PM: 9/8/20

Nancy Schultz
[redacted]

Please use the contact information listed above for any communication on this matter as Lead Objector.

Subject: The following objections pertain to the Custer Gallatin National Forest and as stated in the Custer Gallatin National Forest 2020 Final Forest

Original comments submitted June 2019:

Standing:

I understand the proposition the Forest Service extols in that all objections need to be substantive.

The Proposed Solutions:

My objections have proposed solutions.

The link between Objection and prior Formal Comments:

There is a direct link as many of the comments provided before are the same as provided now. My position has not changed and the science has not either. I present the same and some new information because it surely seems that my original comments were ignored. The case we presented in our original comments is the same that we present now. The data backing up those comments has not changed. What needs to change is an openness to accept the data and science as it is and realize the quality of the forest is dependent upon the readiness to accept new upcoming science. The overall purpose here is to provide protection for the resource (in this case wildlife and habitat) for future generations. That was the purpose in my prior comments and that is the purpose now.

September 7, 2020

Objections Reviewing Officer
USDA FS
Northern Region
26 Fort Missoula Road
Missoula, MT 59804

Objections that concern the Custer Gallatin National Forest Plan

Please accept my objections to the CGNF plan.

I have provided concise statements explaining my objections and suggestions how the proposed plan should be improved:

• The reasons for these objections are: Broadly put, the Forest is at risk of misrepresenting the viability of its intended management for resilience, ecological integrity, and desired future condition, all within a natural range of variation. This affects wildlife, endangered and threatened wildlife and the habitats that they require to be sustainable for the long term.

Almost every day I read about nature's dangerous decline as "unprecedented", species extinction rates "accelerating" "The health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide. This report is from the **Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).** It is not too late to make a difference, but only if we start now at every level from **local** to global"

With this the strongest warning to date about the health of ecosystems and the species that depend on them I am objecting to the forest service plan. My goal is to secure the strongest ecosystem protections for the Greater Yellowstone Ecosystem in Montana. The decisions on the health of this precious ecosystem are in your hands.

We have laws regulations to guide management decisions and I will refer to these.

Laws

National Environmental Policy Act (NEPA) of 1969:

This act requires the analysis of projects to ensure that the anticipated effects upon all resources within the project area are considered prior to project implementation (40 CFR 1502.16).

Endangered Species Act of 1973, as amended: Section 7(a)

(1) Supports biotic sustainability by requiring that "all... Federal agencies shall... utilize their authorities in furtherance of the purposes of this act by carrying out programs for the conservation of endangered species and threatened species."

2) The Endangered Species Act includes direction that Federal agencies, in consultation with the USFWS, will not authorize, fund, or conduct actions that are likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of their critical habitat. Endangered Species Act of 1973, administered by U.S. Fish and Wildlife Service: protect and recover imperiled species and the ecosystems upon which they depend. Record of Decision (2012 Planning Rule) detailed in 36 Code of Federal Regulations [CFR] 219.9 and the associated directives in

Endangered Species Act of 1973, as amended: Provides requirements for Federal agencies with regard to species listed as threatened or endangered, proposed for listing, or candidates for consideration under the act. Section 2 requires all Federal agencies to "seek to conserve endangered species and threatened species," and section 7 requires Federal agencies to ensure that the actions authorized, funded, or carried out by them are not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of their critical habitats

National Forest Management Act of 1976: "It is the policy of the Congress that all forested lands in the National Forest System shall be maintained in appropriate forest cover with species of trees, degree of stocking, rate of growth, and conditions of stand designed to secure the maximum benefits of multiple use sustained yields. Plans developed shall provide for the diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet the overall multiple-use objectives, and within the multiple-use objective."

National Forest Management Act of 1976: This act directs the Forest Service to manage for a diversity of habitat to support viable populations (36 CFR 219.19). Regulations further state that the effects on these species and the reason for their choice as management indicator species need to be documented (36 CFR 219.19(a)(1)).

Wilderness Act (1964) (16 U.S.C. 1131-1136): This act provides the statutory definition of wilderness and management requirements for these congressionally designated areas. This act established a National Wilderness Preservation System to be administered in such a manner as to leave these areas unimpaired for future use and enjoyment as wilderness

We have regulations to guide forest planning

Federal Register/Vol. 77, No. 68/Monday, April 9, 2012/Rules and Regulations 21163 with land management planning. It is intended to create a more efficient and effective planning process and provide an adaptive framework for planning. This final planning rule requires that land management plans provide for ecological sustainability

2012 Planning Rule: Relative to wildlife species and habitats, this rule directs national forest planners to consider:

1. Habitat conditions for at-risk species; 4 See 36 CFR 219.10(a)(5); 219.8; and 219.9(b)(1) Chapter 3.

(b) Consistent with the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528–531) (MUSYA), the Forest Service manages the NFS to sustain the multiple uses of its renewable resources in perpetuity while maintaining the long term health and productivity of the land

(c) The purpose of this part is to guide the collaborative and science-based development, amendment, and revision of land management plans that promote the ecological integrity of national forests

(f) Plans must comply with all applicable laws and regulations, including NFMA, MUSYA, the Clean Air Act, the Clean Water Act, the Wilderness Act, and the Endangered Species Act.

Identify and consider relevant existing information contained in governmental or non-governmental assessments, plans, monitoring reports, studies, and other sources of relevant information. Such sources of information may include State forest assessments and strategies, the Resources Planning Act assessment, ecoregional assessments, nongovernmental reports, State comprehensive outdoor recreation plans, community wildfire protection plans, public transportation plans, State wildlife data and action plans, and relevant Agency or interagency reports, resource plans or assessments. Relevant private information, including relevant land management plans and local knowledge, will be considered if publicly available or voluntarily provided.

Acceptable References from Custer Gallatin Plan

This analysis draws upon the best available literature citations that were found to be relevant to the ecosystems on the Custer Gallatin National Forest. Literature sources that were the most relevant, most recent, peer-reviewed, and local in scope or directly applicable to the local ecosystem were selected.

Uncertainty and conflicting literature was acknowledged and interpreted when applicable. Key information on population trends, life history, and status of aquatic species in the plan area was obtained from the Montana Field Guide (http://fieldguide.mt.gov), state wildlife management agencies for Montana and South Dakota, Forest Service databases, natural heritage programs, Nature Serve, and the U.S. Fish and Wildlife Service, and peer reviewed literature.

· Federal Register/Vol. 77, No. 68/Monday, April 9, 2012/Rules and Regulations 21163 with land management planning

Identify and consider relevant existing information contained in governmental or non-governmental assessments, plans, monitoring reports, studies, and other sources of relevant information. Such sources of information may include State forest assessments and strategies, the Resources Planning Act assessment, ecoregional assessments, nongovernmental reports, State comprehensive outdoor recreation plans, community wildfire protection plans, public transportation plans, State wildlife data and action plans, and relevant Agency or interagency reports, resource plans or assessments. Relevant private information, including relevant land management plans and local knowledge, will be considered if publicly available or voluntarily provided.

Objection the 2012 planning regulations do not say references need to be the most recent or peer-reviewed. Dr. Lance Craighead, a noted local scientist and the forest service should use his report; Wilderness, Wildlife, and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area it was released in 2015 and the report is free and available on his website.

Solution; the Forest Service should include Dr. Craighead's report on the Hyalite-Porcupine-Buffalo Horn WSA.

Connectivity

Corridors may occupy a small percentage of the landscape but they provide important habitat connectivity The focus on habitat connectivity would improve effectiveness of the areas to support wildlife and diverse natural ecosystems. It is the responsibility to provide for wildlife connectivity.

Objection

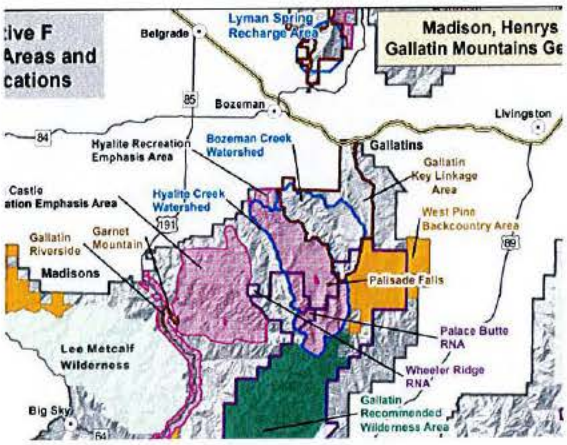
I object to the Forest Service Plan that does not provide protected habitat. Below is a picture of Ramshorn Peak and Ramshorm Lake with the Porcupine and Buffalo drainages.

Ramshorn Peak with Ramshorn Lake Wildlife will get the rocky and in the winter icy peak, while all the forested habitat will become backcountry designation, which means motorized, and nonmotorized recreation allowed. The incredibly important Porcupine and Buffalo drainages will be not secure for the grizzly population in the area. Wildlife will lose important habitat that provides protection, vegetation and water

I object to the Forest Service Plan that does not address how converting the Porcupine-Buffalo Horn part of the HPBH WSA to backcountry designation, will adequately protect wildlife, especially endangered and threatened species like the grizzly, Canada Lynx and Wolverine There has been much written about the importance of the Porcupine-Buffalo Horn area for wildlife.

