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First name: Max

Last name: Hjortsberg

Organization: Park County Environmental Council

Title: Conservation Director

Comments: Please find attached Park County Environmental Council's comment for the Draft Forest Management Plan and Draft Environmental Impact Statement.

I am writing on behalf of the Park County Environmental Council (PCEC), a local grassroots environmental group with more than 500 members and 2,300 supporters. I appreciate your time and consideration on this important matter. I would like to thank you the opportunity to provide comments to the Custer Gallatin National Forest (CGNF) on the Draft Revised Forest Plan (Plan) and Draft Environmental Impact Statement (DEIS).

Introduction

PCEC has been working to protect and preserve Park County's vast natural resources since 1990. We are a countywide environmental group focusing exclusively on issues affecting Park County. PCEC works with residents to safeguard and advocate for the county's world-class rivers, diverse wildlife, landscapes, and outstanding natural beauty, while protecting the health and wellbeing of people who live and work here.

Initially formed by a small group of community members to advocate for wild places, wilderness and quality of life issues in Park County, PCEC has grown to cover numerous issues related to the Yellowstone River and its tributaries, public land management, land use and threats from development, while encouraging community engagement on these issues.

If we want to ensure that the Greater Yellowstone Ecosystem (GYE) continues to maintain its vital importance for wildlife, intact habitat and ecological diversity for generations to come, as well as our reverence for wild places, we encourage the CGNF to enact a management plan that can provide for protections that will make that a reality.

The GYE is home to some of the best, most diverse and intact wildlands in the Lower

48. It's still is home to all the major species of mammals that were present on this continent prior to the arrival of Europeans, having long provided refuge for elk, bison, wolverine and grizzly (and room for the return of the wolf). Its wildlife migration corridors are extensive and still mostly intact. All of this possible because it contains habitat that remains largely unfragmented and still mostly intact in the 21st century.

Careful consideration and a cautious approach need to be applied to management of the CGNF in the face of rapid growth and development in the rural and urban areas adjacent to the CGNF in south central Montana, and

with the correlating demands and pressure that come with that growth. Dividing the national forest lands up into different areas based on varying recreational or developmental preferences will only open the door for further fragmentation of the forest and wildlands as more and more competing interests vie for what little is left of the place.

With the advocacy for, and recent passage of, the Yellowstone Gateway Protection Act, which protects 30,000 acres of public lands in the CGNF, our local communities demonstrated the need and desire to preserve the public lands in the CGNF as they

are: undisturbed. That same position and action needs your consideration with the draft Plan.

Outside of Yellowstone National Park wilderness is the greatest means of protecting the habitat and wildlands so crucial to preserving the uniqueness and diversity of wildlife in the Yellowstone region, as well as providing the necessary refuge we humans, and all species, will need as the effects of climate change become more pronounced.

The CGNF has outlined five Alternatives for landscape designations, or zoning options, that would each carry considerable weight with any future recommendations, or decisions regarding management of the CGNF. PCEC was founded on the principles of wilderness advocacy; it has been a part of our mission for the past 30 years. For this reason, we support Alternative D.

Wilderness and Backcountry Areas

The alternatives other than D put forth by the Plan largely substitute backcountry areas (BCA) for wilderness, or completely remove wilderness from consideration. While BCAs are a novel and reasonable designation, and potentially suitable for some areas in the CGNF, they are not an acceptable alternative designation for existing wilderness study areas (WSA) and many inventoried roadless areas (IRA).

The Plan outlines its Standards for BCAs in section 2.4.46. In Standard 01, [ldquo]New permanent roads shall not be constructed; temporary roads may be constructed.[rdquo] (Plan,

131) For WSAs and IRAs where backcountry areas are being proposed, especially in Alternatives B, C and E, this Standard would negatively impact the undeveloped nature of those landscapes, especially in the Gallatin and Crazy Mountains. A [ldquo]temporary road[rdquo] can remain as such for years, decades even, if the project area it accesses merits that use, thereby creating all the impacts of a permanent road[ndash]like soil compaction, erosion and a glaring absence of trees. A reclaimed temporary road may prevent vehicle use,

but bicycles, motorcycles and ATVs will still be able to utilize them, legally or not, since motorized use is not strictly prohibited in all BCAs.

Standard 07 states [ldquo]New access to and development of minerals shall minimize impacts to backcountry areas.[rdquo] (Plan, 132). This leaves BCAs open and vulnerable to mining and resource extraction, which, if permitted, will create permanent impacts and the potential for perpetual pollution sources, like acid mine drainage, even when [ldquo]minimizing impacts.[rdquo]

Under the Suitability portion of Section 2.4.46 of the Plan[rsquo]s BCA section it states [ldquo]The backcountry areas are not suitable for timber production. Timber harvest may be allowed for purposes such as fuels reduction, restoration, or wildlife habitat enhancement.[rdquo] (Plan, 132) This statement opens up the BCAs to logging and the necessary road building and development that accompanies such development.

More and more, fuels reduction and forest health are used as a guise for large logging projects. In fact, as reported in the Helena Independent Record, there is a lawsuit in the Helena National Forest pertaining to a proposed fuels reduction/forest health logging project in a roadless area: the Ten Mile South Helena Project. This project seeks to log nearly 17,500 acres within a 60,000-acre project area. The project proposes to use temporary roads. (Kuglin, 2019) The size of those impacts will be felt for generations, no matter how temporary the access. The language in Section 2.4.46 allows for this kind of project in the CGNF, regardless of the statement that [ldquo]backcountry areas are not suitable for timber production[rdquo] because it states in the next sentence that [ldquo]Timber harvest may be allowed,[rdquo] which means it could potentially occur at some point.

