6 p. 477-498) that appropriately identifies the direct impacts and disturbance due to human use created by roads and

trails. The DEIS also presents the best available science related to road density thresholds, core secure habitat and barriers to wildlife movement. According to the DEIS, each geographic area has over 50% of its area in a functional condition to facilitate movement of large mammals across the landscape (road densities at or < 1 mi/sq mi) and the largest geographic areas have the lowest road densities.

We are concerned that the draft plan does not clearly establish motorized route density thresholds or caps across the forest, instead referencing existing travel plans without discussing what density thresholds those plans establish. We recommend including guidelines in this section of the draft plan that will ensure key areas of the forest remain at or below established motorized route density thresholds.

The DEIS also discloses the effects from recreation management (p. 676) noting that increased recreation use may result in need to convert popular single lane roads to two lanes to accommodate this use. Yet there are no plan components to mitigate the potential for wider roads to become barriers to wildlife movement, particularly through increased use causing wary species to avoid the area. We recommend an additional guideline in this section, similar to FW-GDL-WL 01, that specifically states that upgrades to the road system due to increased use should not create movement barriers or degrade habitat security for wide ranging wildlife species such as wild carnivores and ungulate.

We are concerned that the draft plan and DEIS do not acknowledge or address unauthorized routes on the forest. The DEIS (p. 667) makes reference to unauthorized routes in its discussion of roads but makes no mention in the discussion of trails. The existence and use of unauthorized routes and trails impact habitat security and connectivity. In some parts of the forest, unauthorized trails are more heavily used by outdoor recreationists than nearby system trails. We suggest an additional plan objective that commits the forest to:

- conducting an inventory of unauthorized routes and trails in the more heavily used parts of the forest and
- working with recreation user groups to identify which of these should be included in the system and which should be closed and rehabilitated.

We appreciate that the Forest is responding to the interest in backcountry aircraft landing strips. We are concerned, however, that over 900,000 acres of land are considered suitable for backcountry air strips in each alternative except Alternative D. (see Table 105, p. 674, DEIS). Alternatives B, C and E all identify a number of land allocations where landing strips are not suitable. Notably missing are backcountry areas and recreation emphasis areas. We believe these designations should be included in the allocations where aircraft landing strips are not suitable regardless of their ROS designation given the type of recreational experiences being sought in these areas and the potential for conflicts with other users presented by backcountry aircraft landings.

Finally, the infrastructure monitoring plan should track additional measures related to the ecological and fiscal sustainability of the system and its value in connecting people to

the forest. Specifically, we suggest including the following additional indicators and measures:

- Percentage of passenger car roads with a safety condition rating of good;
- Miles/percentage of roads identified as unneeded for future use that have been decommissioned;
- Miles of road improved or maintained to meet plan standards and guidelines for aquatics and watersheds.

**Fire and Fuels**

We are aware of the complexities and challenges surrounding how to safely allow fires to burn in ecosystems that were historically shaped by fire (Hessburg et al. 2015). We were impressed by the rigor and thoroughness of the assessment of current and historical landscape conditions, and the careful considerations of fire's role in shaping habitats.

**Sustainable Recreation (2.4.14 – 2.4.33):**

Managing for sustainable recreation and a balance of different recreational uses is a growing challenge on the CGNF, particularly in the western part of the forest where conservation values, including abundant healthy wildlife populations and cold, clean headwaters streams, are high. The 2012 planning rule's requirement that forests develop plan components that provide for year-round sustainable recreation (36 C.F.R. § 219.10(b)(1)(i)) creates an important opportunity for the CGNF to provide a framework for year-round sustainable recreation that ensures high quality recreation experiences and the continued health of the wildlife and wildlands outdoor enthusiasts value.

Recreation Opportunity Spectrum

We are heartened to see the improvements from the 2018 proposed action to the 2019 draft plan and DEIS with regard to plan components related to ROS. Specifically, we appreciate the more detailed desired conditions for each ROS setting that describe specific settings, character, and suitability for each of the ROS classifications.