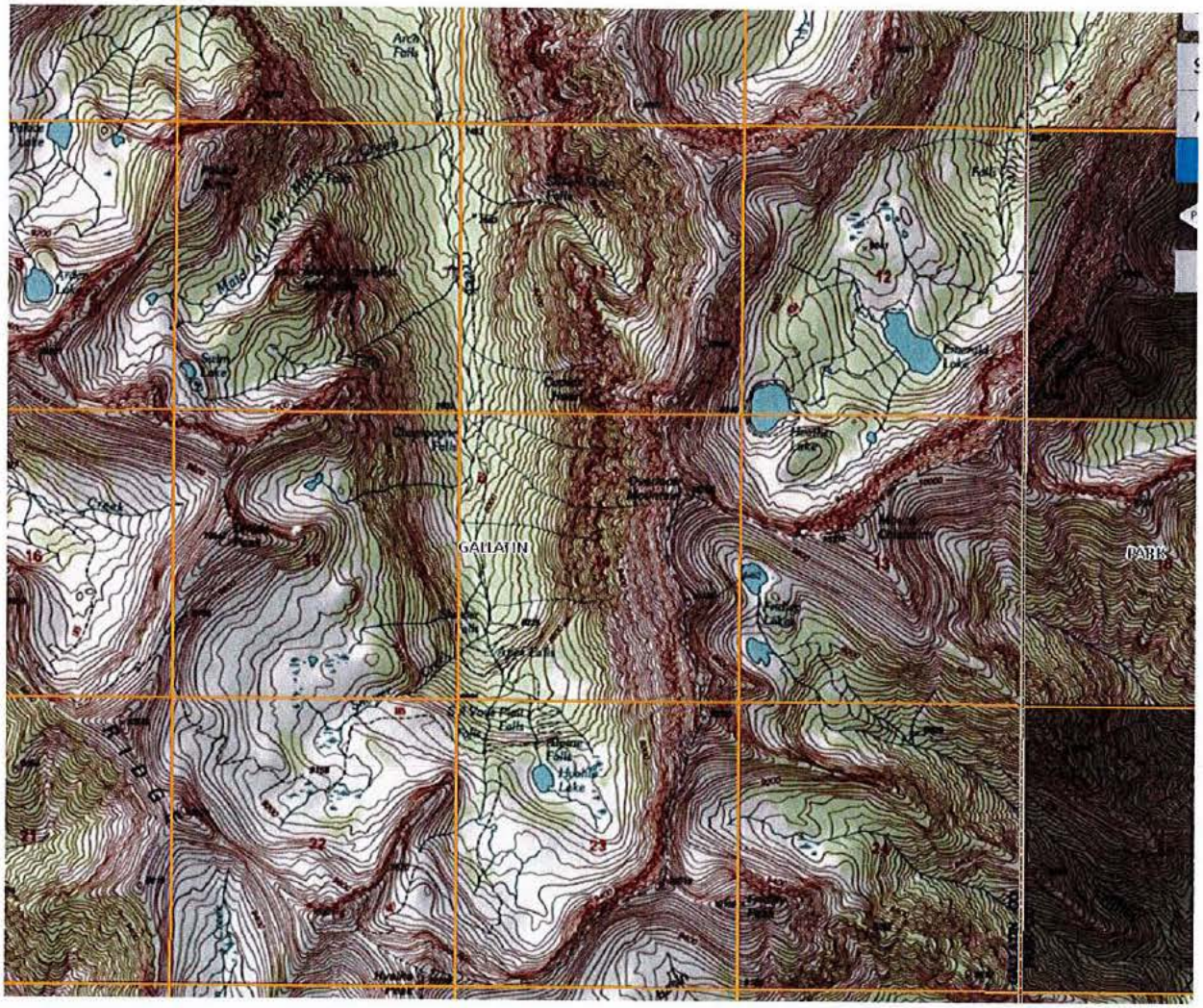
I also object to changing the northern end of the WSA to Recreation Emphasis. Wildlife will lose valuable habitat and a critical corridor/connecting route to the Northern Continental Ecosystem. This route has been identified as a least cost route for the grizzly to connect with the northern population and best ensure genetic connectivity for the species long term survival.

The area at the northern end of the Gallatin Range should remain in the HPBH WSA and not carved up for recreation and the key linkage area is in the Bozeman Watershed timber project, that is not protected habitat.

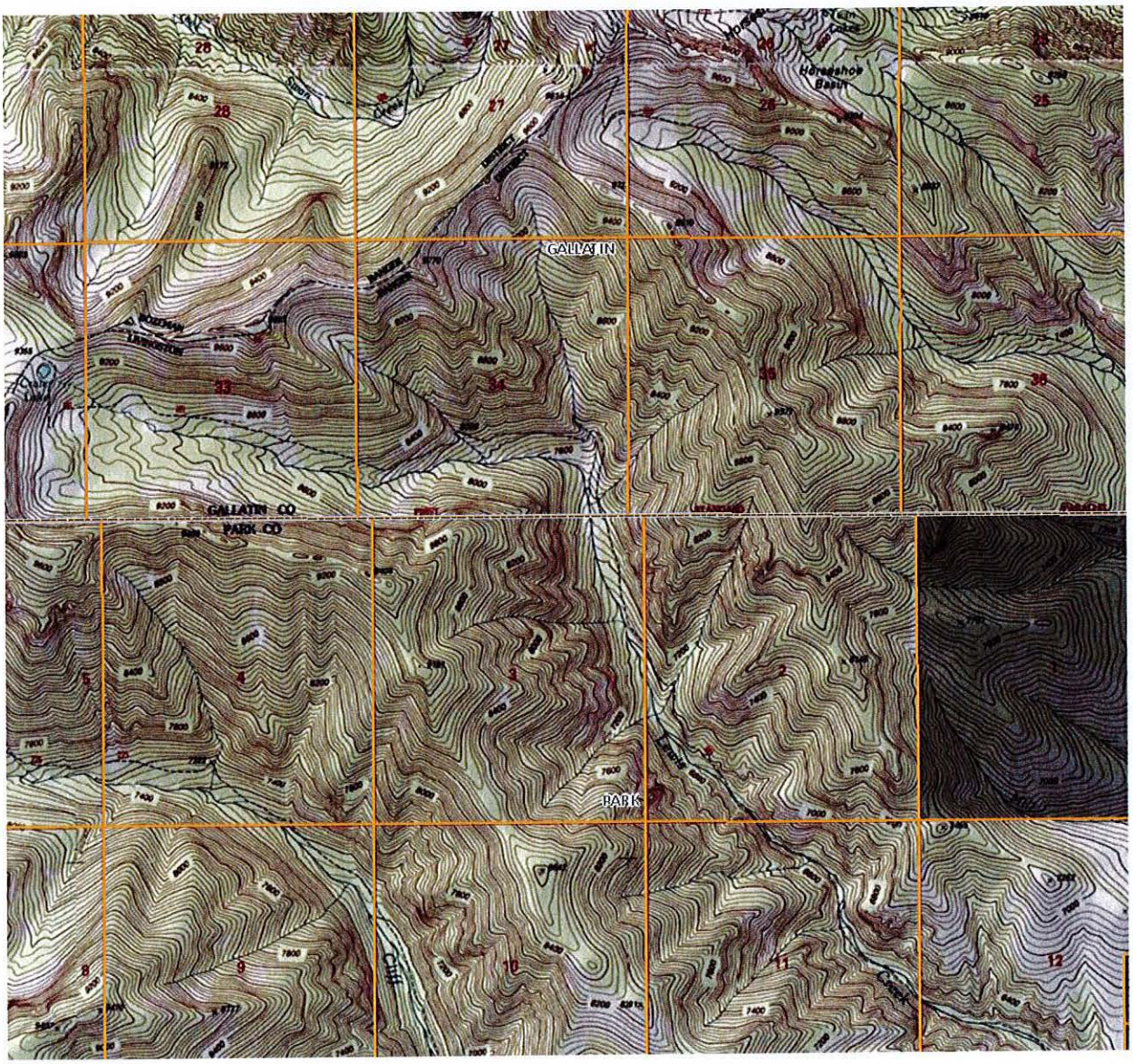


Custer Gallatin Working Group meeting 6-10-2020 New Committees
Gallatin Project Kerry White Chair
This is a large project that goes along the face of the Gallatin Range and up the Gallatin River. It includes drainages of Little Bear, Storm Castle, Moose Creek and ends at Portal Creek.

Below are two maps. The first one shows the area that will become recreation. The second show what wildlife will get when they are dislocated from better wildlife habitat. Please notice the water features, lakes, streams in map one and the lack of water features in map two.



Map one



Map two

The same is true of the area south and west of West Yellowstone and it needs protection, not recreation emphasis.

Solution

The Forest Service should not carve up the HPBH WSA. At the very least, the HPBH WSA must stay intact, and protected areas that provide connectivity should be added.

Corridors

I commented on the importance to wildlife of corridors and the Forest Service plan did not address the corridors.

Objection

The plan does not address that conditions in an ecosystem change (the overarching stressor is climate change as measured by drought, fire, timber harvest, development on private lands, motorized use or other factors) wildlife will need to be able to move. Designated, protected corridors give wildlife the ability to move. These corridors are critical to mitigate climate change and the changes to ecosystems that climate change will bring. Protected corridors need to be available where wildlife needs them. For example, corridors need to connect to other protected wilderness areas (land designation that can best mitigate the effects of climate change). In the CGNF, corridors need to link with the northern Rockies and those wilderness areas and the Salmon Selway wilderness and other wilderness areas that will connect to northern habitat.

Solution

Corridors have been mapped, and the CGNF plan needs to put protected corridors in the plan.

The Key Linkage Areas at the northern end of the Gallatin Range and on the west side of the Bridgers are inadequate. These will be discussed later in this document.

Climate Change

Language from EIS

- There is a great deal of uncertainty about the magnitude and rate of climate change,
- Considerable uncertainties underlay these projections of vegetation under future climates,• Complex interactions of climate with vegetation and disturbance are difficult to predict in time and space making future projections difficult • Abundant scale problems in nature and in the literature that made it difficult to generalize species and ecosystem trends at consistent temporal and spatial scale;

Objection

I object to the forest service using phrases like; great deal of uncertainty, considerable uncertainty... These phrases are not science based. there is a great deal of science that speaks about the effects of climate change on forests. And yet the Forest's insistence on repeating its key claims of managing for resilience, when the Forest knows full well that its attempt at achieving resilience, ecological integrity, and desired future is at some appreciable risk of failure.

