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Organization:
Title:
Comments: Sierra Club comments on CGNF Draft Revised Forest Plan & 1 of 2 maps

Please see attached comments on the Draft Revised Forest Plan and two attached maps. (2nd map will be sent in another email due to size).

Thank you,

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Thank you for the opportunity to comment on the Draft Revised Forest Plan and Draft Environmental Impact Statement Action for the Draft Revised Forest Plan for the Custer Gallatin National Forest. We submit these comments on behalf of more than 3,100 members in Montana and 3.7 million members and supporters nationwide.

Sierra Club is the country[rsquo]s oldest and most influential environmental organization. Our members spend substantial time on the Custer Gallatin National Forest (CGNF) to experience solitude and inspiration, and to pursue a wide variety of educational and recreational pursuits. Our members and supporters also understand that management of our national forests transcends personal interests, and recognize the critically-important role that the CGNF plays in maintaining the health of the entire Greater Yellowstone Ecosystem (GYE) as well as the well-being of rare and imperiled species including grizzly bears, Canada lynx, and wolverines, among others.

Keeping the CGNF[rsquo]s remaining wildlands and rivers intact is essential in achieving connectivity with the

Northern Continental Divide Ecosystem (NCDE) for wide-ranging animals such as grizzly bears and many other species, and for providing refugia for wildlife in a warming climate.

Sierra Club appreciates the hard work of the many Forest Service employees involved in developing the Draft Revised Forest Plan (DRFP) and its associated underlying technical

information. Revising a forest plan and trying to ensure protection of the Forest[rsquo]s resources in the face of current and unknown future threats for the next several decades is no small task.

As the Forest Service revises its management plan for the CGNF, it must keep uppermost two of the most significant threats facing the Forest: human population growth and associated recreational demand, particularly affecting the Gallatin, Madison, Bridger, Absaroka and Beartooth Ranges; and climate change. These two stressors will only become more severe in the coming decades over the life of this revised forest plan. Protection of the CGNF[rsquo]s remaining

wildlands, rivers, and wildlife linkages in the face of these and other threats is essential. The CGNF is a critically-important component of the GYE, one of the most intact temperate ecosystems left in the entire world. As such, the Forest Service bears an enormous responsibility to the American public and to people around the world to ensure its protection for the wild species which depend upon the CGNF, and for future generations.

1.
1. Human Population Growth in the Plan Area

Human population in the plan area, specifically the Bozeman/Belgrade/Big Sky area, is rapidly increasing and this trend is expected to continue in the coming years. It has become common to see headlines such as [ldquo]Big Sky Crowded: Growth, density and the future of the Gallatin;[rdquo] [ldquo]Bozeman is the fastest growing community in the U.S.;[rdquo] [ldquo]Bozeman must plan for thousands of new residents,[rdquo] etc. in local papers.

This is a core issue that must be considered in the context of the CGNF plan revision. A March 2017 article discussing growth in Gallatin County noted that:

[ldquo][A]s in recent years, Gallatin County has been, far and away, the fastest growing county in Montana[hellip]With new arrivals flocking to the Bozeman area, Gallatin County continued its blistering population growth between 2015 and 2016, according to freshly released numbers from the U.S. Census Bureau[hellip]The county[rsquo]s overall population growth rate

between 2015 and 2016, 3.7 percent, was also up slightly from the previous year[rsquo]s 3.5 percent rate. It[rsquo]s also substantially higher than the county[rsquo]s average annual growth rate between 2000 and 2010: 2.8 percent.[rdquo] 1

A new report2 released in January 2018 by Denver-based Economics and Planning Systems, Inc. (EPS) notes that [ldquo][E]ven if Gallatin[rsquo]s growth rate were to level out, the county could receive another 55,000 people by 2045.[rdquo] Half of those arrivals are expected to land in Bozeman.

Bozeman is now growing at well over the national rate. The EPS report notes:

[ldquo][B]ozeman is one of the fastest growing places in the nation. Between 2000 and 2016, the City added approximately 17,000 new residents, which translates to a growth rate of nearly 1,100 new residents per year or an annual growth rate of 3.0 percent[hellip][G]rowth rates since 2014 have averaged approximately 4.7% or roughly 1,800 new residents per year.[rdquo]3

Such numbers have inspired comparisons to much bigger cities and predictions that it is only a matter of time before this becomes a reality in Gallatin County. We need to take concrete action

1 https://www.bozemandailychronicle.com/news/county/gallatin-county-grows-another-nudges-further-past-residents/article_611e4358-57e7-5297-a7e9-32080bd2cea5.html

2 http://weblink.bozeman.net/WebLink8/0/doc/145438/Electronic.aspx

3 Ibid p.12

[para]now to protect what makes Greater Yellowstone so unique. A 2017 article in Mountain Journal4

opined that:

[ldquo][A] three percent annual growth rate means Bozeman/Gallatin will double in 24 years. A four-percent rate, meanwhile, means it would only take 18 years to reach Salt Lake City and 36 years (or the year 2053) to match the population of present-day Minneapolis proper.[rdquo]

Tens of thousands of new residents living in Gallatin County in the coming years will result in significant additional development of private lands, and associated infrastructure to support new housing development, which will further squeeze wildlife onto less land with less options for achieving connectivity. We cannot expect connectivity to be maintained at its current level and certainly cannot expect it to improve with the anticipated growth of Gallatin Valley, without strong protections for the lands within the national forest.

As noted in the DEIS, he 2012 Planning Rule acknowledges that the plan area exists within the broader landscape, and the Forest Service must take into account existing conditions outside the national forest boundaries that may influence the plan area[rsquo]s ability to maintain or restore ecological integrity. (DEIS at 479)

Increased population growth will inevitably result in new, increased stress on wildlife and public lands, and new challenges for land managers, simply due to more people living and recreating in the area. Public demand for recreational access and public use of the landscape can be expected to accelerate, and we can also anticipate additional types of recreational demand and new technologies that can go further and faster. For example, no one was thinking about fat bikes or electric bikes and how to manage them on the landscape a decade ago. Today, however, that is something that must be considered by land managers.

The Sierra Club is very concerned that the DRFP does not consider potential resource impacts from [ldquo]Emerging Recreational Technologies[rdquo] and how those impacts might be addressed, or that there may be a need to consider not allowing new recreational technologies on the Forest or to limiting their use. Language in the DRFP seems to allow any new type of recreation without any caveats to possible environmental impacts. For example, the only Desired Condition is [ldquo]New recreational technologies contribute to visitor enjoyment and experiences, consistent with

recreation settings.[rdquo] (FW-DC-RECTECH 01, DRFP p.109). The only Goal is [ldquo]New recreational technologies are integrated into the Custer Gallatin with support and guidance through the

involvement of a community of interests.[rdquo] (FW-GO-RECTECH, DRFP p.109). The Sierra Club made this same comment in regard to the Proposed Action, and we are disappointed to see that the Forest Service did not do anything to incorporate the need to consider environmental impacts in the DRFP[rsquo]s plan components on Emerging Recreational Technologies. We believe this is a serious omission and hope and expect that it will be addressed in the final plan for the CGNF.

Additionally, many of the people moving to the plan area in Greater Yellowstone are moving from other areas of the country and may not be familiar with some of the iconic species that call the CGNF home. As noted in the EPS report:

[para]

[ldquo][A] large portion of the County[rsquo]s growth comes from migration: Nearly three-quarters of Gallatin County[rsquo]s population growth is from people moving there. Some are moving from other parts of Montana, but many also move from the Front Range of Colorado, the Pacific Northwest, and California[rsquo]s Bay Area. Of the 15,000 new people in the County from 2000-2015, over 11,000 are people who moved to Gallatin County.[rdquo]5

A growing percentage of income from people moving to Gallatin County is derived from sources other than wages, particularly investment and retirement income.6 Consequently, many new residents have more free time to devote to recreational pursuits, and access to the outdoors and

the area[rsquo]s stunning scenery and vast wildlands are a primary reason why many people move to the area. Recreationists from the aforementioned areas are likely not experienced in sharing the landscape with some species of major carnivores in the plan area [ndash] notably, grizzly bears. The Forest Service should consider this in regard to land allocations in this plan revision, for example in determining whether to create more mountain bike trails where people are likely to encounter grizzly bears.

What does this projected and inevitable growth mean for our beloved backyard, with that many more people living and recreating here, and for species like bears, lions and elk that were here

long before Montana became [lsquo]the last best place[rsquo] that has now been discovered? It means a lot more pressure on the land, on wildlife, and on the resources that we all depend on. It means a large human footprint. It means we have to be ever more thoughtful about our individual and collective impacts. Or else we could quickly lose the very things that make the CGNF and surrounding lands so special.

Human population growth has profound implications for the future of the CGNF, and the Forest Service must carefully consider these implications in determining how best to balance resource protection and recreation over the life of this forest plan. We urge a precautionary approach: in the face of uncertainty, err on the side of caution and protection of precious remaining wildlands.

1.
1. Climate Change

Climate change is a significant factor influencing the CGNF and its ability to support rare and imperiled species including wolverines, grizzly bears, and others. Effects of climate change will almost certainly become more severe over the life of the plan, including drought, fire, impacts to stream flow, and other resources.

Directives to implement the 2012 Planning Rule require that the Forest Service consider climate change when developing plan components for Ecosystem Integrity and Diversity:

5 Ibid p.3, 20

6 The Craighead Institute [ldquo]Wilderness, Wildlife and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area[rdquo] November 2015. p. 46

[para][ldquo][I]n light of possible changes in species composition under the effects of climate change and with a focus on restoration, the Agency designs plan components to provide ecological conditions to sustain functional ecosystems based on a future viewpoint.