We are also glad to see that the ROS maps vary by alternative and do not simply reflect current conditions as the ROS maps did in the proposed action. The result, however, is that when the final plan is adopted there will be areas where the ROS classification conflicts with current uses allowed under the existing travel management plans. As a result, we recommend the Forest Service include an objective in the general ROS section (FW-OBJ-ROS) to ensure appropriate site-specific travel planning is accomplished in a timely manner (i.e.: within 1 year of completion of the forest plan). This is particularly important where new RWAs have a semi-primitive nonmotorized or motorized ROS classification based on existing travel plans.

Winter travel management

As noted in our March 2018 scoping comments, TWS has an interest in over-snow vehicle (OSV) management on the CGNF beyond the areas addressed in the Gallatin Forest Partnership Agreement discussed below. The 2012 planning rule requires the CGNF to

ensure that OSV use does not threaten sensitive winter wildlife, wildlife habitat, air and water quality, and wilderness values.[2] The Forest Service should utilize the plan revision process to lay the foundation for timely compliance with the Forest Service's 2015 rule governing OSV use (subpart C of the Travel Management Rule) on the Custer portion of the forest which does not have a winter travel plan and has not complied with subpart C.

Winter travel planning on the Custer is urgently needed, particularly on the Beartooth District. The revised forest plan should include plan components that set the stage for winter travel planning on the Custer, including an objective to conduct winter travel planning in a timely manner. And, while the 12-year-old Gallatin plan has generally aged well, the forest plan revision presents an opportunity to examine where it could be updated or improved and set the stage for doing so.

The final revised forest plan should make meaningful suitability determinations for OSV use that address both legal suitability (e.g., motorized uses are prohibited in designated wilderness) and practical suitability based on terrain, wildlife needs, and other conditions (e.g., steep slopes and windswept ridgelines, low elevation areas without adequate snowpack, areas with dense tree cover, and important habitat for wintering wildlife should be unsuitable).[3] The final revised plan should also include a guideline that implementation-level route and area designations will be consistent with suitability determinations, but that OSV use will not necessarily be permitted in all suitable areas.[4] The plan should make clear that winter ROS allocations are not a substitute for implementation-level, site-specific winter travel planning to designate particular routes and areas that are open to OSV use.

Finally, while the DEIS identifies winter recreation as a potential stressor to both Canada lynx and wolverine (pgs 335-336, pgs 351-352, pgs 400, pgs 405-409), there are no plan components that address the potential impacts of winter recreation on these snow dependent species. The recently revised Flathead National Forest plan included several guidelines in the General Recreation section intended to meet the 2012 Planning Rule's requirements for integration and address the possible recreation impacts on these species.[5] We recommend the CGNF plan consider guidelines similar to what is in the revised Flathead plan for forest-wide direction for recreation:

- FW-GDL-REC 01: To provide ecological conditions to support Canada lynx on NFS lands at a forest wide scale, there should be no net increase in miles of designated routes for motorized over-snow vehicle use, groomed routes, or areas where motorized over-snow vehicle use is identified as suitable.

[2] *See* 36 C.F.R. §§ 219.8, 219.9, 219.10(b)(1)(iv) (forest plans required to provide for ecological sustainability and species diversity, and to protect the ecological and social characteristics of recommended wilderness areas).
[3] *See* Forest Service Handbook (FSH) 1909.12, § 22.15 ("Plans may include suitability or nonsuitability statements for uses such as . . . cross-country over-snow vehicle use . . . .").
[4] *See* FSH 1909.12, § 22.15(1) (a suitability determination "is not a commitment to allow such use but only an indication that the use might be appropriate").
[5] See Flathead Forest Plan, Chapter 2, page 61.

The Flathead plan also contains a similar guideline related to wolverine, which we suggest the CGNF include in the final plan as follows:

- FW-GDL-REC 02: To limit the risk of cumulative impacts to female wolverines with dependent young, there should be no net increase in percentage of modeled wolverine maternal denning habitat where motorized over-snow vehicle use is identified as suitable on NFS lands at a forest wide scale.