We are wary of the BCA designations in the CGNF at the present, especially for the IRAs and WSAs currently in place in the Gallatin, Absaroka, Beartooth and Crazy mountains. Logging roads have already been built right up to the IRA boundaries in all of these mountain ranges. BCAs will allow for the extension of these roads,

[ldquo]temporarily[rdquo] creating permanent impacts to wildlife and wildlife habitat. If these Standards in the BCA designation were removed or revised, and BCAs were defined more strictly to prohibit mining and logging development, then we would possibly be more amenable to that designation, but as it stands now, BCA designations are a serious reversal of existing CGNF protections and completely unacceptable.

Section 2.4.46 also needs to address Standards regarding motorized use, bicycle use, and new trail construction. Currently motorized use in BCAs is only discussed in Guideline 01, which lacks the mandatory authority of a Standard, since it allows for [ldquo]departure from its terms, so long as the purpose of the guideline is met.[rdquo] (Plan, 6) Limitations, if not prohibition, of use of motorized use in BCAs needs to be more clearly defined and adhered to as a Standard rather than a Guideline. Non-motorized mechanical use, such as mountain biking, also needs to be addressed in the Standards of Section 2.4.46. Bicycle use is very popular, and growing more so every year. We recognize this fact and see this as an opportunity for the CGNF to recognize and address this use as part of the Plan, especially considering this user group advocates for BCA designations.

Section 3.33.4 of the DEIS provides more detail about the proposed management of BCAs in the CGNF. For example, the proposed Buffalo Horn and West Pine BCAs will allow for new hiking, horse, and mountain bike

trails, without detailing just how many (leading one to presume an unlimited number). These trails will further impact the wild character of the two areas, inviting more use. Only in Alternative C is the Buffalo Horn BCA blessed with a restriction on timber harvest of any kind and temporary roadbuilding, which is nice; although, in Alternatives B and E that doesn't apply. Why? To what purpose is restricting timber harvest beneficial in only one Alternative, when it is well-documented that the Buffalo Horn is some of the best wildlife habitat in the Gallatins?

In the DEIS, the Cumulative Effects of BCAs are touted as a panacea:

Plan components are sufficient to maintain the current undeveloped or lightly developed characteristics of the backcountry areas. Plan components do so by restricting: new permanent roads, communication sites, utility corridors, saleable mineral material removal, and timber production where those actions would have not have already been restricted, while allowing a mix of non-motorized, mechanized, and motorized recreation opportunities. (DEIS, 852)

How can the CGNF maintain undeveloped or lightly developed characteristics, while allowing for trail construction, motorized and mechanized use in BCAs? Especially in the face of rapid population growth and development in Gallatin and Park Counties?

It's not that the CGNF doesn't recognize the potential impacts of growth, except perhaps when it comes to wilderness:

Growth in the western counties near the Custer Gallatin and the Billings area is likely to increase recreational use of the national forest, including use within recommended wilderness areas. The effects of urbanization and population growth on recommended wilderness use and resource conditions are likely to be gradual and to extend well beyond the planning period. Increased recreational use may negatively affect wilderness characteristics, particularly the opportunity for solitude and natural quality. Examples of potential impacts include increased opportunity for crowding in certain locations, soil compaction or erosion, and threats to native plant species from the spread of noxious weeds from sources outside the area. (DEIS, 835)

Why no such consideration for the proposed BCAs? Yes, population growth and development threaten wilderness character, but a greater threat to wilderness is removing lands that are currently suitable for wilderness designation and opening the door for new trails, high impact use, non-motorized activities, timber harvesting and mineral development.

If the CGNF can acknowledge impacts from growth in the Cumulative Effects on wilderness, then it certainly can recognize the same impacts for BCAs. Think about the soil compaction and erosion that a mountain bike can cause. Think about the crowding and conflicts that will arise with more people vying to ride horses, bike, run, hike and hunt at the same time on the same trails in any given BCA.

Meanwhile in the Cumulative Effects of BCAs the DEIS merely states:

A backcountry area allocation on lands where there is not an existing inventoried roadless area would restrict: timber production on potentially suitable lands, permanent road building, saleable mineral material removal, new communication sites, utility corridors, recreation events, development of recreation facilities, and (in most cases) new motorized trails. While the lightly developed character of these areas is retained, limits on new recreation facilities [sic] and uses restricts lands available for potential future recreation facilities to address increasing population growth. (DEIS, 852)

Relying on limits on new recreation use to deal with population growth will likely not work. In fact, it is the current pressure of population growth and increased use on the CGNF that has led to the idea of BCAs in the draft Plan. Restricting development, timber harvests and [ldquo]in most cases[rdquo] new motorized trails does not prevent them. This is hoping for the best when we should be planning for the worst. The pressures on the CGNF are real; we are witness to them right now, and to think that they won[rsquo]t become greater in 10 to 20 years is just wishful thinking. We have something in the CGNF that is rare, and it has largely been preserved due to its remote location. But the cat is out of the bag, and now we must plan for a new era in the region. If it[rsquo]s the wild places that people come here for, then we must do all that we can to keep them that way, or else the CGNF will become just like every other forest, remembered for what it once was, not admired for what it still is.

There is a sense of apprehension with this study, given that the main conclusion the CGNF comes to in the DEIS regarding recommended wilderness is that it will [ldquo]result in the most potential displacement of current trail users, who would no longer be able to use motorized or mechanized modes of travel.[rdquo] (DEIS, 835) But that[rsquo]s the nature of protecting a place. Do we hold our personal interests above the value of the place, the importance of undisturbed wildlife habitat, and clean water? We must, and we have to in the face of population growth and climate change.