Functional ecosystems are those that sustain critical ecological functions over time to provide ecosystem services.

The Responsible Official should coordinate with Research and Development to develop plan components to adapt to the effects of climate change.

When designing plan components (ecosystem and species-specific) to provide for ecological conditions that

contribute to the recovery of threatened and endangered species that occur within the plan area, the Interdisciplinary Team should:

[2]. Consider limiting factors (for example, naturally small and isolated populations, climate change) and key threats to each threatened and endangered species.[rdquo]7

The 2017 Montana Climate Assessment8 notes several key messages/findings in regard to the impacts of climate change in Montana:

* Montana is projected to continue to warm in all geographic locations, seasons, and under all emission scenarios throughout the 21st century. By mid-century, Montana temperatures are projected to increase by approximately 4.5-6.0[deg]F (2.5-3.3[deg]C) depending on the emission scenario. By the end-of-century, Montana temperatures are projected to increase 5.6-9.8[deg]F (3.1-5.4[deg]C) depending on the emission scenario. These state-level changes are larger than the average changes projected globally and nationally (Figure III).
* Across the state, precipitation is projected to increase in winter, spring, and fall; precipitation is projected to decrease in summer. The largest increases are expected to occur during spring in the southern part of the state. The largest decreases are expected to occur during summer in the central and southern parts of the state.
* Rising temperatures will reduce snowpack, shift historical patterns of streamflow in Montana, and likely result in additional stress on Montana[rsquo]s water supply, particularly during summer and early fall.
* Rising temperatures will exacerbate persistent drought periods that are a natural part of Montana[rsquo]s climate.
* An increase in fire risk (i.e., probability of occurrence)[mdash]including an increase in size and possible frequency and/or severity (i.e., tree mortality)[mdash]is expected in the coming century as a result of a) prolonged fire seasons due to increased temperatures, and b) increased fuel loads from past fire suppression.

While we know general trends regarding the impacts of climate change in the West [ndash] generally, rising temperatures, declines in snowpack, earlier spring snowmelt and reduced late summer

7 Forest Service Handbook 1909.12, Chapter 20 p. 58, 77.

8 http://montanaclimate.org/chapter/executive-summary

[para]flows, the precise impacts on ecosystems are complex and difficult to manage.9 In this scenario, Sierra Club strongly believes that we should take a precautionary approach and protect remaining intact wildlands, rivers and wildlife linkages to the greatest extent possible in order to buffer the impacts of climate change.

The Gallatin Range, with its location directly north of Yellowstone National Park, is pivotal in providing potential refugia to wildlife impacted by climate change. In its report on the Hyalite Porcupine Buffalo Horn Wilderness Study Area (HPBH WSA), the Craighead Institute notes:

[ldquo][P]ortions of the area of the HPBH WSA appear as Large Landscape Blocks surrounded by high value connectivity habitat. LLB connectivity depicts likely pathways of animal movement and connectivity between LLBs of the target ecotype and are based on least cost corridor analyses.

The HPBH WSA is an integral part of the alpine network connecting Yellowstone National Park to alpine areas further north, and west. This can be more clearly seen in Figure 5: the white areas are all above 8,000 feet and demonstrate that the HPBH WSA is a direct extension of the higher elevation landscapes of Yellowstone Park. It is connected across short distances of lower elevation to the other high elevation landscapes to the east and west. These areas are crucial to many species such as Bighorn sheep, Mountain goats, Wolverines, Pika, and Grizzly Bears.

The HPBH WSA is an integral part of the high elevation landscape of the GYE. This is a landscape that is becoming a critical refuge for wildlife as the climate warms and changes.[rdquo]10

Under moderate predictions of greenhouse gas emissions, the HPBH WSA fares quite well; species will not have to move fast or far to find a similar climatic niche. Under a worst-case scenario, assuming little reduction in carbon dioxide emissions and a longer time frame (until 2055), [ldquo][P]otential refugia will move north from the HPBH WSA and may be found in the Bridger and Bangtail mountain ranges. This highlights the need for maintaining intact habitat for connectivity northward from the HPBH WSA so that many species can adapt by moving north.[rdquo]11

The high elevation of the Gallatin, Madison, Absaroka, Beartooth and Crazy Mountains may also provide critical refugia as the climate warms in the coming decades. Except for the Gallatin and Crazy Mountains, significant portions of these ranges are protected as designated wilderness.

However, as discussed further below, many deserving areas currently without permanent protection were not recommended for future wilderness designation in the DRFP.

Whitebark Pine (Pinus albicaulis) and Climate Change

9 The Craighead Institute [ldquo]Wilderness, Wildlife and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area[rdquo] November 2015. p. 39

10 Ibid p.31

11 Ibid p.45

[para]Whitebark pine is threatened throughout its range by the introduced disease blister rust and mountain pine beetle attack. Intensity of pine beetle outbreaks and host switching to whitebark pine is thought to have increased with climate change. Moreover, climate change itself is altering the extent of physiologically suitable habitat for this tree species. In addition, whitebark pine nuts are a key source of food for grizzly bears and a host of other species found in the alpine reaches of the forests in and surrounding the CGNF. All of these factors combine to make whitebark pine an indicator of the effect of climate change and of the health of alpine forests in the CGNF.

Importantly, recent research has shown that the CGNF holds whitebark pine refugia that may be critical for the species to survive climate change.12 Maps available from the Whitebark Pine Ecosystem Foundation site (see http://whitebarkfound.org/refugia/) show the location of a number of stands of the tree species that combine genetic resistance to blister rust, adaptation to droughty conditions and persistence of suitable conditions for the physiology of the species in the CGNF. Protection of these refugia is paramount for maintenance of the species and persistence of healthy populations of grizzly bears, Clark[rsquo]s nutcrackers and a number of small mammals in the face of climate change.

Most of these refugia are outside of currently designated wilderness or recommended wilderness under the CGNF DRFP. Expansion of recommended wilderness to encompass these stands, where appropriate wilderness characteristics exist, is one step that can support climate change resilience on the CGNF as required by the 2012 Planning Rule. Protection of stands identified as refugia by Mahalovich et al (2017) through development of appropriate standards and guidelines within the plan and/or creating whitebark pine management areas within the plan would be prudent as well.

1.
1. Wildlife Habitat and Connectivity

Under the 2012 Planning Rule and associated directives, the Forest Service is required to consider, plan and manage for ecological connectivity, including explicit requirements for maintaining and/or restoring connectivity on national forest lands as well as facilitating connectivity across varying land ownerships. Directives include:

[ldquo][T]he Interdisciplinary Team shall take into account the following items, set out in the Rule at 36 CFR 219.8(a)(1)(i) [ndash](iv) and (vi) when developing plan components:

Ecological connectivity at multiple temporal and spatial scales that would provide landscape linkages facilitating the exchange of resources and the movements of species across the broader landscape (FSH 1909.12, ch. 10, sec. 12.14c, paragraph 1).

The Planning Rule requires that the development of plan components must consider habitat and habitat connectivity ([sect] 219.10 (a)(1)) and:

12 Mahalovich MF, Kimsey MJ, Winward S. 2017. Adaptive capacity and climate refugia for interior Pinus albicaulis. Forest Genetics 2017: Health and productivity under changing environments. A joint meeting of WFGA and CFGA, University of Alberta, Edmonton, AB, June 26-29, 2017.

[para](4) Opportunities to coordinate with neighboring landowners to link open spaces and take into account joint management objectives where feasible and appropriate.

(6) Land status and ownership, use and access patterns, relevant to the plan area. ([sect]

219.10 (a))

The Planning Rule ([sect] 219.10(a)) requires that a plan include plan components including standards or guidelines, for integrated resource management to provide for ecosystem services and multiple use [including wildlife and fish].

When developing plan components, the Responsible Official shall take into account plants, wildlife and fish, and related uses, that contribute to local, regional, and national economies in a sustainable manner ([sect] 219.8(b)(3)) and consider fish and wildlife species and habitat and habitat connectivity ([sect] 219.10 (a)(1)).

Plans must contain plan components, including standards or guidelines, that maintain or restore the composition, structure, ecological processes, and connectivity of plan area ecosystems in a manner that promotes their ecological integrity (36 CFR 219.8(a) and 219.9(a)(1)).[rdquo]

The CGNF plays a key role in facilitating wildlife movement and connectivity for grizzly bears and other wide-ranging species. The Forest Service[rsquo]s Assessment is clear on the importance of several of the CGNF[rsquo]s ranges for wildlife connectivity. For example, as noted in the Wildlife Report (WR):

[ldquo][S]ince the Custer Gallatin National Forest plan area covers much of the northern portion of the Greater Yellowstone Ecosystem for grizzly bears, it is important in terms of facilitating connectivity with the Northern Continental Divide Ecosystem to the north. Walker and Craighead (1997) conducted pioneering work to identify potential movement corridors for grizzly bears, using least-cost analysis. They identified three possible corridors between the Greater Yellowstone Ecosystem and the Northern Continental Divide Ecosystem through: (1) Big Belt, Bridger and Gallatin Mountains; (2) the Boulder, Tobacco Root , Gravelly and Taylor-Hilgard Ranges; and (3) the Selway, Bitterrott (sic), Lemhi, Centennial and Madison ranges. Each of these routes involves some portion of the Custer Gallatin National Forest plan area.