Emerging recreation technologies

We appreciate the Forest Service's forethought in recognizing that new recreational technologies will emerge over the life of the plan and anticipating the need to guide Forest Service management of these future uses. Rapidly evolving recreation technology demands both unambiguous plan components that clearly define what types of recreational uses are permitted in certain areas, as well as forward thinking policies that anticipate the increased use and associated impacts of certain activities over the life of the new plan.

While there will certainly be wholly new technologies that emerge, there will also cases where emerging recreational technologies fit within an existing classification. TWS strongly supports existing Forest Service management policy 13 that classifies all types of e-bikes as motorized vehicles that are exclusively permitted on motorized trails and roads.[6] The Custer Gallatin National should specifically adopt this policy in its revised forest plan, classifying electric bikes (mountain and otherwise) as motor vehicles because they have motors. Plan components should identify e-bikes as suitable on designated motorized routes and trails located within semi-primitive motorized, roaded natural, and rural ROS settings.

To accommodate the anticipated growth in e-bikes and the need to clearly identify where they can be appropriately used on public land, we suggest adding the following plan components to the final plan:

- FW-SUIT-RECTECH 01: Electric bicycles are suitable on designated motorized routes in semi-primitive motorized, roaded natural, and rural ROS settings.

We also suggest modifying the current ROS suitability language as follows (*additional language in italics)*:

- FW-SUIT-ROSSPM 01: Motorized use*, including e-bikes*, is suitable on designated routes in semi-primitive motorized settings.
- FW-SUIT-ROSRN 01: Motorized recreation travel, *including e-bikes*, is suitable on designated routes within roaded natural settings.
- FW-SUIT-ROSR 01: Motorized recreation travel, *including e-bikes*, is suitable on designated routes within rural settings.

To provide for future management of as yet unforeseen recreational technologies, we also recommend adding the following new standard to the RECTECH plan components:

[6] USFS National Forest Briefing Paper, Managing E-Bikes on National Forest System Trails (2015).

- Use of emerging recreational technologies that are not addressed by current direction are prohibited in areas with special designations (i.e. recommended wilderness, backcountry, etc.) unless explicitly integrated through a public planning process.

**Geographic Area Direction:**

**Madison, Henrys Lake and Gallatin Mountains** (p. 172-187)**:**
This geographic area (GA) is among the wildest places supporting one of the last intact communities of mammals in the contiguous United States. In fact, its wild character and intact condition are of global significance. The area is regularly identified as an important linkage between protected areas and wildlife populations based on its roadless condition and connection to Yellowstone National Park.

The draft plan touches on these distinctive roles and contributions, but the plan components in this GA do not always reflect or protect the unique values of these globally significant public lands. The following comments identify areas where we feel the plan direction for this GA should be strengthened to ensure this portion of the Custer Gallatin continues to contribute to the long-term conservation of the Greater Yellowstone ecosystem.

***Madison and Gallatin Mountains: Gallatin Forest Partnership proposal***
As a member of the Gallatin Forest Partnership, The Wilderness Society thanks the forest planning team for incorporating significant elements of the Partnership's agreement into Alternative C as it applies to the Madison and Gallatin Ranges. We strongly support this agreement and also endorse the Partnership's comment letter on the draft plan and EIS.

The Partnership built our agreement around the shared values of protecting the wildlife, clean water and undeveloped wild lands that characterize the Gallatin and Madison Ranges. As discussed in the Partnership's letter, there are additional plan components we believe should be added to Alternative C in order to better reflect the Partnership's agreement and ensure the protection of these important values. Specifically, we recommend that:

- Desired conditions (MG-DC) for the WSA, Hyalite Recreation Emphasis Area (HREA), Buffalo Horn Backcountry Area (BHBCA), and West Pine Backcountry Area (WPBCA) should be developed to better reflect the need to protect wildlife habitats and wildland characteristics in these areas as well as the recreation values within them. The desired conditions in 3.7.8 – Cabin Creek Recreation and Wildlife Area (CCRW) - provide an example.

- The Gallatin Forest Partnership comment letter identifies a number of additional or revised plan components for each land allocation included in our agreement. We support these proposed objectives, standards, guidelines and goals as they will better reflect the entirety of the agreement and strengthen the final forest plan's ability to move toward the desired conditions for these areas.