The final forest service statement that;

Vegetation conditions are generally within the natural range of variation as described for vegetation, thereby providing wildlife habitat for a variety of life cycle needs, including year-round and seasonal use by a diverse suite of native and desired non-native species.

However, Vegetation conditions are not within the natural range because of climate change, drought and fire and therefore cannot fully support wildlife as is stated

Camille S. Stevens-Rumann, Kerry B. Kemp, Philip E. Higuera, Brian J. Harvey, Monica T. Rother, Daniel C. Donato, Penelope Morgan, Thomas T. Veblen. **Evidence for declining forest resilience to wildfires under climate change**. *Ecology Letters*, 2017; DOI: 10.1111/ele.12889

1. Researchers analyzed data from nearly 1,500 sites in five states -- Colorado, Wyoming, Washington, Idaho, and Montana -- and measured more than 63,000 seedlings after 52 wildfires that burned over the past three decades. They wanted to understand if and how changing climate over the last several decades affected post-fire tree regeneration, a key indicator of forest resilience.
2. They found sobering results, including significant decreases in tree regeneration following wildfires in the early 21st century, a period markedly hotter and drier than the late 20th century. The research team said that with a warming climate, forests are less resilient after wildfires.
3. "We often talk about climate change and how it will affect us in the future, but the truth is we are already seeing those changes," said Camille Stevens-Rumann, assistant professor in the Department of Forest and Rangeland Stewardship at CSU. "Disturbances like wildfires are a catalyst for change. In many places, forests are not coming back after fires."
4. One of the big surprises for the team was seeing the data for the average annual water deficit at study sites.
5. "In my lifetime, you can see these sites becoming substantially hotter and drier," she said. "Many forest managers want post-fire years to be cooler and wetter, to help with regeneration, and that's just not happening anymore, or happening very infrequently."

For example, the Forest knows that Stevens-Rumann explicitly define regeneration as key to resilience; "Forest resilience, or the capacity of a forest to return to a pre-disturbance state , monitoring tree regeneration will provide critical information on possible climate change effects to this vulnerable life stage -Stevens-Rumann

Seedlings will die in hot dry soils no matter whether those conditions follow fire or logging.

The Forest needs to convey the risks the forests under the proposed management plan face in a hotter region. There are reports that should guide management.

A scientific study of the Greater Yellowstone Ecosystem and the effects of climate change are telling.

Yellowstone, Wildland Health Index; Ecosphere, August 2018; Dr. Andy Hansen and Linda Phillips Montana State University.

The report determined that the "Greater Yellowstone's ecological health is challenged by changing climate. This report said:"...changes in land use and climate have reduced snowpack and stream flows, increased stream temperatures, favored pest outbreaks and forest die-off, fragmented habitat types, expanded invasive species, and reduced native fish populations," That report also noted that national parks and wilderness are best able to sustain an ecosystem when the effects of climate change are factored in. This report about many negative impacts due to climate change raises enormous questions for the CGNF and the forest plan. The forest plan will need to better protect for sustainability, now and for the length of the plan and by giving many important areas wilderness designation.

Another Climate Assessment states that Montana's climate is changing:

2017 MONTANA CLIMATE ASSESSMENT Bozeman and Missoula MT: Montana State University and University of Montana, Montana Institute on Ecosystems made the following projections;

Average temperature Since 1950, average statewide temperatures have increased by 0.5°F/decade (0.3°C/decade), with greatest warming in spring; projected to increase by 3-7°F (1.7-3.9°C) by mid century, with greatest warming in summer and winter and in the southeast. Maximum temperatures have increased most in spring and are projected to increase 3-8°F (1.7-4.4°C) by mid century, with greatest increases in August and in the southeast

Extreme heat days are projected to increase by 5-35 additional days by mid century, with greatest increases in the northeast and south. Minimum temperatures Minimum temperatures have increased most in winter and spring and are projected to increase 3-7°F (1.7-3.9°C) by mid century

Solution

The forest service as the responsible official **shall** identify and evaluate existing information relevant to the plan area for the following: (1) Terrestrial ecosystems, aquatic ecosystems, and watersheds; (2) Air, soil, and water resources and quality; (3) System drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and **climate change**; and the ability of terrestrial and aquatic ecosystems on the plan area to adapt to change

· Federal Register/Vol. 77, No. 68/Monday, April 9, 2012/Rules and Regulations 21163 with land management planning

The planning regulations say shall identify and evaluate, the language in the EIS does not identify or evaluate.

The forest service should follow the science, monitor and mitigate. Below are regional studies

Forest Regeneration

Another report from the University of Montana was published in the Proceedings of the National Academy of Science, March 11, 2018 **Wildfires and climate change push low-elevation forests across a critical climate threshold for tree regeneration** Kimberley T. Davis eta. This is a study on climate change. That report drew the following conclusions.

- Species that require snow will be especially impacted: "Projections for the coming century suggest more precipitation as rain rather than snow, which will have substantial impacts to snowpack across the GYE. The net balance of the projected increases in temperature and precipitation results in a 36 percent reduction of the average total annual snowpack during 2070–2099 relative to 1970–1999."
- The greater GYE will have higher temperatures for longer periods and will have a 36% reduction in annual snowpack
- Climate change will also change vegetation. With hotter drier weather patterns there will be more fire. The aftermath of the fires could lead to vegetative changes
- Climate change in the American West may be crossing an ominous threshold, making parts of the region inhospitable for some native pine and fir forests to regrow after wildfires, new research suggests.
- As temperatures rise, the hotter, drier air and drier soil conditions are increasingly unsuitable for young Douglas firs and ponderosa pines to take root and thrive in some of the region's low-elevation forests,.

- Wildfires in these areas could lead to abrupt ecosystem changes, from forest to non-forest, that would otherwise take decades to centuries, the study says.
- "Once a certain threshold was crossed, and then the probability of tree establishment decreased rapidly," said Kimberley Davis, a researcher at the University of Montana and lead author of the study. "The climate conditions are just a lot less suitable for regeneration."

This study that links climate change and forest tree revegetation failure could have huge implications for the CGNG and the future of the GYE in Montana. Scientists have been studying the work of Dr. Davis research project and looking at her evidence.

- Ecologists have been predicting this kind of climate-linked tree regeneration failure for years, says Forest Ecologist Andrew Larson. He wasn't involved in Davis' research project, but says Davis is the first person to go beyond just hypothetical's.
- "Nobody else has managed to find this sort of evidence yet," says Larson. "So it's right on the cutting edge of ecosystem change across the West."
- Larson says Davis' work reveals that changes in forest regeneration that scientists had been predicting would happen by 2040 or 2050 are already happening.

National Academies of Sciences Fourth National Climate Assessment, March 2018, Kim Davis's study was published March 11 in the *Proceedings of the National Academy of Sciences* Wildfires and climate change push low-elevation forests across a critical climate threshold for tree regeneration Kimberley T. Davisa,1, Solomon Z. Dobrowski, Philip E. Higueraa, Zachary A. Holdenc, Thomas T. Veblend, Monica T. Rotherd,e, Sean A. Parks, Anna Salag, and Marco P. Manetah

- We found that regeneration exhibited a threshold response to annual climate conditions and the forests we sampled crossed these climate thresholds in the past 20 years, resulting in fewer recruitment opportunities through time. In areas that have crossed climatic thresholds for regeneration, stand-replacing fires may result in abrupt ecosystem transitions to nonforest states.
- After a fire, all kinds of grasses, shrubs and trees have a blank slate to recover. But trees, especially low-elevation species, need more soil moisture and humidity than their smaller plant cousins. Before the mid-90s, those good growing seasons rolled around every three to five years. The study shows such conditions have evaporated on virtually all sites since 2000.
- "The six sites we looked at in the Bitterroots haven't been above the summer humidity threshold since 1997," Higuera said. "Soil moisture hasn't crossed the threshold since 2009."

Objection on lack of regeneration following fire and my observations and findings that are consistent with scientific studies

The forest service does not have a plan to address the lack of stand replacement forest as a result of fires or logging. Stand replacement is a term used, but is not an objective to be measured and mitigated. I have visited forest service lands in the Custer Gallatin National Forest.

I have gone to fire areas to observe the forest service goal of stand replacing regeneration. My observations of two forest areas in the Gallatin Range that have had fires; one the Fridley Fire of 2001 and the fire in the Storm Castle drainage in 2008. My observations and photos show that these two forests are not resilient and will not regenerate into stand replacing forests.

One area that I have followed is the Fridley Fire of 2001 I did a Lighthawk Ecoflight on July 27,2018 to assess the Greater Yellowstone Ecosystem in Montana. One part of the flight was down the east side of the Gallatin Range. We flew over the Fridley Fire area. I have available a map of the fire and the news reporting of the fire.