A decade later, Cushman and others (2008) presented additional science relative to linking these two ecosystems for grizzly bears, and again, identified the Bridger and Big Belt Mountain Ranges as the most important corridor for connectivity.[rdquo] (WR at 39)

Importance of the Bridger/Bangtail/Crazy Mountain Ranges for Wildlife Connectivity

In addition to the statement above, the WR goes further in discussing the Bridger, Bangtail and Crazy Mountains in regard to connectivity:

[ldquo][T]his landscape also provides a potential corridor of mountainous Federal land, which may facilitate wildlife movement between the Greater Yellowstone Area and other large contiguous blocks of wildlife habitat to the north, such as the Northern Continental Divide Ecosystem in northwest Montana.[rdquo] (WR at 20)

[para]

This portion of the CGNF is also important for lynx connectivity:

[ldquo][A]s with the Bridger/Bangtail part of this landscape, dispersing lynx from Colorado apparently passed by, but did not enter, or linger near, the Crazy Mountain Range (Ivan 2012). While this landscape does not appear to have adequate habitat to support residential use by lynx, it may provide important connecting habitat to facilitate north- south movement of lynx, which could play a role in connecting the plan area, and elsewhere in the Greater

Yellowstone Area, to source populations in northwestern Montana and/or Canada.[rdquo] (WR at 55)

and,

[ldquo][[hellip]a]s per the Northern Rockies Lynx Management Direction, continued monitoring may be needed in the Bridger/Bangtail/Crazy Mountain landscape[hellip]at the very least, these areas should be monitored for suitability and hare production, in order to serve as possible connective habitat for lynx.[rdquo] (WR at 59)

Scientists have noted that the Bridger, Bangtail and Crazy Mountains are also important for connectivity for wolverines:

[ldquo][A]nother area important for wolverines has been coined the [ldquo]Central Linkage Region[rdquo] by Inman and associates (2014). The Central Linkage Region consists of relatively small patches of suitable wolverine habitat found in a number of isolated mountain ranges located between the larger contiguous blocks of wolverine habitat. The Central Linkage Region includes the Bridger, Bangtail and Crazy Mountain Ranges of the Custer Gallatin National Forest, as well as other small mountain ranges to the north and west (e.g., the Belts, Anaconda/Pintler, and Gravelly Ranges.[rdquo] (WR at 67)

The Bridger, Bangtail and Crazy Mountains, as part of the Central Linkage Region have been identified [ldquo]as highly important for metapopulation persistence, because its position on the landscape may provide habitat connectivity and linkage between large islands of suitable wolverine habitat.[rdquo] (WR at 73)

These small ranges north of I-90 will likely become even more important for wolverines and other species due to a warming climate and changes to their historic habitat. As noted in the WR,

[ldquo][M]cKelvey et al. (2011) also predicted that by about year 2070, important dispersal corridors connecting the Greater Yellowstone Area wolverine population to other core areas such as Glacier National Park and the Bob Marshall Wilderness complex in northwest Montana, would shift to the east, assessing greater import to the Bridger/Bangtail/Crazy Mountain landscape in the plan area for wolverine connectivity.[rdquo] (WR at 76)

The Importance of the Gallatin Range and the Hyalite Porcupine Buffalo Horn Wilderness StudyArea (HPBH WSA) for Wildlife Connectivity

[para]

Extending from Yellowstone National Park to the foothills of Bozeman, the Gallatin Range contains some of the wildest lands left in the lower 48 states and it is the only mountain range originating in Yellowstone that does not have permanent protection. With over 200,000 roadless acres directly adjacent to the Park, it serves as a key wildlife corridor for some of the healthiest wildlife populations of any temperate ecosystem on Earth.

When Lewis & Clark crossed Montana in the early 1800s, they described seeing immense herds of bison, elk, antelope, deer, and countless other animals. By the end of the century, Montana[rsquo]s wildlife populations were decimated from overhunting, and many species were on the verge of extinction. During this dark period for Montana[rsquo]s wildlife, the Gallatin Range served as a refuge for some of the last remaining wildlife populations in the state. By the early 1900s, the Gallatin Range was one of only two areas in Montana that still had elk populations. While other iconic species were gone from much of the state, the Gallatin Range harbored some of the last populations of bighorn sheep and rare carnivores including grizzly bears and wolverines.

Today, the Gallatin Range is more important than ever as a key wildlife corridor, connecting Greater Yellowstone with the Northern Continental Divide Ecosystem. The HPBH WSA is the wild core of the Gallatins outside of Yellowstone, and its permanent protection is absolutely critical for wildlife movement and connectivity with vast wildlands to the north.

As stated above, connectivity between many parts of the CGNF and other public lands to the north will become increasingly important for wildlife connectivity due to the impacts of climate change in the coming decades. As noted by the Craighead Institute:

[ldquo][P]otential refugia will move north from the HPBH WSA and may be found in the Bridger and Bangtail mountain ranges. This highlights the need for maintaining intact habitat for connectivity northward from the HPBH WSA so that many species can adapt by moving north.13

From a genetic standpoint, maintaining a corridor for connectivity through the HPBH WSA to the NCDE, will be very important for the persistence of grizzly bears in the GYE, particularly as climate change and land use change alter current grizzly bear habitat. In 2007 grizzly bear habitat and connectivity was modeled by the Craighead Institute for the entire northern Rockies region of the U.S. (Figures 17 and 18). The study found that the HPBH WSA is important living habitat as well as part of a key movement corridor for grizzlies.14

Steve Gehman and Wild Things Unlimited conducted snow tracking surveys during 9 winters and documented wolverine presence each winter in all areas of the HPBH WSA (Gehman 2010).

13 The Craighead Institute [ldquo]Wilderness, Wildlife and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area[rdquo] November 2015. p. 45

14 Ibid p. 94

[para]The Wolverine is the [lsquo]poster child[rsquo] of connectivity: both males and females travel extensively throughout the year to find food and mates; they also disperse long distances when they are subadults. Male wolverines tend to disperse more frequently and farther than females (Flagstad et al.,2004; Inman et al. 2012, 2013; Vangen et al. 2001). Data from research in the Madison and Teton Mountain ranges indicate that both males and females are capable of dispersing to areas at least 170 km from their mother[rsquo]s home range. Other data suggest that this may underestimate the distances wolverines disperse. GPS collar data, documented an exploratory movement by a male who travelled 112 km from its mother[rsquo]s center of activity and covered over 200 km in less than 6 days (Inman et al. 2012). One wolverine that was collared in the Madison Range dispersed as far as northern Colorado and returned; crossing the Wyoming Red Desert and Interstate 80 on both legs of the 900 km journey (Inman et al. 2009).

The HPBH WSA is an integral part of an important wolverine movement corridor going north-south connecting the GYE with the Bridger and Big Belt mountains and the NCDE.[rdquo]15

Wilderness: Best Tool for Achieving Connectivity

In numerous places in the DEIS, the Forest Service implicitly acknowledges the importance of wilderness for promoting connectivity:

[ldquo][R]oughly, 35 percent of the land base within the Custer Gallatin National Forest is in designated wilderness. These areas, which include parts of the Absaroka-Beartooth, and Lee Metcalf Wilderness Areas, are intended to preserve wilderness character on the landscape, thus providing large blocks of wildlife habitat relatively undisturbed by man development, and by association, some of the best habitat connectivity for wildlife. (DEIS at 382)

1. ome of the highest quality areas for habitat connectivity are already in designated areas, such as wilderness (DEIS at 491)
2. he inherent land use restrictions in designated wilderness provides the protection needed to maintain habitat connectivity, and therefore additional, fine-filter plan components were not necessary. (DEIS at 491)

[T]he top one percentile of forested connectivity habitat is primarily located in designated areas, with roughly 90 percent of the best random movement habitat and 83 percent of the best optimal connecting paths found in designated wilderness or inventoried roadless areas. (DEIS at 494)

[R]ecommended wilderness area allocation would maintain secure habitat (DEIS at 380)

Additionally, in referencing Alternative D in the DEIS in regard to proposed key linkage areas in the Bridger and Gallatin Ranges, the Forest Service acknowledges that a recommended wilderness allocation is a better choice for connectivity than other land allocations:

15 Ibid p. 105-106

[para]

[ldquo][C]ollectively, these restrictions would provide better security for wildlife movement within the recommended wilderness portions of the key linkage area.[rdquo]16 (DEIS at 492)

Key Linkage Areas

We found it difficult to discern in both the DRFP and the DEIS exactly what the desired conditions, guidelines, standards and specific management prescriptions would be for the proposed key linkage areas in regard to trail use. We understand that where there is a more restrictive land allocation, such as recommended wilderness for portions of the key linkage areas, the more restrictive allocation applies. However, it was not clear to us what management restrictions for trail use, if any, apply to portions of key linkage areas that do not have an overlapping land allocation. Will existing motorized and mechanized uses still be allowed on trails which are

exclusively within a key linkage area? It seems an oversight to identify key linkage areas and not address all the threats and uses that will affect these areas. Key linkage areas should also have management strategies to account for increased recreation, which is guaranteed to happen as the human population grows.

The Forest Service proposes [ldquo]rest[rdquo] periods for vegetation management projects for at least four of every ten years, including two consecutive years. We appreciate that the Forest Service acknowledges that disturbance over an extended period of time can result in permanent displacement of wildlife (DEIS at 492). However, it is not clear in the DEIS that the studies referred to in the DEIS recommended the specific [ldquo]rest[rdquo] regime that the Forest Service proposes. We question whether four years of no disturbance over a decade, with only two consecutive years of no disturbance, is adequate to avoid long-term displacement of wildlife.