### *Hyalite-Porcupine-Buffalo Horn Wilderness Study Area* (3.7.9)

Again, we appreciate the effort to incorporate elements of the Partnership agreement into the overall management direction for the wilderness study area if Congress were to release the WSA without replacing that designation with the Partnership's proposed package of designations.

Given that the management guidance reflected in the WSA plan components (3.7.9) will guide management of the WSA until Congress acts, we have identified several plan components we believe should be added to this section of the plan.

First, once again the desired conditions (MG-DC-WSA) fail to mention wildlife and do not set the stage for recreation management decisions that will balance the needs of the iconic wildlife in the Gallatin Range with increased recreation use of this landscape. We strongly encourage adding additional desired conditions that describe a desired future of healthy wildlife populations and secure habitat as well as continued wilderness character, including opportunities for solitude.

In addition, the Recommended Wilderness Analysis included in Appendix D of the DEIS (p. 231-233) identifies significant acreage of outstanding and reserved mineral rights as well as a small amount of oil and gas leases within the boundary of the WSA. Given the existence of these mineral encumbrances, the final plan should include an additional standard for the WSA that reads:

- New access to and development of minerals shall minimize impacts to the area's wilderness character and potential for inclusion into the National Wilderness Preservation System.

This standard is consistent with forest wide direction provided for Backcountry Areas at 2.4.46 (FW-STD-BCA 07) which reads: "New access to and development of minerals shall minimize impacts to backcountry areas."

Finally, we recommended adding an objective to the WSA plan components to implement a travel plan decision for the WSA in a timely manner.

### *Henrys Lake Mountains: Lionhead Recommended Wilderness*

This portion of the Geographic Area is not included in the Gallatin Forest Partnership's agreement. The Wilderness Society supports managing this area as recommended wilderness and adopting the forest wide suitability determination in Alternatives C and D that RWA's are not suitable for motorized and mechanized recreation.

However, we do not support the RWA boundaries for Lionhead included in Alternative C. This alternative would divide two RWA units with a corridor open to mountain bikes. Because of the limited number of system trails in this area, the on-the-ground effect of this management direction would be to create two RWAs without trails, while allowing mechanized use to continue on the few trails in the area. This undermines the suitability determination that RWAs are not suitable for motorized and mechanized recreation.

With respect to RWAs and other designations outside of the Madison, Henrys Lake, and Gallatin Mountains Geographic Area, TWS endorses the following recommendations of the Montana Wilderness Association and makes the following additional recommendations:

**Bridger/Bangtail and Crazy Mountains GA:**
We support MWA's recommendation that the Forest Service manage the Crazies to protect their wilderness values and cultural significance, with no new expansion of motorized or mechanized trails. The Forest Service should manage the area in close consultation with the Crow Nation in order to protect and honor Crow reserved treaty rights and traditional cultural practices.

We also support the designation of the west side of the Bridger Mountains as a key linkage area, though as noted above, we believe the proposed management guidelines for these key linkage areas need refinement and clarification.

**Absaroka-Beartooth GA**:
The Forest Service should retain the RWAs from the existing forest plans that are adjacent to the Absaroka-Beartooth Wilderness and reflected in Alternative A. Specifically, this includes Line Creek Plateau, Red Lodge Creek/Hellroaring, Mystic Lake, Burnt Mountain, and Republic Mountain.

Line Creek Plateau is an important area for a variety of reasons and continued recommended wilderness management will best protect the wilderness values of the area. The area outside of the existing RWA in Alternative A provides important and valuable backcountry mountain biking that has been stewarded by the cycling community, balanced with the larger plateau's designation as a Research Natural Area (RNA). Protecting the area currently managed as RWA protects an area of the plateau outside of the RNA and provides continuity to the overall landscape.

In addition, we would like to see the rugged, unroaded lands surrounding Chico Peak, Emigrant Peak and Dome Mountain to the west of the Absaroka-Beartooth Wilderness recommended as wilderness.