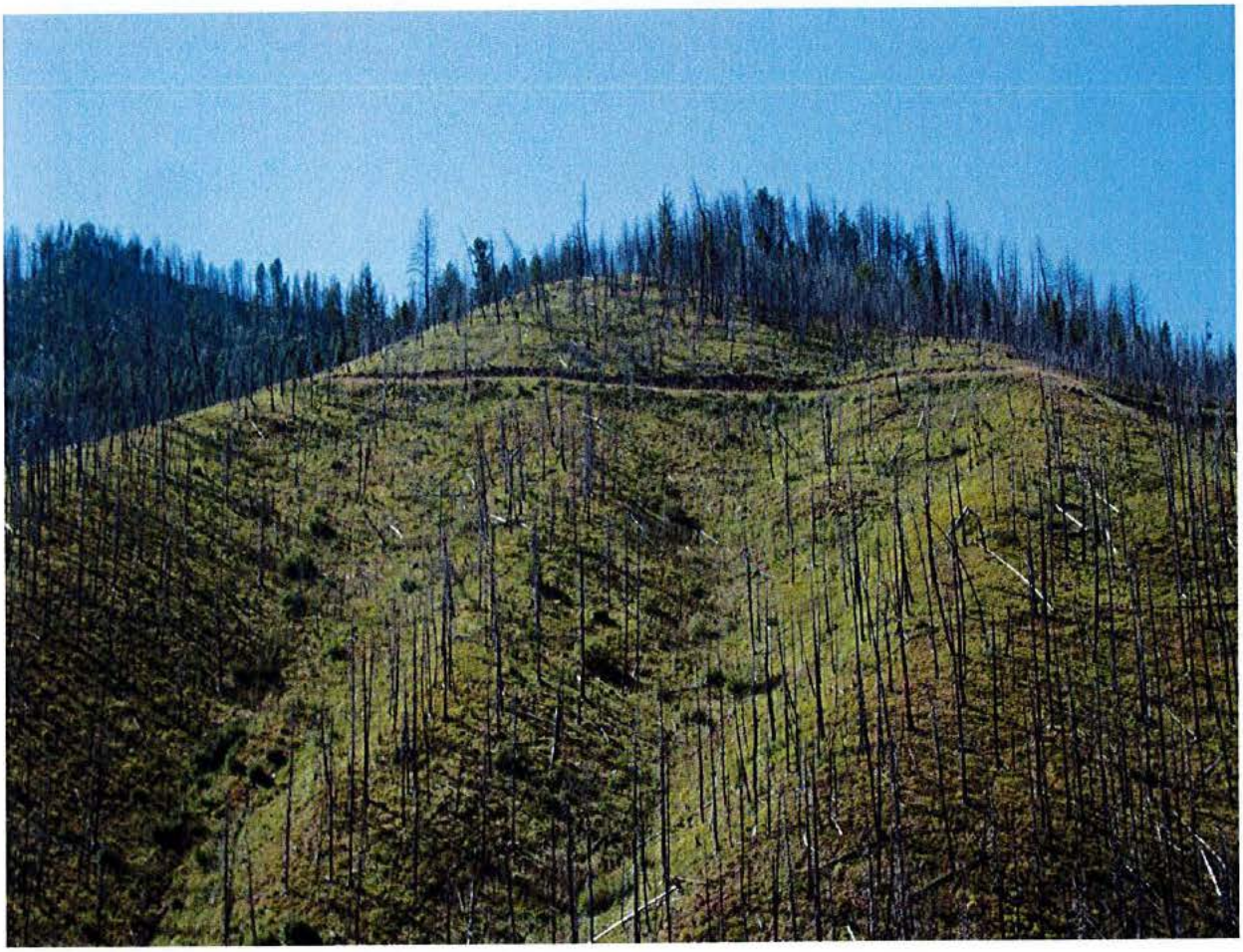
The picture below shows the area 17 years later. Visible are the old logging roads and the current conditions. After 17 years there should be visible stand replacement. There is a noticeable lack of seed trees.

According to the US Drought Monitor, since 2001, the area has been in abnormally dry, moderate drought, severe drought, extreme drought or exceptional drought 68% of the years from 2001-2020 (from the US Drought Monitor archive maps for the last week in August of each year)

The forest service does not have a plan to mitigate after fires. Below is an aerial photo of the Fridley fire.

The same lack of stand replacement forest appears on the west side of the Gallatin Range. The picture below shows a picture taken from the Storm Castle road. The fire in this area was in 2008.

The US Drought Monitor since 2008 shows this area to be in abnormally dry, moderate drought, severe drought or extreme drought 50% of those years (looking at the US Drought archive maps for the last week in August of each year).



Timber Product Manufacturing Infrastructure and Economics

- The ability of the Custer Gallatin to positively affect forest vegetation is partially dependent upon the ability to sell forest products to manufacturing companies and to use harvesting processes (including the residual slash disposal activities) as a means to positively affect the forest vegetation and reduce hazardous fuels.

The forest service says that to positively affect forests they are dependent on the ability to sell forest products.

Objection

The forest service has to cut timber to positively affect the forest vegetation and reduce hazardous fuels. This should not be a forest service directive. Science should guide the decision. I have photographed timber cut areas and do not see stand replacing regeneration.

· Federal Register/Vol. 77, No. 68/Monday, April 9, 2012/Rules and Regulations 21163 with land management planning § 219.10 Multiple use.

Aesthetic values, air quality, cultural and heritage resources, ecosystem services, fish and wildlife species, forage, geologic features, grazing and rangelands, habitat and habitat connectivity, recreation settings and opportunities, riparian areas, scenery, soil, surface and subsurface water quality, timber, trails, vegetation, viewsheds, wilderness, and other relevant resources and uses.

Objection

I object that timber, being one of the multiple uses is identified as a use that positively affects the forest vegetation and reduction of hazardous Also, logging for forest health and reduction of hazardous fuels does not have a strong basis in scientific research.

If the forest service looks at the economic impacts of timber in Gallatin, Park and Madison counties the impact is small. How big is the timber infrastructure?

Gallatin County-industries percentage of private employment; timber.2%, mining.4%, agriculture 1.6%, travel and tourism 25.0%

Madison County- timber.6%, mining 6.2%, agriculture 10.8%, travel and tourism 23.4%

Park County-timber 1.9%, mining .1%, agriculture 6.4%, travel and tourism 32.2%

Solution

The forest service needs to look at the science of logging to create healthy forests and does logging really reduce hazardous fuels? This should be looked at through the lens of climate change, what conditions

are driving forest fires and can hazardous fuel reduction be done on the huge landscape of forest service lands?

Objection

I object to the CGNF plan for the threatened Lynx

The EIS and the final plan give me no assurance that the Canada Lynx will persist for the long term. Conflicting statements are confusing at best. As much as forest service language wants to say it is ok, I could find nothing definitive that would protect this threatened species in a habitat, the Gallatin Range that is designated Lynx Critical Habitat

Lynx forest service

- Effects from Timber Management Mechanical harvest of timber has the potential to affect lynx habitat in ways that can be detrimental, neutral, or even beneficial to lynx. Negative impacts to individual lynx could occur through management actions that remove, change, or reduce the amount or density of horizontal cover in boreal forest types that are naturally capable of supporting snowshoe hares.
- Even-aged regeneration harvest creates openings that are typically only provide marginal (or summer) foraging habitat for snowshoe hares and lynx in the short term (0 to 15 years after harvest), but have high potential to grow into high-quality, stand-initiation stage winter snowshoe hare and lynx habitat in the mid-term (16 to 40 years after harvest
- Backcountry area is a new plan allocation on the Custer Gallatin National Forest, which would occur in lynx habitat. Backcountry areas would be maintained as generally undeveloped or lightly developed with few roads
- land uses are somewhat less restricted in backcountry areas than in recommended wilderness areas. For example, existing mechanized and motorized transport would generally continue to be suitable in backcountry areas
- Effects from Recreation Management Effects of recreation on lynx and lynx habitat are not well understood. Potential ways recreation may affect lynx include disturbance from noise or human presence associated with recreation use; habitat loss resulting from removal of forest Habitat loss can reduce prey availability, as well as produce more fragmented landscapes that could affect lynx movement patterns within or between home ranges

- Key linkage areas would allow public recreational developments (roads, trails, etc.) to continue, as currently authorized, but new recreation developments would be promote low development, quiet use patterns over the majority of lynx
- it is logical to conclude that lower disturbance levels associated with more restrictive land use allocations could benefit lynx
- Recreation emphasis areas currently have, and are expected to continue to receive relatively high levels of motorized and nonmotorized recreation use, and may have a high density of recreation-related infrastructure relative to other parts of the Custer Gallatin.
- Lynx habitat in the Greater Yellowstone Area is naturally more patchily distributed than other areas where lynx are found. Recreation emphasis areas may further fragment habitat due to higher densities. The largest recreation emphasis area (Hebgen winter) overlaps one entire lynx analysis unit and part of another.
- recreation emphasis areas is a way to acknowledge existing and anticipated future use levels.
- In conclusion, all alternatives would continue to contribute to recovery of lynx by providing large blocks of low-disturbance areas and limiting management actions that could adversely affect lynx.

Solution

The forest service needs to go to the Lynx Critical Habitat Map and not have land categories like recreation emphasis, backcountry that compromise the long term sustainability of the Canada Lynx.

Grizzly Bear Canada Lynx Wolverine

Resilient Habitats for Threatened Endangered Listed and Candidates Under Consideration

Plan direction for grizzly bears and lynx and other Wildlife plan components generally support functioning, resilient habitat conditions that would also benefit terrestrial vegetation. The vegetation-related wildlife plan components would provide for the wildlife habitat conditions that support the full suite of native species.

The final plan states that habitat conditions provide security and refuge for wildlife to escape from stresses and threats, while still meeting basic needs such as feeding, breeding, sheltering and movement and that landscape patterns throughout the Custer Gallatin provide habitat connectivity for wildlife, particularly wide-ranging species such as medium to large carnivores and wild ungulates. Habitat conditions within the Custer Gallatin near boundaries provide structural and functional diversity, and are resilient to existing and predictable future stressors, thereby supporting natural movement patterns for a wide variety of species across administrative

Objection

The Forest Service has failed to say how the wildlife plan will support resilient habitat and terrestrial vegetation for the full suite of native species including the threatened grizzly, Canada Lynx and very likely the Wolverine (USFWS plan due 8/2020) and all wildlife, but Federal land managers have obligation to manage wildlife on federal lands.

FISH AND WILDLIFE MANAGEMENT ON FEDERAL LANDS: DEBUNKING STATE SUPREMACY M. Nie, C. Barns, J. Haber, J. Joly, K. Pitt & S. Zellmer1 To be published by Environmental Law, Vol. 47, no. 4 (2017) Suggested Citation: Nie, M., C. Barns, J. Haber, J. Joly, K. Pitt, and S. Zellmer, "Fish and Wildlife Management on Federal Lands: Debunking State Supremacy," Environmental Law, 47, no. 4 (2017)

This evaluation states that; Federal land management agencies have an obligation, and not just the discretion, to manage and conserve fish and wildlife on federal lands.