1.
1. Species of Conservation Concern

Sierra Club supports the Forest Service[rsquo]s designation of Greater sage-grouse and prairie dogs as species of conservation concern. Additionally, as described below, we believe that bison should be designated as a species of conservation concern.

Sierra Club believes that the Forest Service has erred in not designating bison as a species of conservation concern. Bison continue to face significant issues that challenge their ability to persist over the long term in the plan area. There is no established year-round herd of bison outside of Yellowstone National Park in the plan area. We support the Buffalo Field Campaign[rsquo]s comments in regard to designating bison as a species of conservation concern in the plan area.

Please see [ldquo]Report: American Bison - A Species of Conservation Concern[rdquo] 17 for a detailed explanation of why this species warrants designation.

1.
1. Comments on Specific Species

16 The Forest Service goes on to note that some of these same restrictions could work to the detriment of wildlife connectivity; however, we believe that species have adapted to fire, insects, disease and would likely be quite capable of moving through affected areas.

17 http://www.buffalofieldcampaign.org/press-releases-2017-2018/report-american-bison-a-species-of-conservation- concern

[para]

Bison

For many years, the treatment of bison in the Greater Yellowstone ecosystem, specifically Montana, has been tragic. Inhumane treatment of bison through hazing, trapping, ship to slaughter operations that kill hundreds of bison each year, and blatantly unethical hunts fly in the face of the designation of bison as our national mammal. We can and must do better. The Forest Service can and should play a strong role in bringing about a better future for bison in Montana and we urge the Forest Service to be more proactive in leading the Interagency Bison Management Plan partners to institute more progressive and humane management of bison.

In addition to the above comments in regard to designation of bison as a species of conservation concern, we support Alternative D[rsquo]s Desired Condition for bison presence on the CGNF year- round with sufficient numbers and distribution to provide a self-sustaining bison population. A year-round bison population in Montana outside of Yellowstone National Park is long overdue. We appreciate the Forest Supervisor[rsquo]s efforts to foster dialogue and movement in facilitating presence of a year-round herd on the Forest and urge the Forest Service to continue those efforts despite intransigence from some private landowners.

We support Alternative D[rsquo]s proactive measures within and outside the bison management zones to maintain or improve existing habitat conditions such that bison can freely move between suitable habitats within the management zones, but also so that habitat conditions outside the existing zones are suitable for increases in bison numbers, distribution, and time spent on the CGNF. (DEIS at 463)

We also strongly support Alternative D[rsquo]s provision that management actions should not impede bison expansion into currently unoccupied habitat. We support proactive measures to create conditions that are more conducive to bison expansion into currently unoccupied habitat and management actions that favor bison over livestock including closure of livestock allotments, alternate livestock turn-on dates, and change in class of livestock from cows and calves to bulls, steers, horses or mules.

Sierra Club supports the revised plan alternatives[rsquo] continuation of the commitment to cooperate with

partners to expand the science of bison ecology, foster awareness of the important biological, ecological and cultural role of bison on the landscape, and to develop adaptive strategies to manage bison and their habitats to facilitate natural movement of bison into and between suitable habitats.

Grizzly Bears

Sierra Club appreciates the DRFP[rsquo]s goal of establishing connectivity between grizzly bear ecosystems and ultimately increasing the genetic diversity and long-term health of grizzly bears on the CNGF. However, we urge the Forest Service to include a goal of establishing demographic connectivity as well as genetic connectivity between the CGNF and other grizzly bear ecosystems. (FW-GO-WLGB, DRFP at 65)

[para]We support Alternative D[rsquo]s prohibition on the use of domestic sheep or goats for weed control inside the recovery zone/primary conservation area; however, this prohibition should apply not only to the recovery zone but throughout occupied grizzly bear habitat on the CGNF and areas to which grizzly bears can reasonably be expected to expand in distribution or disperse through in future years. We are particularly opposed to the presence of domestic sheep as they are a known grizzly bear attractant. The Forest Service acknowledges this in the DEIS: [ldquo][d]omestic sheep are a known grizzly bear attractant, and bears that encounter domestic sheep are more likely to respond with depredation.[rdquo] (DEIS at 374) Indeed, this is why sheep allotments have been phased out of the recovery zone throughout the GYE (with the exception of the sheep research station operated by the federal government).

We also support Alternative D[rsquo]s prohibition on sheep allotments in the CGNF portion of the GYE grizzly bear distinct population segment area as well as areas where grizzly bears may expand or disperse through in the future.

We support management direction aimed at maintaining or increasing whitebark pine across the landscape (not only in the recovery zone).

We strongly support the guideline to prohibit special use permits for recreation events involving people traveling by foot, horse or bicycle at night. This prohibition should apply not only to the recovery zone, but to all occupied grizzly bear habitat, now and in the future as the bear population expands. As population growth and demand for recreation access and new events increases in the future, it will be critical to prohibit recreation events that could displace grizzly bears and other wildlife from occupied habitat. To prevent future displacement, such events should also be prohibited in areas into which grizzly bears are likely to expand their distribution.

Sierra Club urges the Forest Service not to allow currently vacant livestock allotments to

be reactivated within the grizzly bear distribution area, both inside and outside the recovery zone as well as areas where grizzly bears could expand or disperse through in the future. An exception to this could be in the case of

an allotment being reactivated temporarily to address at-risk species habitat needs. We also urge the Forest Service to work with livestock permittees to relocate existing infrastructure that attracts livestock use in or near riparian areas.

1.
1. Roads and Trails

The DRFP includes a Desired Condition of ensuring [ldquo][T]he transportation system and its use have minimal impacts on resources including ecological integrity and diversity, threatened and endangered species, species of conservation concern, heritage and cultural sites, watersheds, water quality and aquatic species.[rdquo] (FW-DC-RT, DRFP at 88). However, the DRFP[rsquo]s Desired Conditions regarding recreational demands are lacking. We are concerned that FW-DC-RT-05 has no language that allows the Forest Service to place limits on recreation demands that may result in adverse ecological and biological impacts, merely saying that [ldquo][T]he trail system accommodates current and reasonably foreseeable recreation demands.[rdquo] Desired Conditions should address potential impacts to forest resources from the inevitable increase in recreational demands on the CGNF in the coming years.

[para]Goals for Roads and Trails should also include a goal to promote connectivity both within the jurisdiction of the CGNF and across administrative boundaries.

Sierra Club supports the Objective in Alternatives B,C and D of removing 85 miles of planned unneeded system roads at an average rate of 10 miles per year based on available budgets. (DRFP at 94) We encourage the Forest Service to remove as many miles of unneeded system roads as possible. We support the Objective in Alternatives B, C and D to eliminate five existing unauthorized motorized travel incursions per decade (FW-OBJ-ROSP-02, DRFP at 98) and the Forest Service should look for opportunities to eliminate additional unauthorized motorized travel routes in any given year to the extent budgets allow.

1.
1. Recreation

Desired Conditions should include ensuring protection of resources in the goals to accommodate increased recreational demand, not only that [ldquo][R]ecreation opportunities are adaptable to changing trends of desired recreation opportunities and increasing demands and use of the Custer Gallatin.[rdquo] (FW-DC-REC, DRFP at 94)

In regard to Outfitter Guides, the Forest Service should include a standard to require outfitters and their clients to carry bear spray and have it immediately accessible. Bear spray has unequivocally been proven to be more

effective at preventing injury to both bears and people than firearms. The Forest Service regulates outfitters and individual hunters in many ways; they are an already-regulated population of users of the Forest. It is not a huge step to require them to carry bear spray. The DRFP should include a goal of zero conflicts between outfitters/guides and their clients, and bears.

We strongly support the DRFP[rsquo]s guideline to minimize potential conflicts between grizzly bears and people by not granting special use permits for events that involve people traveling by foot, horse or non-motorized vehicles during the hours between sunset and sunrise during the non- denning season. However, this guideline should be applicable not only to the recovery zone, but to all occupied habitat and habitat that is likely to become occupied or dispersed through by grizzly bears in the future on the CGNF.

Impacts of Mechanized and Motorized Recreation on Wildlife

As land managers are well aware, as grizzly bear populations have made a comeback in Montana, there have been more conflicts between grizzly bears and recreationists, some unfortunately resulting in injury or death of the mountain biker, grizzly bear, or both. In a literature review of the effects of recreation on wildlife, the Craighead Institute notes that [ldquo][E]ffects on wildlife are generally more pronounced with mountain bikes than with either

hiking or horseback, generally due to the [lsquo]sudden encounter[rsquo] effect (Quinn and Chernoff 2010).[rdquo]

18

18 Ibid p. 33

[para]The Craighead Institute[rsquo]s literature review also noted that mountain bikers and motorized users can travel much greater distances in a shorter amount of time, thus impacting a larger area, and that wildlife usually reacted more strongly to these users:

[ldquo][I]n one well-designed study, Wisdom et al. (2004) observed increases in elk flight response and movement rates related to human recreational use in the same 3,590 acre section of the Starkey Experimental Forest and Range in Oregon. Elk flight response was greatest for ORV use, followed by mountain biking, and finally human hikers and horseback riders. "Higher probabilities of flight response occurred during ATV and mountain bike activity, in contrast to lower probabilities observed during hiking and horseback riding. Probability of a flight response declined most rapidly during hiking, with little effect when hikers were beyond 500 meters from an elk. [hellip]Higher probabilities of elk flight continued beyond 750 meters from horseback riders, and 1,500 meters from mountain bike and ATV riders.[rdquo] Significantly, an increase in movement rates at sunrise and sunset following daytime ORV and mountain-biking use was observed, suggesting the elk are displaced from preferred security and foraging activities following human use. Only one pair of ATV users were needed to cover the 20-mile study area, but two pairs of mountain bikers and three pairs of hikers were needed to cover the distance in the time allotted, underscoring the different relative distances that the three groups are capable of covering.