On the eastern edge of the A-B Wilderness, The Wilderness Society supports the addition of West Woodbine, East Rosebud to Stillwater, and Red Lodge Creek to the list of recommended wildernesses in the final plan. Finally, Bad Canyon should be managed as a Backcountry area with no mechanized and motorized recreation as proposed in Alternative B.

Some of these additional RWAs include ecosystems that are underrepresented in the National Wilderness Preservation System (see TWS ecosystem representation analysis).

**Pryor Mountains GA**:
This geographic area is home to plants and animals found nowhere else in Montana, often representing the northern-most reach of their range, as well as species that are found

nowhere else in the world. Uplifted limestone plateaus, featuring numerous caves and canyons, rise from the driest region in Montana. The Pryor Mountains also have deep significance for the Crow Tribe whose contemporary reservation covers the northern section of the mountains.

The TWS ecosystem representation analysis submitted as part of our scoping comments indicates that the Pryor Mountains represent a unique and important opportunity to protect ecosystems typically underrepresented in the National Wilderness Preservation System (NWPS). The attached maps show the level of representation in the NWPS of each ecosystem type at the national and forest scale. The Pryor Mountains GA includes ecosystems with less than 20% and in many cases less than 5% of the ecosystem type included within the wilderness system. Appendix D entirely neglects this important aspect of the Pryor Mountains GA in its analysis of wilderness inventory units here.

The Forest Service should protect the wild character and cultural significance of the Bear Canyon, Big Pryor, and Punch Bowl areas in the Pryor Mountains by managing them as recommended wilderness, as reflected in Alternative D. The existing Lost Water Canyon RWA should be expanded to 13,000 acres, also reflected in Alternative D. These four areas are not suitable for motorized or mechanized recreation, both of which could degrade the wilderness quality of the areas and threaten irreplaceable cultural values.

## Monitoring

The 2012 Planning Rule envisions a cyclical process of adaptive management in which monitoring the effectiveness of the forest plan is a critical element. The revised forest plan should be a living document where monitoring, evaluation, and adaptive management are critical to successful and sustainable forest management.

In the growing communities on the western end of the Custer Gallatin, much of the public debate around the forest plan has focused on how (or if) recreation impacts wildlife, and how the Forest Service should manage the recreation use of national forest lands to protect the forest's highly-valued wildlife populations. The presence of healthy wildlife populations in an intact ecosystem is integral to the distinctive role and contributions of the Custer Gallatin. In many respects, experiencing grizzly bears, elk and other species in their natural habitat drives the burgeoning recreation on the forest because these opportunities enhance recreationists' sense of adventure.

However, ever increasing and poorly managed recreation of all types can negatively impact wildlife. Recreation of all forms can influence the physiology, behavior, survival, and abundance of wildlife species (Larson et al. 2016). The degree of impact on wildlife can vary with the type of recreation, and counter-intuitive results have been reported. The complexity of these responses has led to equivocal management recommendations and public disagreement among representatives of different organized recreation groups. There really is no clear scientific consensus on recreation/wildlife impacts, and scientific arguments are being used as a proxy for disagreement about preferences regarding different recreation-types. Understanding how responses vary by wildlife species, type of

recreation, and season should be a high priority for monitoring the Custer Gallatin National Forest. The amount of recreation pressure will continue to rise on the Custer Gallatin and sustaining wildlife will require significant improvements in the understanding of this impact now and in the future.

Unfortunately, the draft monitoring plan does not include monitoring questions specific to recreation impacts to wildlife. Because monitoring questions must relate directly to plan components, additional plan components to address recreation management in the context of restoring, enhancing or maintaining key habitats are necessary as well.

For example, the forest plan could incorporate the following plan components into the forest wide direction for wildlife:

- FW-DC-WL 09: Recreation management in key linkage areas should include design features to restore, maintain or enhance habitat connectivity for long distance range shifts of wide-ranging wildlife species.
- FW-DC-WL 10: Recreation use and infrastructure do not increase wildlife habitat fragmentation.

And the following monitoring could be added to ensure progress toward these desired conditions:

- MON-WL-16: Is recreation use displacing wildlife populations from critical habitat?
- MON-WL-17: Is there an increase in wildlife habitat fragmentation due to recreation activities?