It seems that the CGNF can only worry when it comes to recommended wilderness[ndash]worry about too many people and worry about displacing others. A more

fitting conclusion for wilderness would be to champion and celebrate what it does for the flora and fauna, the refugia it provides, and the wildness that it nourishes. Wilderness feeds resilient ecosystems, and the mere idea of wilderness feeds humanity[rsquo]s soul.

Wilderness is not a place without people. That was an unfortunate construct of the 19th century, an idea that facilitated colonization: It[rsquo]s easier to claim a land supposedly devoid of people than one that has been occupied for millenia. Native Americans used the [ldquo]wilderness[rdquo] in the CGNF long before we arrived and redefined the place. People will continue the use wilderness, as we do now, and as we should: with the least impact we as a species can muster.

BCA designation in the CGNF is a good idea. It is a sensible attempt to address a complicated set of issues and problems that land managers grapple with and address with limited budgets and personnel. We respect this attempt to find a solution to the myriad of stakeholder interests in the CGNF. We hear these same concerns from

our members and supporters and are not blind to what we face locally with increased tourist pressures, new residents, traditionalists, and neo tech-minded disciples.

Can the proposed protections given to certain BCAs (such as no new timber harvesting and roads) be protected permanently by an act of Congress? We ask because if BCAs are the result of the Plan, what do they guarantee? Our concern is that no matter how well-intentioned the protections designated in a BCA, they can be further eroded and undone during future forest planning, rule changes, or a couple of lawsuits. We cannot find these answers in the Plan and are unsure that BCAs will be recognized as intended. This issue needs further clarification and attention in the Plan, since the CGNF is charting unknown territory with their new BCA designation.

For instance, wilderness and the Wilderness Act are in accord with the Multiple Use and Sustained Yield Act of 1960. [Idquo]The establishment and maintenance of areas of wilderness are consistent with the purposes and provisions of this Act.[rdquo] (16 U.S.C. 528)

Creating a novel management classification risks subdividing the Forest into a myriad of use classifications. Where will this subdivision end? What is to prevent a flood of alternative classifications that create a balkanization of the National Forests? The risk from this precedent will have untold implications that the CGNF, and the USFS overall, may not be equipped administratively to handle. [For additional insight on this matter please refer to the CGNF Plan comment authored by Marshall Swearingen]

We regard the integrity of the ecosystem above all else. The tenuous nature of the BCA designations leaves us with only one forest plan allocation that we can truly support that ensures the most ecological resilience, integrity, adaptability, and wildlife connectivity in the face of climate change: wilderness, as put forth in Alternative D.

Recommended Gallatin Wilderness Area

In order to reinforce our commitment to Alternative D, PCEC supports the recommended Gallatin Wilderness Area. It will create a robust wilderness to the west of the Yellowstone River to match the grandeur and scope of the Absaroka Beartooth Wilderness to the east, signaling an enduring responsibility by the USFS to protect the wildlands and wildlife north of Yellowstone National Park for generations to come.

The Gallatins are an invaluable part of the GYE. They provide critical habitat for many wildlife species like grizzly bears, elk, westslope and Yellowstone cutthroat trout and many others. Its flora and fauna are largely intact and diverse. It provides key linkage to the wildlands to the north and west of the GYE.

Carving a large portion of the Hyalite-Porcupine-Buffalo Horn out of both WSA and Wilderness designation, to make the proposed Buffalo Horn Backcountry Area, would potentially fragment the Gallatin ecosystem and remove one of the best areas of wildlife habitat from wilderness protections needed to allow for migration and

seasonal occupancy by numerous species.

The original intention of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area has always been wilderness. Due to a history of unconsolidated land ownership found throughout the West in the form of checkerboarding that resulted from land given to the railroad as it constructed transcontinental rail lines. This land ownership issue was finally resolved with the passage of the Gallatin Range Consolidation and Protection Act of 1993[ndash]HR 873. This legislation consolidated the public lands in the HPBA. Written explicitly into the bill was the following confirmation of its intent:

Lands acquired within the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area shall be managed to maintain their presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System in accordance with the Montana Wilderness Study Act of 1977. (HR 873, 1993, 8(c)(2))

It's important to remember and highlight the original and continuing intentions of creating wilderness in the HPBA, regardless of the tumultuous history of use and management of that landscape since creation as a WSA in 1977[ndash]to the passage of the HR 873 in 1993[ndash]and now the development of the current draft Plan.

The most recent CGNF study, Wilderness Character Monitoring Report Hyalite Porcupine Buffalo Horn Wilderness Study Area, prepared by Erin Clark, Kimberly Schlenker, and Catherine Filardi (Clark et al. 2012), which built upon earlier WSA required studies, collected key baseline data in advance of the preparation of the 2012 Forest Planning Rule and the subsequent draft Plan.

The introduction of the Clark et al. study provides a very thorough narrative of the often controversial and contentious path that was taken to get where we are now (as the CGNF is certainly all too aware of), but it does conclude by saying [ldquo]actions taken since 1977, however, have improved or restored wilderness character in the HPBH WSA, including the acquisition of private land, reduction in number of developments, and the enactment and revision of travel plans.[rdquo] (Clark et al. 2012, 8) To the credit of the CGNF and many others, the HPBA currently remains suitable for wilderness designation in 2019, although getting from there to here was not an easy path, which may explain why

attitudes may have shifted in the last few years and the idea of creating a BCA now seems more palatable. But we can't let that prevent us from completing the original vision of creating the intended HPBA (Gallatin) wilderness, as it retains the necessary characteristics need for that designation.