Vieira (2000) studied the effects of both pedestrian and ATV (four wheeler) effects on movement patterns of elk in a White River, Colorado, study area. The mean distance moved by the elk in response to the ATV was more than twice the pedestrian mean.

Vieira was able to measure the distance traveled by each elk in response by using radio collared elk tracked by airplane. ATV use by hunters on public lands was considered responsible for greater flight distances and greater chances of elk entering private land. A study comparing responses of elk to ATV[rsquo]s, mountain biking, hiking, and horseback riding (Naylor et al. 2009) found that elk spent less time resting and more time travelling in response to the disturbance. ATV use caused the greatest disturbance (increase in travel and reduced resting time) followed by mountain biking, hiking, and horseback riding

A literature review by Snetsinger and White (2009) found documentation of negative impacts on elk from snowmobiles, skiing, hiking, biking, horseback riding, human presence, trails, and developed recreation sites. Flight responses have been recorded for elk up to 650 m from skiers (Cassirer et al. 1992); 500 m from hikers and horseback riders; and 1500 m from bikers (Wisdom et al. 2004). Elk were observed fleeing further distances from bikers than from hikers or horseback riders (Wisdom et al. 2004, 2005).[rdquo]19

The Forest Service itself has acknowledged the serious potential for conflicts between mountain bikers and bears and recently developed specific public messaging on this issue.20 In recent news stories regarding mountain bike use in occupied grizzly habitat, the former USFWS grizzly bear recovery coordinated stated:

19 Ibid p. 75-76

20 https://www.dailyinterlake.com/local_news/20190526/experts_warn_bikes_and_bears_a_risky_combination

[para][ldquo][M]ountain bikers have the potential to compromise and diminish the value of grizzly bear habitat by displacing bears from bike trail areas.

Mountain bikers also put themselves at serious risk of surprise encounters with both black and grizzly bears because they travel quietly at high speed[hellip]This is exactly what we tell people not to do when traveling in grizzly habitat.[rdquo]21

The board of review in the death of mountain biker Brad Treat in 2016 attributed the increased hazards associated with mountain biking in bear habitat to the tendency for the activity to be comparatively quiet and for bikers to travel at a higher speed than hikers. In addition, the board observed that mountain bikers tend to focus on the trail close to the bike [ldquo]instead of looking ahead for bears, especially on single-track trails.[rdquo]22

A February 2016 article at singletracks.com observes, [ldquo]Mountain biking is perhaps the most dangerous of the forms of recreating in bear country.[rdquo]23

Outdoors retailer REI was even more blunt in one installment of the company[rsquo]s online [ldquo]Expert Advice[rdquo] feature: [ldquo]It is not advisable to ride mountain bikes in grizzly country. Bikes cover ground quickly and quietly, meaning you could encounter a grizzly in a swift and startling

manner. Such a meeting is a grave error in grizzly territory.[rdquo]24

As noted by former recovery coordinator Servheen, [ldquo]Bears must live in these areas while humans are just visitors.[rdquo] And the GYE and NCDE are two of only a tiny handful of places where they actually can live in the lower 48.

The CGNF management plan needs to be developed with these pressures uppermost in mind, to protect the resources for all [ndash] people, grizzly bears, and everything in between.

1.
1. Recommended Wilderness (RW)

As noted above, the CGNF contains some of the most ecologically-important remaining wildlands in the GYE, and serves as a critical landscape and linkage for the wildlife of Yellowstone National Park, including grizzly bears, bison, wolves and many other species. Considering the plan area[rsquo]s rapid population growth, climate change and other stressors, now is the time to ensure that the CGNF retains its wild character, through substantial wilderness recommendations.

Sierra Club is not endorsing a specific alternative in the DRFP for recommended wilderness. Instead, we urge the Forest Service to give serious consideration to the recommendations below to balance ecosystem and resource protection, connectivity for wildlife and recreation interests.

21 Ibid.

22 Ibid.

23 Ibid.

24 Ibid.

[para]Sierra Club urges the Forest Service to recommend 479,040 acres of additional wilderness in the final forest plan, as described further below and in the two attached maps.25

Madison, Henrys Lake and Gallatin Mountains Geographic Area

1. Gallatin Range

1. Gallatin Forest Partnership Proposal

Sierra Club appreciates the significant work that went into developing the Gallatin Forest Partnership[rsquo]s proposal for the Gallatin and Madison ranges in regard to recommended wilderness, and we support wilderness designation for all areas recommended for wilderness by the Partnership. However, we believe wilderness recommendations must be strengthened in

25 Note that in the attached Sierra Club maps, all existing trails are noted in order to show existing use and which motorized and mountain bike trails would be precluded if the polygon was recommended for wilderness. Where motorized or mountain bike trails appear in polygons that are identified as Sierra Club Recommended Wilderness (lime green polygons), those trails would be retired/not allowed.

[para]several areas from the Partnership proposal, as outlined below, in order to protect important habitat/linkages and wilderness qualities for wildlife and for future generations. We strongly believe that recommended wilderness in the Porcupine Buffalo Horn, Hidden Lakes, South Cottonwood and West Pine areas is essential, given the inevitability of the growing human population in the Bozeman/Big Sky and Livingston areas and a warming climate.

1. Hyalite Porcupine Buffalo Horn Wilderness Study Area

In 1977 approximately 155,000 acres of the wild core of the Gallatin Range was designated as the HPBH WSA. Unfortunately, over decades many of the wilderness qualities of the WSA are being eroded due to increasing demand for recreational access and newer technologies that allow recreationists to go much farther and faster than during the time the WSA was established.

As noted above, the HPBH WSA plays a critical role in providing high-quality habitat and serving as an essential wildlife corridor from Yellowstone National Park to the Northern Continental Divide Ecosystem (NCDE). The importance of its long-term protection and preservation of its wilderness characteristics cannot be overstated.

Porcupine Buffalo Horn

Nowhere is the above statement more true than in the Porcupine Buffalo Horn area.

The Porcupine Buffalo Horn area provides some of the most important wildlife habitat in the WSA. It is a critical component of the Primary Conservation Area for grizzly bears. Elk from Yellowstone National Park migrate into the Buffalo Horn drainage in winter as it generally has less snow and a milder climate. The Buffalo Horn drainage in particular is very important for regional connectivity for elk. 26 As such, it absolutely deserves long-term

protection. In designating this area [ldquo]backcountry[rdquo] and open to continued motorized and mechanized use in some alternatives of the DRFP, the Forest Service proposes to allow fully two-thirds of the width of the WSA in the Porcupine Buffalo Horn to be severely compromised. The Forest Serviceshould recommend the entire area from east of the Big Sky Snowmobile Trail to the eastern edgeof the WSA for wilderness designation, prohibiting mechanized and motorized use of the current Porcupine and Buffalo Horn trail to Ramshorn Lake (trail #160). We recognize the popularity of this trail to mountain and motorized users. However, this habitat and linkage zone are too important to wildlife not to be permanently protected as wilderness. Additionally, the human population of the Big Sky area will only continue to grow in the coming years, and associated demands for more and more recreational access will threaten this landscape, with the potential to displace wildlife to an even greater degree.

Recommended wilderness east of the Big Sky Snowmobile Trail on the northern portion of the trail should follow the original WSA boundary (prohibiting the current snowmobile [ldquo]play area[rdquo]).

Hyalite/South Cottonwood

26 The Craighead Institute [ldquo]Wilderness, Wildlife and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area[rdquo] November 2015. p. 71, 77

[para]We also recognize the popularity of the Hyalite drainage to recreational users due to its proximity to Bozeman and that this area was recommended for a [ldquo]national recreation area[rdquo] designation in prior (unsuccessful) legislation. There are many established uses in the Hyalite drainage that are important to the mountain bike and motorized communities, as well as hikers, horse packers and others. As such, we agree with the Gallatin Forest Partnership[rsquo]s proposal for a [ldquo]Hyalite Watershed Protection and Recreation Area[rdquo] with several exceptions, described below. The management points that we agree with from the Partnership are listed below.

* Areas and trails that are currently non-motorized will stay non-motorized, and no new motorized trails will be constructed.
* In the portions of the Hyalite watershed that are within the Hyalite-Porcupine-Buffalo Horn WSA, there shall be no new trail construction to ensure the high peaks (Flanders, Mt. Bole, Divide Peak, Maid of the Mist) and alpine basins currently without trails continue to provide remote, pristine, and wild backcountry character.
* As recreational use increases in the Hyalite Watershed Protection and Recreation Area, the Forest Service should consider managing more trails through time-share trails agreements such as the one currently in place for the Emerald Lake trail.
* The Forest Service should increase enforcement efforts to ensure that recreational use is confined to those routes and areas where it is allowed.

* The area should be withdrawn from all forms of appropriation under mining laws and from disposition under laws pertaining to mineral and geothermal leasing.
* Establish baseline data regarding existing recreational use as well as wildlife occupancy and known movement patterns. Monitor ongoing recreational and wildlife use of the recreation area to ensure increased recreational use is not having a detrimental impact on wildlife.