There are forest health/vegetation management projects that will negatively affect grizzly long term survivability and genetic integration with the Northern Continental ecosystem grizzly population. There are land designations that will negatively impact grizzlies; recreation emphasis and backcountry. These designations will cause habitat fragmentation

Habitat fragmentation caused from human use is an issue addressed in; **Wilderness, Wildlife, and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area, Dr Lance Craighead.** He states;

- Most wildlife species, particularly those prized for hunting, viewing, and photographing, are sensitive to human-caused disturbance and habitat alteration.
- The amount of disturbance to wildlife caused by trail users is greatest from all-terrain vehicles according to most existing studies
- Disturbance due to human activities reduces the amount of habitat available for use by wildlife, increases stress, and depletes energy reserves, thus reducing the carrying capacity of the habitat: the best habitat for wildlife is found in areas with the least human disturbance.
- To ensure that wildlife have sufficient habitat for population persistence into the future, and to confer resilience in the face of climate change and land use change, there must be an adequate amount of protected habitat available among the spectrum of lands that are accessible to those wildlife.
- The more permanent that protected habitat is, and the larger the area is, the more certainty there is that wildlife populations can persist.
- Fragmenting the HPBH WSA into smaller pieces of protected habitat would greatly diminish its value for wildlife habitat and the provision of ecosystems services, and could nullify its ability to function as a refuge from climate change. **Wilderness, Wildlife, and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area, Dr Lance Craighead**

- **The above mentioned document is not in the CG forest plan reference list. I have brought my copy to every meeting with the forest service, stating the importance of this document. The forest service has always said that they know of it and have read it, so why is it not listed as a reference. I have put this in an objection point.**

Solution

The Forest Service needs to use this report and the obligation as stated in the above document as a guide to evaluate the impacts of wildlife from recreation and backcountry uses in the Hyalite Porcupine Buffalo Horn WSA and follow all laws and planning regulations.

Increasing Population

Increasing Human Population Additional stressors that may increase in the future are increasing population levels, both locally and nationally, with resulting increasing demands and pressures on public lands. As related to forest and vegetation conditions, these changes may lead to increased demands for commercial and noncommercial forest products, elevated importance of public lands in providing for habitat needs of wildlife species, and changing societal desires related to the mix of uses public lands should provide

Objection

The Forest Service does not need to focus planning on increasing demands and pressures on public lands. These are one aesthetic value-recreation. the forest planning guidelines say much more is the management responsibility of the Forest Service. I object to the forest service position that increased population, both locally and nationally, should change the forest service policy to follow the Endangered Species Act of 1973, National Forest Management Act of 1976, Wilderness Act (1964)

· Federal Register/Vol. 77, No. 68/Monday, April 9, 2012/Rules and Regulations 21163 with land management planning.

Aesthetic values, air quality, cultural and heritage resources, ecosystem services, fish and wildlife species, forage, geologic features, grazing and rangelands, habitat and habitat connectivity, recreation

settings and opportunities, riparian areas, scenery, soil, surface and subsurface water quality, timber, trails, vegetation, viewsheds, wilderness, and other relevant resources and uses.

(8) System drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and climate change; and the ability of the terrestrial and aquatic ecosystems on the plan area to adapt to change (§ 219.8);

(iv) Protection of congressionally designated wilderness areas as well as management of areas recommended for wilderness designation to protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation.

Solution

The Forest Service shall manage for all stressors and protection of congressionally designated wilderness as well as management of area recommended for wilderness.

Fire

Fire intensity and severity would probably be higher in low severity fire regimes because of fuel drying from hotter temperatures and higher fuel loadings (that is, tree mortality, increased forest densities). In mixed severity fire regimes, an increase in fire risk is projected with short-term increases in fire severity and could convert lands to more of a low severity fire regime, where frequent fires favor more open stand conditions and tree species resistant to fire damage. Increased fire risk and fire sizes in high severity fire regimes are projected to increase with no change in severity and could have significant local effects, especially in the wildland-urban interface.

Of all the ongoing and foreseeable future actions that have the potential to affect fire, especially unwanted wildfire, climate change is likely to be the single most important factor. In general, the fire seasons are expected to become longer, large wildfires are expected to occur more often, and total area burned is expected to increase

Population and Wildland Urban Interface

Human Population Increases and Shifts towards Wildland-Urban Interface More human development is occurring near the boundary of lands administered by the Custer Gallatin National Forest. This trend is expected to continue in the future and is likely to have effects on the forest vegetation. The wildland-urban interface will evolve over time and the need for vegetation treatments being implemented within the wildland-urban interface will increase

Objection

I object to forest service language about the uncertainty of climate change that I mentioned earlier and now climate change is the main driver of fire. We know that hotter and drier are drivers, and this is climate change. Climate change also negatively affects forest regeneration after a fire.

Solution

The forest service needs to address the wildland urban interface problem. Instead of saying they will focus on protecting structures they need to aggressively educate people about building in wildfire prone areas. Many moving into the area want to have the National Forest as their backyard, but this needs education on making the landowners structures as fire resistant as possible and not having vegetation near the structures.

Population

Public visitation on federal lands in the Greater Yellowstone Ecosystem has increased dramatically. In Yellowstone National Park alone, annual visitor numbers increased by more than 40 percent from 2008 to 2018, surpassing 4 million visitors annually since 2016

Objection

The forest service says that they must change land classifications to accommodate the increase and for example in the Gallatin Range (Hyalite Porcupine Buffalo Horn WSA) the forest service is taking 50% of the WSA and reclassifying it to recreation emphasis and backcountry. Roadless wilderness quality land is being downgraded in habitat suitabilty for endangered/threatened species and other wildlife species.

The growing use and the impacts to the Greater Yellowstone Ecosystem in Montana has been studied

Growing use by people

- in *EcoSphere*, Dr. Andy Hansen, professor of ecology at Montana State University in Bozeman and colleaque Linda Phillips write, "Greater Yellowstone's ecological health is challenged by growing use by people and changing climate." The human population has doubled, and housing density has tripled in Greater Yellowstone since 1970 and both are projected to double again by 2050. Human development now covers 31 percent of the ecosystem.

Wildlands are Shrinking

- "The Earth's remaining tracts of wildlands are being altered by increased human pressure and climate change. Yet, there is no systematic approach for quantifying change in the ecological condition of wildland ecosystems." Between 1993 and 2009, the footprint of humanity, which already had resulted in wild places being relegated to merely a fraction of the land mass that started the 20th century, expanded by 9 percent globally.

Solution

The forest service needs to accept and manage the GYE in Montana in a way that will protect this unique (connecting Yellowstone National Park to other ecosystems) place (one of the most important in the world).

The forest service needs to understand that 81%t Montanans and most likely the rest of the nation do not want what the forest service has as its plan.

In a University of Montana poll about WSAs, 81% said don't change or add more land to WSAs

Another UM poll tallied the top three activities that Montanans participate in:

Hiking and trail running 67%
Camping 66% Bird watching
Wildlife watching 49%

These activities require healthy ecosystems. It is in all of our best interest to sustain healthy ecosystems, and cutting the WSA acres by 50% is a huge step in the wrong direction

In addition to the effects to the ecosystem, it is also in the publics best interest to have strong ecosystem economically.

Economics

The annual value of nature tourism to the region, for Yellowstone and Grand Teton parks alone and led by growing interest in wildlife watching, is more than $1 billion. Montana data has been gathered for Montana by the University of Montana.

The UM, Institute of Tourism and Recreation Research, conducts yearly non resident tourism data collection. In 2018 over 12 million non residents visited Montana and contributed 5.24 billion dollars to Montana communities and created 58,000 jobs.

It is clear how important tourism is to Montana in both dollars and jobs. The forest service table on jobs in the GYE counties is very telling;

- Gallatin County-industries percentage of private employment; timber.2%, mining.4%, agriculture 1.6%, travel and tourism 25.0%
- Madison County- timber.6%, mining 6.2%, agriculture 10.8%, travel and tourism 23.4%
- Park County-timber 1.9%, mining .1%, agriculture 6.4%, travel and tourism 32.2%

Travel and Tourism are a leading industry. Recreation is an element of travel and tourism, but not the leading industry for this area. Recreation is not a substantial part of tourism dollars.

Grizzly Bear

Introduction Grizzly bears on the Custer Gallatin National Forest are part of the Greater Yellowstone Ecosystem population that occurs in parts of Montana, Idaho, and Wyoming.

The two grizzly secure habitat maps below show how secure habitat is compromised by motorcycle trails to Emerald Lake and the Storm Castle to Hyalite route. Secure grizzly habitat is compromised in the south by motorcycle and snowmobile trails.