We have only this one opportunity, and we at PCEC certainly don't believe that now is the time to abandon more than 40 years of hard work, Federal legislation, lawsuits, and numerous comprehensive studies that all support of wilderness in the HPBA.

The critical role the HPBA plays in the GYE is beyond measure. Its very location is key in maintaining undeveloped and unfragmented habitat for wildlife, either resident in the Gallatins, or for wildlife migration from Yellowstone National Park into the NYE. The fact that it borders the Park on the south and extends to

northernmost reach of the range in the West Pine Creek area creates an unfragmented stretch of protected land to tie into the Gallatin Key Linkage Area, allowing for uninterrupted wildlife migration into and out of the GYE.

Additionally, we would like to refer the CGNF to Lance Craighead's 2015 study, Wilderness, Wildlife, and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area (Craighead 2015), which details comprehensively with the ecological importance of wilderness in the HPBA as supporting evidence in our case for the creation of the Recommended Gallatin Wilderness, in particular emphasis to its analysis of key wildlife species.

Absaroka Beartooth Recommended Wilderness Areas

The Absaroka Beartooth Wilderness (ABW) is one of Park County's greatest assets, something we all treasure. It anchors the southern half of the county to Yellowstone National Park, and as a result, we can safely say the grizzlies roam within five miles of Livingston, that many of the headwaters of the upper Yellowstone River are protected,

providing clean, cold water sources for Yellowstone cutthroat trout, and that the northern Yellowstone elk herd has room to migrate throughout the area.

We support all of the the recommended wilderness additions to the ABW in Park County. Building on the existing ABW is a responsible and respectful way to strengthen the ecological resilience of the area. The community of Park County has demonstrated repeatedly over the years that they value wild places and are committed to protecting them.

The local community of Park County, many of who are PCEC supporters, recently banded together to advocate for protecting 30,000 acres of public land in the CGNF from the threats of industrial scale gold mining. More than 400 local businesses formed the Yellowstone Gateway Business Coalition to advocate for the strength of the local economy and way of life that values protected, undeveloped landscapes. We championed an administrative mineral withdrawal and had a two-year moratorium enacted by then-Secretary of the Interior Sally Jewell, which was followed by a thorough environmental analysis conducted by CGNF staff that verified that the landscape was appropriate and suitable for protection from mining.

Everyone's thinking was aligned: Protecting the GYE and the public lands of the CGNF is a priority. That 20-year withdrawal was signed by then-Secretary of the Interior Ryan Zinke. We went further and supported Sen. Jon Tester introducing legislation to permanently protect those 30,000 acres of public land, which passed into law as the Yellowstone Gateway Protection Act (YGPA), with the full support of Montana's entire elected delegation. This is concrete proof that Montanans from all walks of life want to see this place protected and preserved.

In fact the spirit of the YGPA shouldn't necessarily be limited to the Absaroka range. The Gallatins overlook the western side of the Yellowstone River and Paradise Valley, and we all feel the same reverence and commitment to protect that landscape as well.

Additional wilderness designations in the Beartooth Mountains, like Deer Creek, the East Rosebud and Stillwater, and Red Lodge Creek, Lion Creek and others are important, too. The ethos and understanding of wilderness that the ABW brings to this area cannot be underestimated. It is rightly viewed as one of the greatest conservation achievements in the CGNF, and fortifying and building upon it will only add to that accomplishment.

Many employees of the Stillwater Mine live in Park County and commute to the East Boulder mine location. We understand that there is some concern with wilderness designation in the area referred to as the Stillwater Complex. (Plan, While Alternative D could potentially reduce access and exploration for the Stillwater Mine, we do not think that it will hamper any underground mining activities. 102,945 acres is a vast area to set aside for mine exploration and development. (DEIS, 859) We think the CGNF could coordinate more closely with the Stillwater Mine to create a more accurate area needed for mining operations. Already in Alternative D a large area of the proposed Stillwater Complex is outside of wilderness designation. We do not see how the only option is wilderness or none at all, as the other Alternatives have no wilderness designations in that area.

Crazy Mountains Recommended Wilderness

The Crazy Mountains, or the Crazies, as they're referred to collectively, are a dramatic island range that define the natural character of the north half of Park County. We believe that a recommended wilderness area for the Crazies is the best measure the CGNF can take to preserve that character for generations to come.

Any long-term management in the Crazies needs to first address and find practical solutions to the checkerboard land ownership that currently defines that area. We are pleased to see that Goal 01 in Section 3.6.8 specifically addresses this issue (Plan, 170). Any and all options and opportunities should be explored in this regard, with input

from local landowners, area stakeholders, government officials and the CGNF. If possible, and within the ability of CGNF management and budget, elevating this issue from a Goal to an Objective would signal to all stakeholders invested in this effort that it is a priority of the CGNF as well.

The Crazy Mountains, with their wild character, flanked by large working ranchlands, remain largely undeveloped, both at the heart of the range as well as along their edges, making them ideal for wildlife habitat, especially for wolverines, but also numerous other species.

Their location also provides for an ideal migration corridor for wildlife species. While the Bridger and Bangtail mountains provide key linkage for wildlife in the Gallatin range, the Crazies are the key linkage for wildlife in the Absaroka Beartooth mountains (AB). In fact, the Crazies are the only real corridor for wildlife in the AB to connect with wildlife populations in the Northern Continental Divide Ecosystem (NCDE). One species in particular comes to mind in this regard: the grizzly bear.