An important exception to the Partnership[rsquo]s recommendations for the Hyalite area is that we believe the upper part of the South Cottonwood Creek drainage should be recommended for wilderness. It is wild and incredibly scenic, which is most likely why it was included in the HPBH WSA decades ago. It should be recommended for wilderness. In this area, the RW boundary should extend from immediately south of the History Rock trail to Hyalite Peak, and from the current WSA boundary on the west to Hyalite Creek. This recommendation thus allows continued mountain bike use of the History Rock trail but not the Blackmore trail, which would be included in RW. Hyalite Peak and the surrounding alpine basins should be included in RW. The Hyalite Creek and Emerald Lake trails would be included in the [ldquo]Hyalite Watershed Protection and Recreation Area[rdquo] proposed by the Partnership.

A second exception to the Partnership[rsquo]s management recommendations is not to allow new mechanized use or construction of new mechanized trails. (in addition to no new motorized use or new motorized trails)

[para]

Key Linkage Overlap with [ldquo]Hyalite Watershed Protection and Recreation Area[rdquo]

Where the Gallatin Key Linkage Area overlaps with the [ldquo]Hyalite Watershed Protection and Recreation Area,[rdquo] the more restrictive management direction should apply.

West Pine/Dry Creek

The West Pine/Dry Creek area, the northeastern section of the HPBH WSA, and to the east of the Partnership proposal[rsquo]s [ldquo]Hyalite Watershed Protection and Recreation Area[rdquo] boundary, provides an important corridor for wildlife attempting to move north across I-90 to the Bridgers and beyond. This area should also be recommended for wilderness and the boundary drawn to allow the small incursion at the eastern edge of the current WSA boundary of current mountain bike use on the West Pine/Dry Creek trails.

Hidden Lakes

The Hidden Lakes area (Polygon GALLATINS_28) is a spectacular area of high alpine lakes and meadows, with very minimal areas of current nonconforming use. This roadless area east of Highway 191 should be recommended for wilderness. In light of the rapid pace of development in the Big Sky area to the west, retention of this area[rsquo]s wilderness character is essential.

ii. Sawtooth IRA

Sierra Club supports recommended wilderness for the Sawtooth IRA due to its prime location bordering Yellowstone National Park and exceptional wildlife habitat.

1. Madison Range

Sierra Club supports the recommendation to add 4,466 acres to the Taylor Hilgard wilderness unit.

The Forest Service should also recommend Cowboy Heaven for wilderness designation. This 17,000-acre roadless area provides an important linkage between the Beartrap Canyon and Spanish Peaks units of the Lee Metcalf Wilderness. As noted in the WE, [ldquo]Apart from hunting season, recreational use is light and the area retains a remote feel with opportunities for

solitude.[rdquo] (WE at 339) Nearly the entire area is secure grizzly bear habitat; over 13,000 acres is critical lynx habitat and over 12,000 acres provide secure habitat for elk. Additionally, 1,400 acres are considered potential bison habitat. (WE at 341)

1. Henrys Lake Mountains

Sierra Club supports the previous forest plan[rsquo]s recommendation of 23,000 acres for wilderness in the Lionhead.

[para]Mountain bike use has proliferated in the Lionhead over the years despite this area being recommended for wilderness in the 1980s. As a non-conforming use in recommended wilderness, such use should not disqualify those areas now, and as a non-conforming use mountain biking should not be allowed to continue.

Absaroka-Beartooth Geographic Area

The Absaroka-Beartooth Wilderness and surrounding roadless areas are stunning for their scenery, opportunities for inspiration and solitude, and wildlife habitat. Much of the area has retained these qualities due to designation of more than 920,000 acres as wilderness. IRAs make up another 271,000 acres of this GA and many are deserving of wilderness recommendations.

Sierra Club urges wilderness recommendation for several IRAs, as outlined below.

1. Line Creek

While half of this 33,000 acre IRA is protected as a Research Natural Area, the remainder of this IRA does not have any protection. The core of this area remains wild and should be recommended. More than 26,000 acres provide secure habitat for grizzly bears and elk, and over 7,000 acres are designated as critical lynx habitat. Yellowstone cutthroat trout are present. There are no significant challenges for managing this area as wilderness, particularly in the core of the IRA. As noted in the WE,

[ldquo]Challenges to manageability for wilderness character largely occur around the perimeter. Lack of infrastructure within the interior would make the area generally manageable as wilderness, because of its relative large size, lack of private inholdings and roads within the boundary, lack of grazing infrastructure, water developments or other permitted uses.[rdquo] (WE at 61)

The Forest Service acknowledges the worth of the Line Creek IRA and that it could be managed as wilderness, and should recommend it for designation. The Custer Gallatin and Shoshone national forests should work together to ensure protection of this outstanding area.

1. West Fork/Lake Fork of Rock Creek

The alpine landscape of the eastern Silver Run plateau bordering the existing A-B Wilderness is highly deserving of permanent protection. Steeply timbered slopes connect to higher elevations and sub-alpine tundra plateaus and [ldquo]much of the area provides for high levels of solitude because of the limited number of trails and its overall steep and remote location.[rdquo] (WE at 76) The area also contains 16,000 acres designated as municipal watershed [ndash] another strong justification for protection. The area provides over 27,000 acres of secure grizzly bear habitat as well as 25,000 acres of elk security habitat and 17,000 acres of designated critical lynx habitat. Two small areas were previously recommended for wilderness in the 1986 Custer forest plan; the recommendation should extend to the entire IRA. We recognize that there are approximately 20 miles of mountain bike trails in this polygon. However, the fragile, high-elevation environment of the plateau is clearly inappropriate for mechanized or high-density uses, and it is essential that this landscape be fully protected, even in its periphery.

[para]

1. Mill Creek

Polygon AB_15[rsquo]s 56,000 acres stretching south from Mill Creek along the A-B Wilderness boundary to Cedar Creek provide more than 40,000 acres of secure grizzly bear habitat and nearly 20,000 acres of critical lynx habitat. These lands are important migration corridors and winter range for ungulates. At least the portion south of Mill Creek road and adjacent to the A-B Wilderness boundary should be recommended for wilderness designation.

1. East Rosebud

This 25,000-acre area extending from the East Rosebud drainage north to the Stillwater Road should be recommended for wilderness. It is adjacent to the existing A-B Wilderness area and connects to sub-alpine tundra and higher elevations, and [ldquo]much of the area provides for high levels of solitude and primitive recreation because of the lack of trails and its overall steepness and challenge.[rdquo] The majority of the polygon is secure habitat for grizzly bears and elk, and there are nearly 9,000 acres of critical lynx habitat. (WE at 88, 91)

1. Main Fork Rock Creek

Nearly half of this 1,600-acre area was recommended for wilderness in the 1986 Custer Forest plan, and a wilderness recommendation should be carried forward in the new Custer Gallatin plan. As noted in the WE, [ldquo][T]he area is naturally appearing and consists of very steep slopes and cliffs in a glacially carved drainage[hellip]It has outstanding scenic quality with many cliffs, steep slopes and waterfalls.[rdquo] (WE at 155) Access is difficult, and the Forest Service notes that [ldquo]much of the area would be manageable as wilderness because of the location directly adjacent to existing Absaroka-Beartooth Wilderness[hellip][rdquo] Also noted are manageability challenges within areas adjacent to the Beartooth Highway, but that should not preclude the entire polygon from being recommended for wilderness.

Bridger/Bangtail/Crazy Mountains Geographic Area

1. Bridger/Bangtail Mountains

Background/Current Conditions

Together, the Bridger and Bangtail mountain ranges form the westernmost "island" unit in the CGNF. Functioning as a single geographic unit, the ranges comprise a vital link in Montana's north-south wildlife connectivity chain, providing a minimally interrupted migration path from the Gallatin Range and the Greater Yellowstone ecosystem northward to the Big Belt Mountains and ultimately, the NCDE. With this strategic geographic importance, responsible planning for the Bridger/Bangtail area demands extraordinary care, and a high level of concern for wildlife- related issues.

Unfortunately, the necessary preservation of this wildlife corridor is complicated both by geographic constraints and a pattern of past management actions that have not respected the

[para]natural values of this land. The proximity of the Bridgers to the rapidly-urbanizing Gallatin Valley, combined with the range's extraordinary scenic values, has resulted in heavy recreational use in the southern half of the range. This level of use is virtually certain to increase dramatically over the life of the forest plan. Heavy mechanized trail use is seen in much of the area, and motorized off-road recreational use is common. Although no site-specific data on wildlife movement in the area has been developed, it is highly likely that the current level of human activity in the Bridgers is already impacting wildlife behavior in the area, and that this impact will increase over time due to population growth in the area.

Although much of the Bridger range is not suitable for timber production, past Forest Service timber harvests have created road intrusions in a number of areas in both ranges. Additional timber harvest in the Bridgers is planned. These logging roads have substantially reduced the size of the Bridger's contiguous roadless areas, and many of these roads still remain open for public use.

Finally, administration of the Bridgers and the Bangtails has long been complicated by the mix of public and private land ownership in the area, including the challenging "checkerboard" land ownership pattern that has also impacted management of the Gallatin and Crazy Mountains over time. A 1998 land exchange substantially lessened the checkerboard ownership pattern in these ranges, but the unfortunate result was the transfer of substantial portions of the Bangtails to private ownership. This was problematic from a wildlife management perspective, since the Bangtails provide some of the unit's best habitat, and since the proximity of the southern Bangtails to the northern Gallatin Range provides a link that is crucial to wildlife connectivity.