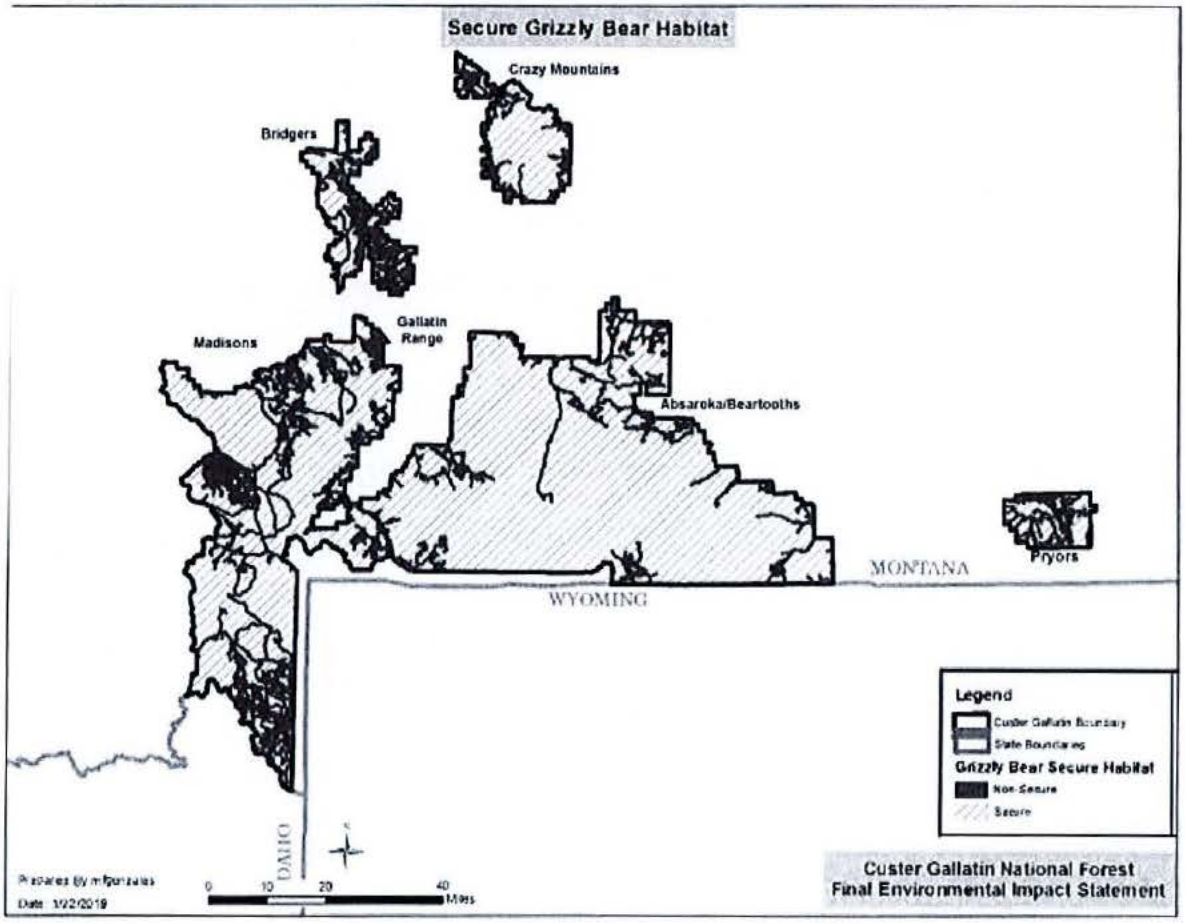


Figure 28. Grizzly bear secure habitat on the Custer Gallatin National Forest

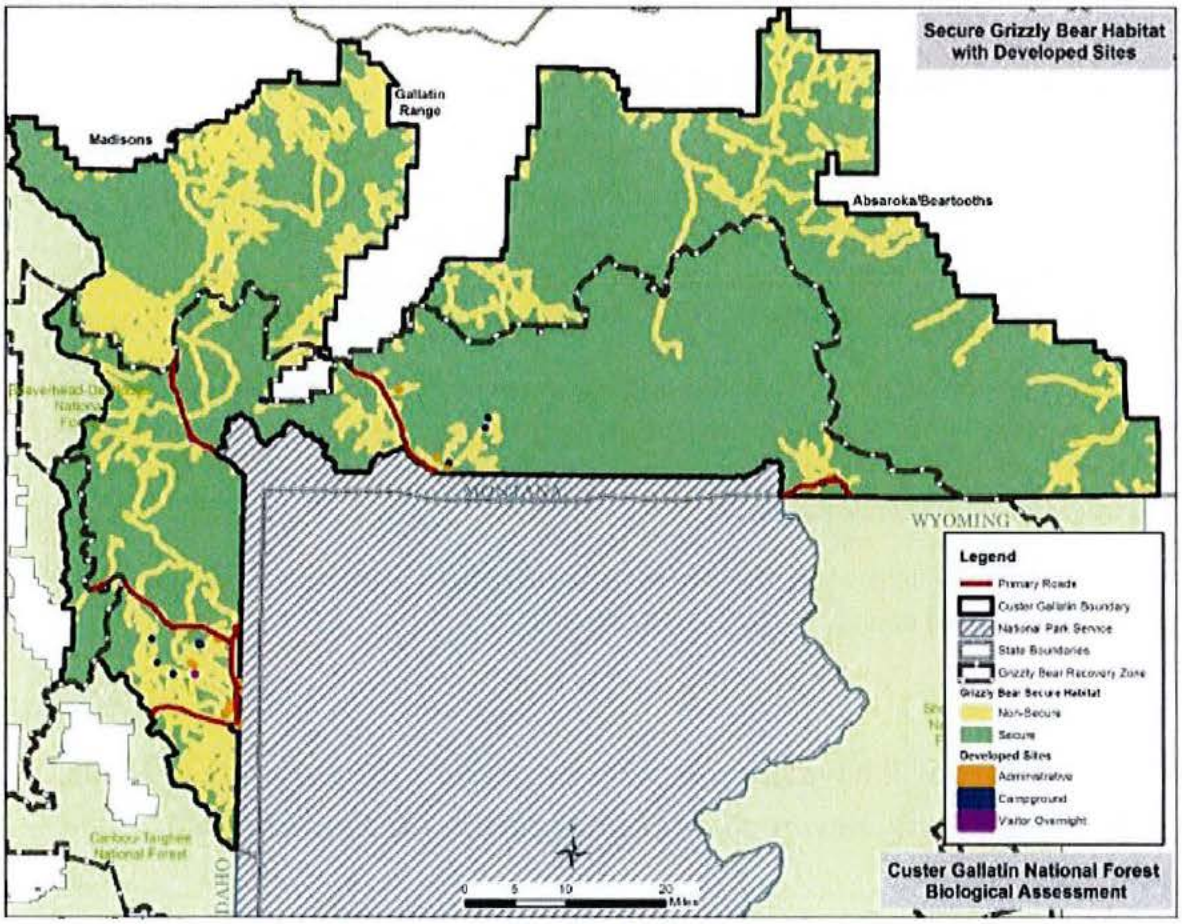


Figure 29. Secure habitat relative to motorized routes, developed site footprints, and primary roads

DNA analyses have concluded that the Greater Yellowstone Ecosystem grizzly bear population is genetically isolated from other grizzly

It is important in terms of providing habitat connectivity to facilitate grizzly bear movement between the Greater Yellowstone Ecosystem and other grizzly bear ecosystems to the north, to promote genetic connectivity among grizzly bear populations in the continental United States

The Bridger Mountain range has generous patches of inventoried roadless areas, which provide secure habitat, as well as well as forage and cover options for bears

- **Potential paths for male-mediated gene flow to and from an isolated grizzly bear population**. CHRISTOPHER P. PECK,1,4 FRANK T. VAN MANEN,1, CECILY M. COSTELLO,2 MARK A. HAROLDSON,1 LISA A. LANDENBURGER,1 LORI L. ROBERTS,2 DANIEL D. BJORNLIE,3 AND RICHARD D. MACE
- This study maps the least cost models for grizzlies. The models go from the Gallatins through the Bridgers

Effects from Recreation Management Emphasis Areas

Offer a variety of recreation opportunities, including motorized and non-motorized uses. These areas may be regional, national, or international destinations, and are often close to human population centers. As such, recreation emphasis areas may have relatively high densities of roads, utilities, and trails, with associated high levels of human use. Under all alternatives, grizzly bear direction) would limit the amount of new development added to recreation emphasis areas inside the recovery zone, except

However, outside the recovery zone, new roads, trails, and developed sites could be added in recreation emphasis areas, which could accommodate and perhaps attract higher levels of human use. Additional human use in recreation emphasis areas could increase human disturbance levels, which could displace some bears from otherwise suitable habitat.

Winter use in recreation emphasis areas should have limited impacts to grizzly bears since most of the associated human use would occur when grizzly bears are denning.

Objection

Recreation emphasis will have huge impacts on wildlife...high density of roads, high levels of human use, new roads, developed sites, increased human disturbance levels

Solution

Do not carve up the WSA for recreation emphasis areas

Wolverine

The threatened Wolverine will be impacted by recreation emphasis and backcountry designations.