The importance of the CNGF for the cultural, spiritual and historic values of Native Americans, and the Crow Tribe in particular, cannot be understated, and the Crazy Mountains, in particular, rank high in that regard. We fully support and recognize the interests of the Crow in protecting the Crazies as a spiritual and historic landscape, free from the development and distractions of the 21st century, which only furthers the importance and need to manage the Crazies in a manner that protects them for the long term; and again, wilderness is the most appropriate means to that end.

Although, we can't fully support the the recommendations for the Crazies put forth in Alternative D because we insist that a wilderness area in the Crazies include all of the IRAs (90,690 acres) in that range. That inclusion would be a small move by the CGNF to create an even more positive and lasting impact in the preservation of the Crazies wild character. In fact, we don't understand the reasoning to exclude significant portions

of the IRAs from wilderness, and question the CGNF's decision to do so in Alternative

D. Habitat and wildlife protections in the Crazies will be incomplete and inadequate if the entirety of the IRAs are not given recommended wilderness designations. Ultimately, the Crazy Mountains should be honored with a designated wilderness status they rightly deserve.

Pryor Mountains Recommended Wilderness

Although quite removed from PCEC's area of geographic focus, the Pryor Mountains deserve our recognition. The four RWAs in the Pryor geographic area—the Big Pryor, Bear Canyon, Punch Bowl, and Lost Water Canyon—when combined and given wilderness designation would allow for the protections this unique and delicate ecosystem needs. Like the Crazies, and much of the CGNF, the Pryors hold much importance to the Crow tribe, and that too deserves the respect of a management option that provides the greatest level of protections.

Climate Change, Ecosystem Integrity and Biodiversity

Addressing climate change in the CGNF usually begins with noting the already perceptible impacts that climate change is having on the area at the present. The example of the decimation of the whitebark pine forests from both beetle kill and the blister rust fungus comes to mind right off the bat, the other is earlier runoff. Numerous studies and data are available to document and back up these observations, and the Plan and DEIS do address the current and potential impacts of climate change on particular species, both plant and animal in the CGNF, but climate change doesn't seem to factor into the discussion of Designated Areas and Forest Plan Allocations in section

2.4.35 of the Plan.

While climate change wasn't addressed by the Wilderness Act itself, we think that the principles of the Act, primarily the major characteristics of natural, primeval, undeveloped, and untrammeled that it defines are in accord with need for intact ecosystems and biodiversity that are seen as essential in adapting to climate change.

The NYE and the CGNF possess the very qualities of that untrammeled ecosystem, and the reason for that is wilderness and Yellowstone National Park. Large landscape conservation was born in this region and has been built upon for generations. While our forebears might not have had climate change in mind when founding the Park, or establishing the ABW, we now know how important those places are and will be as we take the issue on.

Wilderness needs to be considered by the CGNF as the most effective land area designation and plan allocation on public lands for addressing and adapting to climate change.

In the Planning Rule (26 CFR [sect]219.8 (2012)), it states that ecological sustainability and ecosystem integrity must [ldquo]include plan components, including standards or guidelines, to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity;[rdquo] (26 CFR [sect]219.8 (a)(1)) adding further that the Plan must include [ldquo]Contributions of the plan area to ecological conditions within the broader landscape influenced by the plan area;[rdquo] (26 CFR [sect]219.8 (a)(1)(ii)) and include climate change as a one of several system drivers taking into account [ldquo]ability of terrestrial and aquatic ecosystems on the plan area to adapt to change.[rdquo] (26 CFR

[sect]219.8 (a)(1)(iv))

Section 3.6.1 of the DEIS specifically addresses ecosystem integrity and the CGNF's approach, citing several studies, regarding biodiversity using a [ldquo]habitat-based approach, versus species-specific management.[rdquo] (DEIS, 145) The Plan, through maintaining intact ecological conditions, will see that [ldquo]critical ecological and evolutionary processes such as nutrient and sediment transport, biotic interactions, dispersal, gene flow and disturbance regimes, will also be maintained and provide the necessary environmental conditions for climate adaptation.[rdquo] (DEIS, 145) Further, ecological integrity [ldquo]Assumes

that ecological systems that retain their native species and natural processes are more resistant and resilient to natural and anthropogenic stresses over time (including climate change).[rdquo] (DEIS, 145)

These are crucial underpinnings driving the science on the Plan and the DEIS. Ecosystem integrity, biodiversity and ecological sustainability are the hallmarks of the CGNF, and they should be invested in at all costs in the face of climate change. As the DEIS states later in Section 3.6.1:

Successful management of vegetation and ecosystems during this period of rapid environmental change will require [lsquo]anticipatory[rsquo] planning and management. Trends in climate, land use, invasives, recreation, etc. should be tracked past to present and forecast into the future so management strategies can be designed to help the ecosystem be resilient to the changes that may be happening in future decades. (DEIS, 153)

We take this to mean the Plan must not only manage, but proactively account for climate change and its impacts on ecological sustainability and ecosystem integrity of the NYE and the GYE. To that end, we say the time is now. Climate change is not some future issue that we have been given a grace period to allow us more time to understand.

The most noticeable sign that climate change is happening are the diminishing changes in snowpack and earlier seasonal runoff. Craighead, in his HPBA study, discusses these readily visible impacts, and states [ldquo]These changes are already occurring. Current long-term snowpack declines are found across the western U.S. and are being caused by temperature increases.[rdquo] (Craighead, 42)

While wilderness per se doesn[rsquo]t solve the pernicious crawl of global warming temperature increases, it does provide refugia for a rich biodiversity of flora and fauna of all species and protected watersheds providing clean water and aquatic habitat, while also maintaining intact ecosystems and unobstructed, connected migration networks.