Combined, the issues noted above have markedly impacted much of the Bridger and Bangtail Ranges, greatly increasing the importance of permanently preserving the remaining roadless areas in the northern and central Bridgers. Given this area's exceptional importance to current and future wildlife connectivity, the preservation of these lands becomes even more critical.

Recommendations

The Forest Service's 2018 "Evaluation of Wilderness Inventory Areas" identifies two roadless tracts in the

Bridgers of substantial size; both are worthy, at least in part, of designation as RW.

Polygon BRIDGERS_34 comprises some 41,500 acres in the southern Bridgers, including the crest of the range and substantial areas primarily to the west of the ridge. This is among the most spectacular terrain in the entire CGNF, largely unspoiled land that forms the scenic backdrop for much of the Gallatin Valley. A variety of wildlife inhabit this portion of the range.

Because of this area's roadless state, extremely high scenic value, habitat quality, and potential role as a wildlife connectivity corridor, the Sierra Club recommends that as much of this area as possible be designated RW. The primary limiting factor in this recommended designation is the presence of existing mechanized and motorized use trails in the area (40.5 miles open to mechanized use, and 38.5 open to motorized use). We believe, however, that not all of these trails are suitable for these designated uses, both due to potential wildlife conflicts and the topography of the region itself. Closure of a relatively small portion of mechanized trails could

[para]be beneficial to the long-term health of the range, and could allow wilderness designation in this extraordinary area. At a minimum, we recommend that trails north of the Sacajawea/Hardscrabble saddle and to the East of trails 527 and 542 be closed to mechanized use, allowing that portion of the polygon to be designated as RW. Elsewhere, mechanized and motorized use should be scientifically monitored in the future, and these uses should be capped if the possibility of interference with natural wildlife behavior is found to exist.

Polygon BRIDGERS_35 includes 12,453 acres of land mostly in the northwestern corner of the Bridger Range, surrounding Blacktail Mountain (to the west) and Horsethief Mountain (to the east). The polygon is bisected by a mechanized-use trail running north from Flathead Pass to the Horsethief area. The eastern portion of the polygon is a less-coherent geographic unit due to nearby private land and road intrusions, but the larger western portion is a strong candidate for future wilderness, and we urge its designation as RW. This area features high-quality wildlife habitat in a location that is important to wildlife connectivity. Its importance is bolstered by the adjacent presence of large, minimally developed public and private land, extending northward toward the Big Belt Mountains.

Southern Bridger Recreation Area

As noted above, the Bridgers are an important area for both wildlife and recreation. We believe the southern portion of the range should be designated as a Recreation Area. The Recreation Area[rsquo]s northern border would begin at trail 544, trail 518, and the road to Fairy Lake. This area would be actively managed to facilitate connectivity throughout the Bridgers and also to ensure high quality recreation opportunities. The southern part of the Bridgers includes the [ldquo]M[rdquo] trail and Bridger Bowl Ski area, both of which attract thousands of people to the range year round. This area also includes Lyman Creek, an important water source for the city of Bozeman. Finally this area is of paramount importance for connectivity for wildlife, as it is one of the few ways animals can potentially migrate north from Yellowstone to the Northern Continental Divide Ecosystem. The importance of this area for connectivity has also been identified by the Forest Service by the [ldquo]Bridger Key Linkage Area[rdquo]. Our recommendations for the management of the Southern Bridger Recreation Area are

outlined below.

* Motorized and mechanized recreation uses should be limited to trails where it is currently an established practice and not spread to new areas. The current limitations placed on those trails for motorized and mechanized use should be maintained e.g. timeshares and seasonal closures.
* As recreation use increases, timeshare systems modeled after one currently in use on the Middle Cottonwood Trail should be considered for trails that are impacted by erosion.
* The Forest Service should have the ability to implement new seasonal closures to motorized, mechanized, and horse pack travel to help maintain the integrity of the trails and accommodate for wildlife during sensitive time periods.
* The Forest Service should allocate resources to the enforcement of these established uses and potential seasonal closures.

[para]

* No new mining claims or timber sales should be allowed within the recreation area.
* No new roads should be constructed within the recreation area.
* In regard to the Bridger Canyon Timber sale which will affect areas in the northeastern portion of the recreation area, the Forest Service should require the timber company to restore the affected areas to the fullest extent possible after timber harvest is completed.
* Resources should be allocated to establish baseline data regarding current recreation uses and wildlife population and movement patterns with emphasis on threatened and endangered species. The ongoing study of raptor migration in the Bridgers can be a guideline of how to conduct useful studies in the area and create lasting partnerships with NGO[rsquo]s.
* Use data collected from the range on wildlife movement and population to reassess management strategies within 5 years of plan implementation.

Key Linkage Overlap with the Southern Bridger Recreation Area and Recommended Wilderness

In areas where the Bridger Key Linkage Area overlaps with our recommendations for RW and the Southern Bridger Recreation Area, the more restrictive direction should apply.

1. Crazy Mountains

Background/Current Conditions

The Crazy Mountains are an extraordinary and unique region of the CGNF. This island range is an iconic presence on the southwestern Montana landscape, a striking landmark for much of Park, Sweet Grass, and Meagher Counties. The forest contains a variety of landscapes and ecosystems, culminating in a central core of

exceptionally scenic high country. The range provides excellent wildlife habitat, and can serve as a wildlife travel corridor between the Absaroka and Little Belt ranges. As noted above, this range is very important wolverine habitat. It is a spectacular and unique landscape.

Overall, much of this landscape remains surprisingly intact and undisturbed, more so than nearly any other major non-wilderness area in the CGNF. Only a handful of short, unimproved spur roads access the lower reaches of some canyons, and most other past human activities have occurred only in the unit's peripheries. Overall visitation and recreational use of the Crazies are surprisingly low, especially in contrast to the nearby Bridger-Bangtail area. Together, these qualities suggest a landscape that is ideally suited for wilderness protection.

Several complications to this designation exist, though none appear to be insurmountable. The most substantial issue is the checkerboard land ownership situation in much of the Crazies. This ownership pattern is in place across much of the unit, forming the largest remaining blocks of checkerboard ownership in the CGNF. While much of the private land in the Crazies is

[para]topographically unsuitable for development, this creates a substantial management issue for the Forest Service.

A second issue is that administration of the range is split between two national forests: while most of the range is within the CGNF, approximately the northern one-quarter of the range is administered by the Helena-Lewis & Clark National Forest (H-LC). Historically, there appears to have been little coordination between the two forests in the management of the range. Other, smaller, issues in the area include existing grazing and mineral rights, although the planning materials developed by the forest fail to sufficiently define these, as noted above.

Recommendations

Given the exceptional scenic and ecological importance of the Crazy Mountains, and the range's geographic suitability as wilderness, it is imperative that the Custer Gallatin forest planning process specify that the range be managed to preserve those qualities. To do so, the Sierra Club recommends the following:

* It appears that in several areas of the Forest, including the Crazies, the Forest Service has implied that [ldquo]outstanding or reserved subsurface mineral rights[rdquo] is a potential obstacle to assigning RW status to a roadless area, even when the full nature of these rights is not discussed and the rights only impact a portion of the entire roadless area. Before the decision-making process proceeds further, the Forest must complete a specific review of existing mineral reservations in the Crazies, and make this information available for public review. This information should identify the specific land areas covered by these mineral rights; the precise nature of the rights; and the mechanisms by which these rights may be retired.
* The 2018 "Evaluation of Wilderness Inventory Areas" document identifies substantial roadless areas in the Crazies -- although if the checkerboard land ownership were disregarded, the inventory process would have

noted substantially larger tracts of roadless land. CRAZIES_36 and CRAZIES_37, include central core areas that are not impacted by checkerboard land ownership, and the cores of both these areas should be designated RW as shown in the attached maps. Additionally, a smaller roadless area between the north and south polygons should be recommended for wilderness to attempt to bridge the areas.
* It is clear that an appropriate management direction for the remaining roadless areas (other than those we are recommending for wilderness designation) of the Crazies cannot be determined until the checkerboard land ownership pattern in the central range is resolved. The remaining roadless areas in the Crazies should therefore receive an interim designation as a Special Management Area, restricting use changes or future development. This management area would exist until such time as the checkerboard land ownership issue is resolved, after which the Management Area would be formally reviewed for wilderness suitability, in whole or part.
* [para]The Forest Plan should establish the long-term goal of consolidating land ownership in the Crazies, through the federal acquisition of private checkerboard land.
* The Forest Service should establish a formal Crazy Mountains Working Group, consisting of representatives of the CGNF and H-LC with management responsibilities for the range, to develop a joint management philosophy for the area. This work should include a new review of the roadless land in the H-LC portion of the Crazies, since it is likely that some of this land should be included as RW as part of the CRAZIES_37 polygon.

Pryor Mountains Geographic Area

We appreciate that the Forest Service has improved recognition of the unique ecological and cultural values of the Pryor Mountain landscape in the DRFP, and that the Forest Service has designated the Pryors as a distinct GA and includes a few Pryors-specific Desired Future Conditions and other plan components. However, more is needed to better protect this unique area of the CGNF, by expanding the Lost Water Canyon wilderness recommendation and by including Big Pryor Mountain and Bear Canyon in RW, among other points. Sierra Club supports the comments of the Pryors Coalition on the DRFP and is a signatory to those comments.