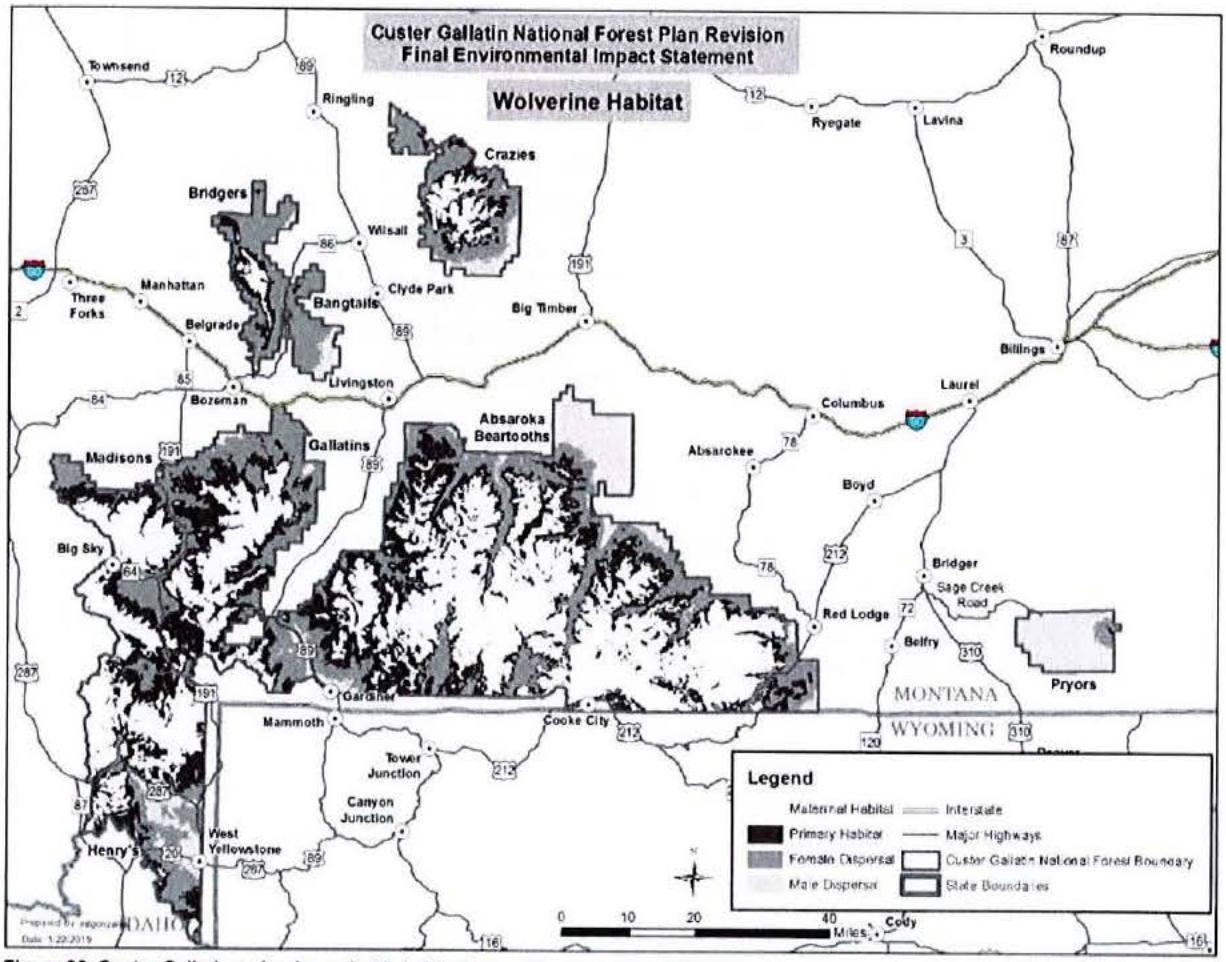


Figure 30. Custer Gallatin wolverine suitable habitat for residential occupation

- The Bridger Range is part of the Central Linkage Region as of high importance for habitat connectivity and gene flow between the larger contiguous blocks of high-quality wolverine habitat. The Bridger Range is identified as important connecting habitat for a wide range of wildlife, because of its proximity to larger contiguous blocks of relatively undisturbed habitat. The upper elevations within the key linkage area maintain persistent spring snow.
- Effects from Timber Management Forest management actions that reduce or remove vegetation cover, such as timber harvest and associated road construction, can impact soil temperature, snow interception, and retention of snowpack
- Noise from equipment and human presence associated with timber harvest can also have disturbance effects on wolverines, possibly resulting in displacement from suitable habitat, or behavioral modifications that could affect a wolverine's energy reserves. However, timber harvest would occur at a very small scale relative to suitable wolverine habitat on the Custer Gallatin, and even relative to the home range size of an individual wolverine.

- Backcountry areas would be maintained as generally undeveloped or lightly developed, meaning they would typically have no roads, or few primitive roads. They may contain no trails, non-motorized use trails only, or a combination of motorized and non-motorized use trails, depending on the particular backcountry area.
    - The CG forest plan does not adequately address the effects of climate change on wildlife, especially the wolverine. An example of the lack of action is how little protection there is for the wolverine. Over 3 years ago Judge Christensen said; "No greater level of certainty is needed to see the writing on the wall for this snow-dependent species standing squarely in the path of global climate change" ..."take action at the earliest possible time to protect against the loss of biodiversity...for the wolverine, that time is now"
    - The science on wolverines says they use the entire Gallatin Range and they avoid roads, snowmobile trails, logged habitat and areas of high human use. Wolverines need a forest plan that gives them, with an incredibly small population of 300 in the U. S. the best chance to survive climate change and human presence.
    - A court decision to require the USFWS to adequately report wolverine conditions will be coming out soon. We will be working with the Forest Service to implement the recommendations or adjust them.

Key Linkage Areas

The final plan states that the availability of secure habitat contributes to habitat connectivity, which facilitates grizzly bear movement between the Greater Yellowstone Area and other grizzly bear ecosystems

The plan also addresses the issue of habitat connectivity between grizzly bear ecosystems, with the long-term goal of achieving successful dispersal of grizzly bears between ecosystems, and ultimately increasing the genetic diversity and long-term health of grizzly bears inhabiting the Custer Gallatin National Forest

The final plan states that research has shown that;

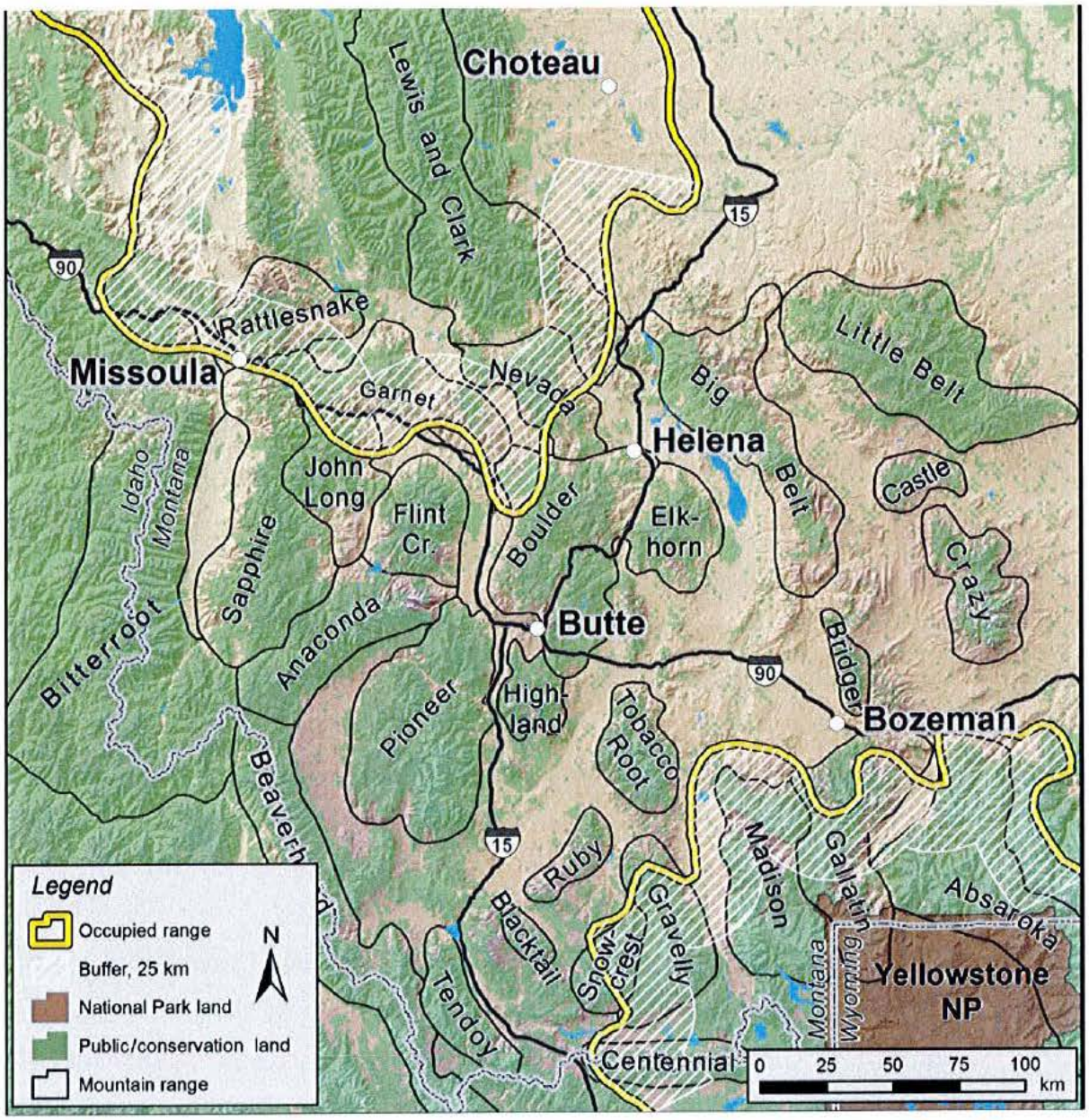
- large-bodied, wide-ranging animals such as elk and grizzly bears avoid areas of high disturbance, such as those associated with major vegetation management actions such as logging operations This research showed that animals were frequently displaced when logging operations involved the use of heavy equipment during peak activity, but returned soon after logging operations were complete.
- parts of the key linkage area would also be allocated as backcountry area. In areas of dual allocation, the more restrictive direction would apply, so new trails for hiking, horseback riding, or mountain biking that would otherwise be allowed in a backcountry area could be constructed in the key linkage area only if needed

- The final plan states that in key linkage areas, human disturbance does not limit habitat connectivity for wildlife, particularly wide-ranging species.
- To protect long distance movements and range shifts for wide ranging wildlife species, vegetation management activities in key linkage areas should include design features to restore, maintain or enhance habitat connectivity. .
- At least four years out of every 10-year period, including at least two consecutive years of no sustained substantial disturbance. Sustained substantial disturbance is the use of heavy equipment or low-level helicopter flights for vegetation management actions for a total of more than 30 days throughout the collective key linkage areas in a calendar year.