Wilderness designations and recommended wilderness are the key to the ecological sustainability and ecosystem integrity, as made clear in Section 3.6.1 in the DEIS.

Environmental law expert Sandra Zelmer, with the University of Nebraska-Lincoln, and author of the article [ldquo]Wilderness, Water, and Climate Change,[rdquo] makes the case for the importance of wilderness preservation within the current reality of climate change. Her main point stresses the value of leaving wilderness alone: [ldquo]the importance of protecting wilderness and its [ldquo]community of life[rdquo] [Wilderness Act, 16 U.S.C. [sect] 1131(c) (2006) (defining wilderness partially as a [ldquo]community of life[rdquo]).] from intervention and development will only increase as the climate changes. Wilderness areas provide large blocks of contiguous habitat and undisturbed migration corridors for climate-threatened species.[rdquo] (Zelmer, 314-315)

Zelmer provides a detailed and thorough analysis of both the constraints and benefits of wilderness designation when managing for climate change, ultimately arguing that wilderness is the best solution when addressing climate change. Wilderness may not prohibit some management practices that seek to adapt and react to the

issues that climate change will inevitably create, such as a prescribed burns, or stocking native fish in a remote lake, but Zelmer offers a serious note of caution, and one with which we concur:

For some if not most areas, a dramatically warming climate creates a [no-analog] future. Although land managers might look to historic ecological conditions, processes, and functions in southern or low elevation areas to predict future conditions, processes, and functions in northern or high elevation areas and to plan future scenarios and management responses, the science of bringing climate models down to the fine-scale level needed to make timely on-the-ground decisions may seem little better than reading tea leaves. (Zelmer, 325-326)

We need areas without disturbance, both well intentioned or deliberate, to maintain a balance within the ecosystem. We don't know what the future will bring, even with the best climate modeling; and we shouldn't allow hubris to get the better of us. Currently, wilderness only occupies 2.7% of our public lands in the United States. We need wilderness as a corollary to the changes a disruptive climate will bring. As Zelmer

states, "Adaptive management experiments outside of wilderness areas will be more meaningful, and we can learn more from them, if wilderness is left alone to provide a baseline and a contrast to areas that are manipulated." (Zelmer, 374)

We understand that this runs counter to conventional thinking. We want to do what's best and make right an awful situation, before it becomes worse. Zelmer's concluding insightful words of wisdom have helped guide our thinking, and we think the CGNF should take them heart when considering recommended wilderness areas in the drafting of the final Plan.

Furthermore, a recent study found that globally the world has seen a loss of 1/10 of all wilderness areas in the last 20 years, and that wilderness protections have come nowhere near in keeping up with those losses. It is also evident that wilderness areas are a key component in protecting imperiled species, and a loss of wilderness increases the risk of species extinction. (Watson et al.) This is evident in the CGNF with wilderness areas and WSA areas providing crucial protected habitat for the ongoing recovery of the Yellowstone grizzly. This only stresses the importance of establishing new wilderness in the CGNF, a measure that will demonstrate that "Proactively protecting the world's last wilderness areas is a cost-effective conservation investment and our best prospect for ensuring that intact ecosystems and large-scale ecological and evolutionary processes persist for the benefit of future generations." (Watson et al., 2933)

Wilderness is a tool we can use right now, one that we have at our disposal to address climate change and the ecological well-being of the CGNF:

Intact ecosystems which are not fragmented by human developments or degraded by human activities are important for many reasons. These include the provision of ecosystems services such as clean air and clean water, climate regulation, soil formation, nutrient cycling, and harvesting of food, fuel, fibers, and pharmaceuticals. Ecosystems also provide spiritual and psychological benefits whose values are not yet well understood. These benefits, like many others derived from wild places, cannot be exactly measured in traditional economic terms. (Craighead, 136)

No other alternatives in the Plan provide the safeguards of wilderness as put forth in Alternative D; all leave the door open for one form of development or another, which ultimately leads to fragmentation and degradation of the ecosystem.

Wildlife Migration and Connectivity

An integral bond exists between ecosystem integrity and wildlife connectivity. Wildlife need large, unfragmented ecosystems for seasonal migration, security, sustaining populations, or individual species recovery. This is something which the CGNF can provide with both designated and recommended wilderness.

It is also well established that wilderness areas are critical for wide-ranging and migratory species reliant on intact ecosystems (and their associated ecological processes) and represent residual habitats for disturbance-sensitive species and for those that have a conflictual coexistence with humans, such as many of the world's large carnivores (Watson et al., 2011)

The ABW and the Recommended Gallatin Wilderness are the most stalwart ecosystems to provide wildlife migration corridors from the GYE to the north [dash] the Madison Range to the west.

The DEIS acknowledges this critical relationship, stating [quote]All Forestwide general desired conditions (FW-DC-WL) address some element of habitat connectivity for wildlife, such as species diversity, abundance, distribution, security, refuge, recovery, and habitat within the natural range of variation. These are factors that cannot be maintained without adequate habitat connectivity.[quote] (DEIS, 488) The Plan lists these desired conditions as well. (Plan, 56) This is also borne out through the connectivity modeling in Appendix B of the DEIS.