1.
1. Wilderness Management

1. Non-conforming Uses of Recommended Wilderness/Mountain Biking

Mountain bikes were not discussed during the debates on the wilderness bill prior to 1964 but Congress did recognize the need for protection of lands from the increasing threats of mechanical devices and stated it as the purpose for the Wilderness Act: 27

[ldquo][l] order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition...[rdquo] (emphasis added).

Sec. 4 (c) of the 1964 Wilderness Act states in part that

[T]there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area. (emphasis added).

Subsequently, Forest Service regulations and policy have defined bicycles as a form of mechanical transport and they are prohibited in all national forest wilderness areas.

27

http://www.wilderness.net/NWPS/documents/FS/FS%20Stewardship%20of%20Wilderness%20Desk%20Guide.pdf.

1. 56

[para]Sec. 261.16 National Forest Wilderness. The following are prohibited in a National Forest Wilderness: (b) Possessing or using a hang glider or bicycle.

2320.5 - 3. Definitions Mechanical Transport. Any contrivance for moving people or material in or over land, water, or air, having moving parts, that provides a mechanical advantage to the user, and that is powered by a living or nonliving power source. This includes, but is not limited to, sailboats, hang gliders, parachutes, bicycles, game carriers, carts, and wagons[hellip][rdquo]28

In areas recommended for wilderness designation (RWAs), the Forest Service must [ldquo]protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness regulations.[rdquo]29

Mountain bike use in recommended wilderness/WSAs is a non-conforming use and should not be allowed. As the Forest Service well knows, once a recreational use becomes established, it is very difficult to eliminate and unnecessarily becomes an issue of significant public debate and conflict. We are concerned about outreach

materials we have seen from the Southwest Montana Mountain Biking Association that advocate for mountain bike use in all RWAs unless permanent damage to the wilderness character is demonstrated or documented.30 Of course, by that time the damage has been done. Many Sierra Club staff, volunteers, members and supporters are avid mountain bikers as well as hikers and backpackers. However, we strongly support the intent of the Wilderness Act in prohibiting mechanized and motorized transport/recreation in designated wilderness, and corresponding Forest Service policies and regulations that clarify the prohibition on mechanized transport/mountain bikes in RWAs.

We wish to comment on the language regarding maintenance of both the [ldquo]ecological and social wilderness characteristics[rdquo] in agency policy/regulations. Much of the debate and research around mountain bike use in wilderness (recommended or designated) has been around the ecological

impacts, i.e. which recreational [ldquo]use[rdquo] results in the most ecological damage to soil, plants, wildlife, etc. All of these are very important considerations and more comprehensive research is needed to fully understand the impacts of different recreational activities on the environment and wildlife. Some things we do know; for example, activities involving higher speeds are more likely to surprise wildlife and elicit defensive attacks, such as mountain bikers surprising grizzly bears on trails.

What we would like to comment on here, however, is on the social characteristics/impacts, and how they relate to what we believe is the intent of the Wilderness Act.

28 Ibid

29 https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3838984.pdf., p.6

30 [ldquo]Only after all other options are exhausted and it is well demonstrated and documented that Wilderness character will be permanently damaged should the elimination of a particular use be considered. In the present case all other options have not been exhausted, and bike riding has absolutely not been demonstrated or documented to

permanently damage wilderness character. Bike riding should not be prohibited in Recommended Wilderness.[rdquo] The Future of Mountain Biking in Montana, Southwest Montana Mountain Bike Association email alert, February 19, 2018.

[para]Bikes in wilderness goes to the core issue of how we humans relate to and experience the natural world.

Hikers want peace and quiet. Bikers, while many appreciate the natural world around them, also want challenge and adventure as part of their experience. Researchers call this [ldquo]goal

interference,[rdquo] and it is at the heart of the bikes and Wilderness debate. 31

In setting aside Wilderness, in addition to attempting to protect wildlife habitat, intact ecosystems, and natural processes, we as a society are also trying to protect a profound experience [ndash] of solitude, of wildness, of the primacy of nature. As Ralph Waldo Emerson famously said, [ldquo]Adopt the pace of nature [ndash] her secret is patience.[rdquo] We need places where we

move to ancient rhythms [ndash] where we can get away from our increasingly mechanized, frenzied, constantly connected, high-adrenalin lives, far from the sounds of roads and motors, where we can slow down and really see and experience what[rsquo]s around us, and actually hear natural quiet[hellip]and if we[rsquo]re lucky, maybe the howl of a wolf. To know that there are places that we and future generations can always go to have these invaluable experiences, and to know that species like grizzly bears have the space they need to roam and to be the wild beings that they are, decades from now.

A mountain biker moving fast around a corner shatters that peace, that feeling of remoteness. Just knowing that a biker could be coming around the corner colors the experience and can add low-level tension to a hike and interfere with the ability to fully appreciate and immerse oneself in the natural world, which is the true gift of Wilderness.

Wilderness doesn[rsquo]t exclude those who mountain bike [ndash] it just stipulates that they go on foot or horseback, which occurs at a slower pace. The Sierra Club believes this goes to the heart of the intent of the Wilderness Act and what the authors were trying to achieve [ndash] to preserve that feeling of remoteness, that separation and release from mechanization and speed, and restraint from the constant desire to dominate nature. Mechanical transport allows us to dominate nature to a much greater degree.

What we need more of, with our growing numbers and ever-present and rapidly-advancing technology [ndash] which now allows us to go further and faster into remote places than ever before[mdash] is more Wilderness, not less, before remaining areas with wilderness characteristics are compromised and gone forever.

1.
1. Monitoring

As noted elsewhere in these comments, the impacts caused by heavy visitor use are already strongly apparent in some parts of the CGNF, and the amount of visitor use is virtually certain to increase. The areas that currently see the heaviest visitor use [mdash] the Gallatin, Madison, and Bridger Ranges, and parts of the Beartooth

Ranger District [mdash] are also the areas where visitor use impact is most likely to increase in the future. These increases are due both to Yellowstone[rsquo]s increasing popularity as a visitor destination and the rapidly-expanding population of Bozeman and other GYE [ldquo]gateway[rdquo] communities, and in broad terms this increased human presence will

largely be beyond the Forest Service[rsquo]s control. It is vital, therefore, that the Forest Service diligently anticipates and prepares for these increases to the greatest extent possible [mdash] and it is

31 https://www.sierraclub.org/sierra/do-bikes-belong-wilderness-areas

[para]also vital that the Forest Service carefully monitors this increased use, and plans for needed mitigation measures in areas of important wildlife habitat or potential environmental concern.

The Sierra Club is particularly concerned about the potential impacts of current and increased visitor use in areas of key wildlife habitat and in wildlife migration corridors. The potential for negative wildlife impacts is particularly troubling because no site-specific scientific analysis of visitor use impacts to these areas has been completed, nor do we know of any on the horizon. In short, current visitor use levels may already be negatively impacting some of the forest[rsquo]s important wildlife populations, and the level of this impact can be expected to increase dramatically over the life of the forest plan. We are very concerned that we did not see any plans for monitoring impacts of recreational use on wildlife in the Monitoring Plan (DRFP at 189-205)

Thoroughly addressing this issue is essential to successful management of the CGNF and protection of its resources in the years to come. To do this, it is essential that the plan include stipulations both to perform science-based, site-specific analyses of visitor-use impacts at current visitation levels, and to establish site-specific maximum-use thresholds. When these thresholds are reached, the plan must specify procedures for designing and implementing visitor-use caps or other mitigation measures to prevent significant, long-term resource damage.

1.
1. Wild and Scenic Rivers

River corridors are important pathways for wildlife movement, and provide a host of other values to people and wildlife. We appreciate that the CGNF has extended Wild and Scenic River eligibility determinations to several more rivers and streams on the forest then in years past.

However, we believe that there are additional rivers that are deserving of eligibility as outlined below; particularly the Taylor Fork, Porcupine Creek and Hellroaring Creek. We request that the CGNF undertake additional analysis of these streams.

*
* Taylor Fork, Madison Range. Outstandingly Remarkable Values: Fisheries, Recreation, Scenery, Wildlife
* Porcupine Creek, Madison Range. Outstandingly Remarkable Values: Recreation, Scenery, Wildlife
* Hellroaring Creek, Absaroka-Beartooth Ranges. Outstandingly Remarkable Values: Fisheries, Recreation, Scenery
* Bear Creek, Absaroka Range. Outstandingly Remarkable Values: Fish, Scenery, Wildlife
* Beaver Creek, Madison Range. Outstandingly Remarkable Values: Recreation, Scenery, Wildlife, Fisheries
* Buffalo Creek, Absaroka-Beartooth Ranges. Outstandingly Remarkable Values: Fisheries, Recreation, Scenery
* South Fork Madison River, Hebgen Basin. Outstandingly Remarkable Values: Fisheries, Scenery, Wildlife

In summary, we urge the Forest Service to first and foremost consider the impacts of human population growth in the region and climate change as two of the most serious stressors to consider in determining how to promote connectivity for wildlife and to protect the CGNF[rsquo]s

[para]invaluable resources for decades to come. We urge you to adopt our recommendations for Recommended Wilderness and Wild and Scenic River eligibility; to designate bison as a Species of Conservation Concern; and to adopt our recommendations for grizzly bear and bison management. We look forward to continuing to work with the Forest Service throughout the plan revision process to ensure a strong final forest plan that truly protects the considerable resources of the Custer Gallatin National Forest in the face of rapidly changing social and environmental conditions.

Thank you for your consideration of these comments.