Objection

I object to the following activities in key linkage areas

- **Secure habitat and habitat connectivity are essential to the grizzly and other endangered and threatened species to persist for the long term. The plan does not ensure connectivity for the grizzly from the Gallatin Range to the Bridger Range to the Big Belts and then to the Northern Ecosystem.**
- **Logging operations-if an area is logged, what habitat does wildlife return to? This is especially relevant in relation to climate change and what the science is saying about resilient forests not being part of the landscape in the CGNF.**
- **Key linkage combined with backcountry designation is not compatible**
- **four years out of every 10-year period, including at least two consecutive years of no sustained substantial disturbance. Sustained substantial disturbance is the use of heavy equipment or low-level helicopter flights for vegetation management actions for a total of more than 30 days throughout the collective key linkage areas in a calendar year. That amount of disturbance will have a negative effect, especially on endangered/threatened species.**
- **Below is a map of occupied grizzly habitat. The map shows how close the grizzly is to the linkage area. We know that grizzly bear survival is strongly linked to the availability of secure habitat.**



Solution

Linkages should have no activity, not mountain biking or snowmobiling. Please use Dr. Craighead's report as a guide to provide secure habitat.

HPBH WSA

The Montana Wilderness Study Act of 1977 (Public Law 95-150): created eight wilderness study areas in Montana, including the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area, for review by the agency for their suitability for preservation as wilderness. The Montana Wilderness Study Act of 1977 specified

that, "subject to existing private rights, the wilderness study areas designated by this act **shall**, until Congress determines otherwise, be administered by the secretary of agriculture so as to maintain their presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System3.21.3 Wilderness Study Area Affected Environment

Objection

I object to the reduction of the WSA by 50%. The original footprint is the least number of acres that should be designated

The Gallatin Range in particular has been a focus of tremendous local conservation efforts.

The CG forest plan needs to recognize the decades of effort that citizens have contributed to make a Gallatin Wilderness possible

- The Gallatin Range was taken out of the historic checkerboard pattern, and put it into the Hyalite Porcupine Buffalo Horn WSA and other protected roadless areas with the goal of the area becoming wilderness.

- Conservationists and others focused on the facts that the Gallatin Range contains the last major roadless area in the northern Greater Yellowstone Ecosystem and priceless wildlands. For decades, conservationists advocated for wilderness designation for the range under the 1964 Wilderness Act. Partial protection came with the 1977 designation of the 155,000-acre Hyalite Porcupine Buffalo Horn Wilderness Study Area.

- Conservationists then worked to solidify public lands the Gallatin Range from YNP through the range. This solidification was finally achieved in 1993, when, the Forest Service, the State of Montana and the Congress of the United States provided funding. There was great interest in safeguarding key wildlife habitat areas and secure a 40-mile-long unbroken habitat link for grizzly bears and other species between Yellowstone National Park and the outskirts of Bozeman

One of the leading scientists to study the Hyalite Porcupine Buffalo Horn WSA is Dr. Lance Craighead. He wrote **. Wilderness, Wildlife, and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area.** Here are some of his conclusions:

- Although solitude and primitive types of recreation are still important wilderness values, we have learned much more about the ecological importance of wilderness areas in the decades since the Wilderness Act, and the Montana Wilderness Study Act, were passed. We now know

that intact, roadless areas of secure habitat are critical for maintaining healthy ecosystems, particularly in the face of our rapidly changing climate. Intact, functioning ecosystems are our best hope for removing carbon dioxide from the atmosphere and sequestering it, and for buffering the impacts of climate change. Intact areas with wilderness characteristics are essential for maintaining the fish and wildlife populations that provide Montanans with a quality of life that has disappeared from most other states.

- HPBH WSA is an ecologically intact landscape that still contains about 99% or more of the vertebrate species that historically used the area (bison are still missing but could recolonize the area if they were not prevented from doing so by state agencies
- Most wildlife species, particularly those prized for hunting, viewing, and photographing, are sensitive to human-caused disturbance and habitat alteration
- Disturbance due to human activities reduces the amount of habitat available for use by wildlife, increases stress, and depletes energy reserves, thus reducing the carrying capacity of the habitat: the best habitat for wildlife is found in areas with the least human disturbance.To ensure that wildlife have sufficient habitat for population persistence into the future, and to confer resilience in the face of climate change and land use change, there must be an adequate amount of protected habitat available among the spectrum of lands that are accessible to those wildlife. The more permanent that protected habitat is, and the larger the area is, the more certainty there is that wildlife populations can persist. Fragmenting the HPBH WSA into smaller pieces of protected habitat would greatly diminish its value for wildlife habitat and the provision of ecosystems services, and could nullify its ability to function as a refuge from climate change.

We realize that there have been impacts to the Porcupine/Buffalo Horn since those statements were made that have negatively affected wildlife. Namely, the large developments in the Big Sky, Moonlight Basin and the Yellowstone Club which was a major historic wildlife migration route

Management of WSAs

Montanans want WSAs to be managed as wilderness; here is what Montanan's say;

- **Montana Statewide Survey | April 2018**
- **Most voters want to keep WSAs as they are now**
- **TOTAL ADD NEW/KEEP ALL** • **81%**
- **Eliminate protections in all 29 Wilderness Study areas** • **11%**

Montanans do not want WSAs to be geographically altered so non wilderness uses can be permitted. Other uses would includes motorized and non motorized mechanized use, intense recreation that will threaten imperiled species like

wolverine, Canada Lynx and Grizzly bear. Montanans in the UM poll, Crown of the Continent are clear in their expectations

Solution

The CG forest plan needs to address the fact that because the GYE in Montana is not protected with a Wilderness designation it is faced with many challenges that other areas around YNP do not face. The CG plan should reflect the years of hard work that went into solidification to keep the Gallatin Range intact. The CG plan should also recognize that it is more important now than ever to keep it intact because of the ecological value.

Tribal Hunting

It is the Forest Service responsibilities to accommodate these reserved treaty rights including maintaining and improving the wildlife, fish and plant habitats upon which the Tribes rely. Bison hunting occurs along the periphery of the Yellowstone National Park and Tribes currently engage in this traditional practice.

Objection

The Supreme Court decision states that tribes have the right to hunt on their ceded lands. Ceded lands are land boundaries stated in treaties with the US Government, the boundaries became smaller through negotiations with the tribes. The end result is a reservation with identified lands around it becoming the tribes ceded land base. Many states have maps that show the reservation and lands identified as the ceded lands.

HERRERA v. WYOMING(2019)No. 17-532Argued: January 8, 2019Decided: May 20, 2019

1. The Crow Tribe's hunting rights under the 1868 Treaty did not expire upon Wyoming's statehood. Pp. 6-17.

(a) This case is controlled by Mille Lacs

(b) In 1868, the Crow Tribe ceded most of its territory in modern-day Montana and Wyoming to the United States. In exchange, the United States promised that the Crow Tribe "shall have the right to hunt on the unoccupied lands of the United States so long as game may be found thereon" and "peace subsists . . . on the borders of the hunting districts."

The Mille Lacs case states that tribes have the right to hunt on their ceded lands
The Indian Resources Section frequently is involved in litigation protecting tribal off-reservation treaty rights to hunt, fish, and gather ("usufructuary rights"). In *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172 (1999), for example, the Supreme Court held that the Mille Lacs Band of Chippewa retained treaty rights on lands ceded

to the United States in 1837. Under the authority of the Treaty of St. Peters of 1837, the Chippewa ceded a vast tract of lands stretching from what now is north-central Wisconsin to east-central Minnesota. Article 5 of the treaty stated that "[t]he privilege of hunting, fishing, and gathering the wild rice, upon the lands, the rivers and the lakes included in the territory ceded, is guaranteed to the Indians, during the pleasure of the President of the United States."

Solution

The forest service needs to identify those tribes that have as their ceded land base the forest service lands that tribes are presently hunting on.

Harvest of timber on national forest lands occurs for many different reasons

Objection

One of the reasons for timber harvest is protection of municipal water supplies. One of the reasons for the timber harvest between Sourdough Creek and Hyalite Creek is to secure Bozeman municipal water. I object to the timber project, Bozeman Municipal Watershed. This project is unnecessary. The new facility is described by the designer as;

- Bozeman Water Treatment Plant
- The Hyalite/Sourdough water treatment plant (WTP) is custom-designed to handle major fluctuations in raw water resulting from wildfire and high turbidity runoffs, extreme temperature variations or other possible degrading water precursors.

Solution

The forest service needs to abandon the Bozeman Municipal Watershed Project, it is not needed. In addition, this project is part of the key linkage area which will negatively impact any success of the linkage area.

The GYE/Montana may be the largest of its kind, but it is not large... The GYE/Montana is an island surrounded primarily by a domesticated and heavily populated landscape. In order for many species to survive long-term, their populations need genetic refreshing best brought on by connecting to, and co-mingle with other, nearby populations.

The forest service plan needs to state future conditions and less about the wants of some groups and individuals today.

We need to express thankfulness to those who have left us these great natural landscapes to enjoy, the forest service plan should state that it will leave these lands and all its resources in better shape...

Thank you for accepting my objections. Please contact me if there are questions.

Nancy Schultz
[redacted]

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Continued warming could transform Greater Yellowstone fire regimes by mid-21st century
https://www.pnas.org/content/pnas/108/32/13165.full.pdf Anthony L. Westerling[a,1], Monica G. Turner[b,1], Erica A. H. Smithwick[c], William H. Romme[d], and Michael G. Ryan[e]

Federal land management agencies have an obligation, and not just the discretion, to manage and conserve fish and wildlife on federal lands.

FISH AND WILDLIFE MANAGEMENT ON FEDERAL LANDS: DEBUNKING STATE SUPREMACY M. Nie, C. Barns, J. Haber, J. Joly, K. Pitt & S. Zellmer1 To be published by Environmental Law, Vol. 47, no. 4 (2017) Suggested Citation: Nie, M., C. Barns, J. Haber, J. Joly, K. Pitt, and S. Zellmer, "Fish and Wildlife Management on Federal Lands: Debunking State Supremacy," Environmental Law, 47, no. 4 (2017)

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