The conclusions made by the CGNF also support Alternative D, noting that wilderness results [quote]in the lowest human habitat modification and disturbance as a contribution to habitat connectivity,[quote] (DEIS, 498) which as we cite in the Watson study and others, is exactly the ecological conditions needed for successful wildlife migrations. However the CGNF still feels as though it needs to manage for forest health, like a large landscape

gardener, allowing in Alternative B and C [quote]greater management flexibility and a wider range of tools to both maintain and restore habitat connectivity,[quote] (DEIS, 498-499) which we take to mean forest health/fuels reduction logging projects, vegetation management and dead timber removal, all requiring road construction and other impacts that will displace wildlife, alter the landscape, and consequently disrupt migration and potentially fragment an area's ability to provide connectivity.

Nowhere is the issue of connectivity more important in the CGNF than the HPBA. Without question we agree with the Lance Craighead's conclusion:

The HPBA WSA is a critical landscape for wildlife connectivity both locally and regionally between Yellowstone National Park and protected areas to the north and northwest. Connectivity for wildlife is an increasingly important concept to be addressed in management decisions for maintaining long term persistence of wildlife populations by helping ensure the resilience (ability to adapt to change) of those populations. (Craighead, 25)

The Madison, Bridger and Crazy mountains all play an important part in this as well, but without the Recommended Gallatin Wilderness, the entire western half of the GYE risks being cut off from the larger landscape beyond the administrative boundary of the CGNF.

Wild and Scenic Rivers

The CGNF is one of the headwaters of the nation. The watersheds that form the upper Yellowstone, Madison and Gallatin rivers protect the clean, cold water that allow native Yellowstone and westslope cutthroat, mountain whitefish and many other aquatic species to thrive and survive. These headwaters provide essential habitat for wildlife, songbirds, and amphibians. They are the source for the water supply we all rely on for our daily necessities, and irrigation for agricultural production. Water is the lifeblood of the West, and it is elemental that we protect the source.

We celebrated the wild and scenic designation recently given to East Rosebud Creek. It is a remarkable achievement that demonstrates that wild and scenic creeks and rivers

have a valuable place in the CGNF, are well supported by local communities, and can receive the necessary support for the passage of the accompanying legislation. We feel the same support can and should be given to the many other streams in the CGNF.

We think emphasizing the importance of wild and scenic for streams located within wilderness areas should be added to the Plan as a Desired Condition. The classification goes hand in hand with the ethos of wilderness and as the DEIS states [Idquo] the increase protection of an eligible river is a minor addition to existing wilderness management.[rdquo] (DEIS, 840)

In addition to the 19 rivers listed in the Plan we would also recommend the inclusion of the following rivers and creeks:

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- * Taylor Fork Creek - Madison Range
- * Mill Creek - Absaroka Beartooth Mountains
- * Bear Creek - Absaroka Beartooth Mountains
- * Hellroaring Creek - Absaroka Beartooth Mountains
- * Upper Shields River - Crazy Mountains

* Cottonwood Creek - Crazy Mountains

Human Use and Development

We passionately advocate for public lands because we use public lands. Some of us grew up here exploring the CGNF, while others arrived more recently to seek the same quality of life and the opportunities that the CGNF has to offer. The explosion of growth in the counties adjacent to the CGNF only illustrates that an area that was once out of the way and difficult to get to are now some of the main reasons people seek the place out. One look around at the landscape and the story tells itself.

With this (re)discovery of the [ldquo]last best place[rdquo] come all the inherent pressures and conflicts that walk hand in hand with growth and development. We must however hold the place above personal self-interest. It is our responsibility to give the wildlands of the CGNF a fighting chance to remain as they are: largely undeveloped.

In the recent study [ldquo]Trends in vital signs for Greater Yellowstone: application of a Wildland Health Index[rdquo] authors Andrew Hansen and Linda Phillips, ecologists at Montana State University, analyzed the overall health of the GYE and looked at the stressors like climate change, growth and development and the potential impacts they will have. Simply put:

The GYE, while large, intact, and with substantial management capacity, is undergoing increasing human pressure and climate change. [hellip] human population has doubled, and housing density has tripled in the GYE since 1970 and both are projected to double again by 2050 [hellip] The WHI Scorecard rated 6 of 9 vital signs as relatively stable or improving in national parks and designated wilderness. On private lands, in contrast, five vital signs were rated as deteriorating. (Hansen and Phillips, 1)

While the CGNF recognizes this issue and these trends throughout the DEIS, the key takeaway for us is that the WHI within the CGNF is still [ldquo]stable or improving.[rdquo] This makes sense because the pressures of development have largely been on private land. But those pressures are knocking on the door and want to move in and make themselves at home in certain areas of the CGNF, and that presence will only become more acute as growth and development continue.

People move here to be outdoors, which is why Billings was named one of the [lsquo]best towns to live in[rsquo] by Outside Magazine, and Livingston was named [lsquo]one of the best places to own a vacation rental[rsquo] by Forbes Magazine, and Bozeman [lsquo]the best place to live now[rsquo] by Men[rsquo]s Journal. The recreation and tourist economy in communities in the GYE brought in \$630 million in 2018 alone. Recreation is a major driver for the local economy, without a doubt, but recreation shouldn[rsquo]t be the driver of how the CGNF manages the National Forest. Recreation use and impacts are a serious matter and need more attention.