We recognize that this monitoring can be expensive, time-consuming and labor intensive. We suggest the Forest Service work with university, state agency and other partners to develop collaborative, adaptive management strategies for evaluating impacts and adjusting recreation management on the Custer Gallatin National Forest. For example, the CGNF could work with MT Fish Wildlife and Parks, Rocky Mountain Research Station and/or Montana State University to monitor wildlife occupancy and recreation use in high value areas or areas of concern and examine how wildlife occupancy changes over time in relation to recreation use (including, but not limited to: types of recreation use, location of activities, duration of activities, and number of people).

**Conclusion:**

The Wilderness Society appreciates the hard work of the Custer Gallatin plan revision team and other Forest Service staff during this forest plan revision process. While we are encouraged by the draft plan and DEIS, we have identified places where the final plan can be strengthened to ensure the final plan is robust, sustainable and able to adapt to the changes this region will see over the next twenty years.

Thank you for considering our comments and we look forward to continuing to participate in this plan revision process.

Sincerely,

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List of Attachments:

- Gallatin Forest Partnership agreement and map
- TWS ecosystem representation analysis of the Custer Gallatin and maps

**Literature cited**:


Aycrigg, J. L., J. Tricker, R. T. Belote, M. S. Dietz, L. Duarte, and G. H. Aplet. 2016. The next 50 years: Opportunities for diversifying the ecological representation of the national wilderness preservation system within the contiguous United States. Journal of Forestry 114.

Belote, R. T., M. S. Dietz, B. H. McRae, D. M. Theobald, M. L. McClure, G. H. Irwin, P. S. McKinley, J. A. Gage, and G. H. Aplet. 2016. Identifying corridors among large protected areas in the United States. PLoS ONE 11:e0154223.

Dietz, M. S., R. T. Belote, G. H. Aplet, and J. L. Aycrigg. 2015. The world's largest wilderness protection network after 50 years: An assessment of ecological system representation in the U.S. National Wilderness Preservation System. Biological Conservation 184:431–438.

Halofsky, Jessica E.; Peterson, David L.; Dante-Wood, S. Karen; Hoang, Linh; Ho, Joanne J.; Joyce, Linda A., eds. 2018. Climate change vulnerability and adaptation in the Northern Rocky Mountains. Gen. Tech. Rep. RMRSGTR-374. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Online at: https://www.fs.fed.us/rm/pubs_series/rmrs/gtr/rmrs_gtr374_1.pdf.

Heinemeyer, K., J. Squires, M. Hebblewhite, J. J. O'Keefe, J. D. Holbrook, and J. Copeland. 2019. Wolverines in winter: indirect habitat loss and functional responses to backcountry recreation. Ecosphere 10:e02611.

Hessburg, P. F., D. J. Churchill, A. J. Larson, R. D. Haugo, C. Miller, T. A. Spies, M. P. North, N. A. Povak, R. T. Belote, P. H. Singleton, W. L. Gaines, R. E. Keane, G. H. Aplet, S. L. Stephens, P. Morgan, P. A. Bisson, B. E. Rieman, R. B. Salter, and G. H. Reeves. 2015. Restoring fire-prone Inland Pacific landscapes: seven core principles. Landscape Ecology 30:1805–1835.

Keeley, A. T. K., P. Beier, and J. W. Gagnon. (n.d.). Testing landscape resistance surfaces dervied from habitat suitability on prospecting movements. Landscape Ecology.

Larson, A. J., R. T. Belote, M. Williamson, and G. H. Aplet. 2013. Making monitoring count: project design for active adaptive management. Journal of Forestry 111:348–356.

Larson, C. L., S. E. Reed, A. M. Merenlender, and K. R. Crooks. 2016. Effects of recreation on animals revealed as widespread through a global systematic review. PLoS ONE 11:1–21.

Pollack, M.M., Lewallen, G., Woodruff, K., Jordan, C.E., and Castro, J.M. 2015. The

beaver restoration guidebook: working with beaver to restore streams, wetlands, and floodplains. Version 1.0. United States Fish and Wildlife Service, Portland Oregon. 189 pp.