Previously in our comment we pointed out that the CGNF noted impacts of increased use of wilderness from a growing population, but then neglected similar attention to other forest classifications. Again, we think this is rather myopic. In a recent Mountain Journal article, [ldquo]Naturalist Says Outdoor Recreation Can Have Huge Impacts On

Wildlife,[rdquo] the impacts of recreation were quite clear. The article compares impacts by hikers to those hiking with dogs, and then looks at the disturbances of mountain biking. All disperse wildlife, each to a greater extent than the other in that order. (Wilkinson, March 2019)

In another Mountain Journal article the effects of mountain biking in grizzly country were discussed and the conclusions drawn by several different grizzly specialists and wildlife biologists was that the risks of quiet, high speed travel in grizzly habitat pose grave risks not only for bike riders, but for bears as well. Even if contact with a bear is not fatal and at a [ldquo]safe[rdquo] distance, or not even noticed due to the fast pace of bike travel, the repeated interactions cause displacement of wildlife. (Wilkinson, May 2019)

Backcountry Hunters and Anglers (BHA) summarized numerous studies and articles looking at the effects on wildlife from mechanized use and motorized use in Colorado, noting that wildlife habitat [ldquo]is being significantly impacted by the proliferation of mechanized (i.e., mountain bike) and motorized (ATV/OHV) trails on public lands.[rdquo] (BHA, 2018) Needless to say, all use has impacts, but mechanized and motorized uses have the greatest effect on wildlife and protected habitat, regardless of the protestations of individual stakeholder groups across the recreation spectrum. [ldquo]Although there are some groups who claim that their off-road recreation activities on public lands don[rsquo]t impact elk and other wildlife species, scientific (peer-reviewed) studies prove otherwise.[rdquo] (BHA, 2018)

Our point is to not demonize outdoor recreation. We enjoy and encourage being outside, taking what the Japanese call a [lsquo]nature bath[rsquo]. We recognize the intrinsic benefits from outdoor activities: from the relaxation and quiet solitude of a backpacking trip, to the joy and reward of a successful hunt, a strenuous trail run, invigorating bike ride, or just being in the presence of a place so grand that it instills humility in one[rsquo]s soul. We use public lands in many different ways; we want that to continue, but know that all lands and all uses are not always compatible.

We need to acknowledge the needs of the place as greater than our own, and that recreation has impacts even when we don[rsquo]t realize it:

Finding an appropriate balance between biodiversity conservation and outdoor recreation is complicated, especially since impacts vary among species and recreation activities. We must start by simply acknowledging that these uses are not necessarily compatible for all species, in all locations. This will make it easier to justify additional research on this topic, establish restrictions on recreation, and encourage changes in the behavior of recreationists, leading to improved conservation outcomes. (Larson et al., 17)

It is with this concern that we caution the CGNF when determining its land use designations. The more the CGNF is divided up based on varying and competing uses without regard to the ecological integrity, the more fragmented the essential habitat will become, with lasting impacts. [ldquo]We found that the differences in ecological integrity across the GYE largely coincide with land allocation.[rdquo] (Hansen and Phillips, 23)

The Plan addresses recreation with its recreation opportunity spectrum classification tool (ROS). The issue isn[rsquo]t just managing existing use, and potentially expanding new uses on existing trails, there are also the proliferating illegally constructed trails on the CGNF. This is a real concern. In regard to motorized use in Section 2.4.17, with Objectives that vary per Alternative, the Plan directs elimination of [ldquo]existing unauthorized motorized travel incursions[rdquo] in Primitive ROS settings (Plan, 98) We would like to see the same Objectives added that address unauthorized non-motorized, or mechanized incursions and illegal trails. Similar Objectives need to be added to Section

2.4.18 for Semi-Primitive ROS settings (Plan, 99) The CGNF needs to make a serious effort to confront illegal trail construction and unauthorized use through both education and outreach, and the physical removal and restoration of unauthorized incursions.

While we have focused mainly on the on-the-ground impacts, we must briefly address impacts from the air: backcountry airfields. Landing strips only serve to exploit public lands for a select few private interests. They will create both ecological impacts and major disturbances to wildlife and other users of the CGNF from the noise and

commotion of aircraft landings and takeoffs. There was a significant lack of analysis in this regard in DEIS considering the large amount of acreage (30% of the CGNF) deemed suitable for landing strips in Table 105. (DEIS, 674) We are opposed to the construction of landing strips in the CGNF across all Alternatives.

Protecting the remaining portion of the CGNF still suitable for wilderness will be the most challenging decision the CGNF will make. But it will be on the right side of history, as it is the only ethical choice in the face of all the pressures our public lands will face. [ldquo]Altering the last remaining roadless areas to accommodate human uses that are not essential to our survival is actually not [ldquo]pragmatic[rdquo]: those intact ecosystems may in fact be essential to our survival in the future as climate change progresses[rdquo] (Craighead, 137)

Conclusion

We view wilderness as the greatest investment we can make in in this magnificent place that we revere. The reverie we experience from being in, or even next to the public lands of the CGNF comes from a primal place deep inside all of us. We share it and we recognize it in our friends and neighbors when they take in the marvel of where we live, either returning from a trip exploring the backcountry, or from just looking out the window at storm clouds gathering over the mountain peaks. More than anything, we cherish this place for what it is, and we fight to protect it from becoming like everywhere else. This place, the CGNF, by remaining largely undeveloped and intact, has held on to its integrity few other places in the lower 48 can touch. We can[rsquo]t let that slip away.

Wilderness protects our clean, cold water, elk herds, mule deer, grizzly bears, wolverines, birds, forests and landscape. It also provides refuge for people: a place free from light and noise pollution. Wilderness is a place of solitude in an ever increasing world filled with commotion and distraction. Much of greater Montana provided that respite only a generation ago, when wilderness in the Gallatin Range was first proposed, but with the discovery of the [Isquo]Last Best Place,[rsquo] we too face the all too

common commotion of the 21st Century in our wild backyard. It[rsquo]s our responsibility to protect this special place before it[rsquo]s too late[ndash]our children and grandchildren will thank us.

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