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Comments: Please accept the attached comments as official commentary from the Gallatin Wildlife Association of Bozeman, Montana.

Thank you

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Subject: Cooke City Fuels and Forest Health Preliminary Assessment

Michael Thom, District Ranger
Custer Gallatin National Forest
Gardiner Ranger District
PO Box 5,
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Dear District Ranger Thom:

On July 12 of this year, the Gardiner Ranger District of the Custer Gallatin National Forest publicly announced their scoping notice for a proposed hazardous fuels reduction project near the communities of Cooke City and Silver Gate, Montana. This project is being promoted on two fronts. The first: is to increase firefighter and public safety within the wildland urban interface (WUI) and the second: to address wildfire crisis strategies on the natural landscape. The latter of which is to reduce wildfire risks and improve forest resilience.

On paper, these sound like admirable goals, but the Gallatin Wildlife Association has been suspicious of projects such as these and this one is no different. We question their effectiveness and intent. The US Forest Service states their policies authorize projects as part of a national effort to mitigate and manage forest fires

and forest health, or so they claim. But our organization believes they do more harm to the overall forest integrity, biological diversity, and national efforts to mitigate a warming world. In other words, they seem like an excuse to continue the policies of old.

The Gallatin Wildlife Association (GWA) is a local, all volunteer wildlife conservation organization dedicated to the preservation and restoration of wildlife, fisheries, habitat and migration corridors in Southwest Montana and the Greater Yellowstone Ecosystem, using science-based decision making. We are a nonprofit 501(c)(3) organization founded in 1976. GWA recognizes the intense pressures on our wildlife from habitat loss and climate change, and we advocate for science-based management of public lands for diverse public values, including but not limited to hunting and angling.

We shall say from the outset that our primary concern over such projects has to do with the impacts on wildlife, their habitat, and their overall existence on the planet. But it is obvious, conditions on the forest floor, climate, and the physical world are all woven in a complex pattern which supports that intricate network of living organisms, large and small. We cannot delineate or separate one from the other.

Project Description and Location:

According to the announcement of July 12, 2024, the proposed action includes the following.

"The proposed action includes approximately 3,693 acres of treatment within three treatment types - mechanical fuels treatments, hand fuels treatments and commercial tractor logging."

Table 1, found on page 7 of the scoping document showcases the breakdown by treatment types.

GWA sees no value in this methodology. We see and have seen, from previous other treatments across our local landscape, only harm done to the local ecological integrity. We will discuss the individual breakdown of treatments and our opposition to them later in these comments.

As for location, a description paragraph found on page 1 of the scoping document describes the location as follows.

"The project area is located outside of the Northeast entrance to Yellowstone National Park (see vicinity map, Figure 1). The project stretches from Yellowstone National Park on the west, follows the Wyoming state line on the south, east of Colter Pass along the Highway 212 corridor, and north to the AbsarokaBeartooth Wilderness boundary and Daisy Pass and Lulu Pass. The Beartooth Highway services the corridor that contains approximately 200 private or commercial structures, a major power line, two Forest Service campgrounds, one Forest Service administrative facility and four trailheads. The Lulu Pass and Daisy Pass gravel roads provide access into the drainages to the north of Cooke City.'

See the vicinity map below.

We should clarify, GWA is not against the necessary work of protecting structures within the WUI from wildland forest fires. That work can be done. But as usual in life; there is a wrong way and a better way. The removal of hazardous fuels from the proximity of structures is the better way, along with the installation of fire-resistant materials upon the structures themselves. Utilizing new technologies and materials in fire prevention is the responsibility of each homeowner or landowner. But as usual, it appears more likely than not, private landowners and investors are reluctant to invest in such tasks. They allow or prefer the US Forest Service to utilize its manpower and expend their financial resources to undergo actions upon the public domain in order to protect the private infrastructure. We at GWA do not support that concept.

Whether or not that perception is correct, that is the perception. GWA strongly favors the approach that each individual landowner has the responsibility to undertake structural improvements, to make their property fire resistant. The best way for protection of the structures and property within the WUI is to do just that, protect the structures and properties themselves; not instill harmful practices that damage the natural landscape. Yet, that seems to be the societal path we are on.

Roads: Within any US Forest Service project area, roads have and always will play a significant part in the project. In fact, many think roads have proven to be the great disruptor, in that they pose the greatest threat with the greatest negative impact upon the landscape. They degrade wildlife habitat, disrupt wildlife movement, and cause an increase in wildlife mortality, whether it be directly or indirectly. They also isolate wildlife populations, disrupt gene flow, and cause air, water, light and noise pollution.

On page 12 of the scoping notice, there is this description pertaining to roads in the project area.

"There are 14.2 miles of haul routes within the project area that are needed to implement the tractor (ground-based) harvest and remove the commercial timber products. Routine road maintenance will be completed on the National Forest System roads that will be used (2.6 miles) prior to implementing the project to ensure route safety and improve existing water quality conditions. This maintenance is authorized outside this decision but is a connected action to ensure the proposed action can be implemented. The remaining roads (11.6 miles) are other jurisdictions, including county, State highways, and private roads. There are also 0.7 miles of temporary roads proposed for facilitating vegetation treatments. Temporary roads would be obliterated and recontoured within three years of project completion."

While the construction of temporary roads appears to be minimal, the 0.7 miles of temporary roads is an increase to the number of roads already developed. The fact that a plan tries to justify temporary road construction as just temporary, does a disservice to the public and to the reality on the ground. Even though the USFS tries to minimize the damage done, the reality is, the damage has already been done. Harm to the biotic community via an influx of noxious weeds has been well documented. The scars upon the landscape do not disappear so

readily.

The Role of Forest Treatments:

GWA has always believed the best way to counter the argument by those perpetuating the practice of vegetative treatments is through science. But let's be honest, usually disagreements over the best solution forward doesn't come down to the best scientific principles or methodology, but it depends upon who has the political will or power in Washington. But we will argue the former here with the hope that one day, better and more scientific land-use management decisions will be made. But they must be heard first.

In a scientific article entitled "Contemporary Wildfires Not More Severe Than Historically: More Fire of All Severities Needed to Sustain and Adapt Western US

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Dry Forests as Climate Changes", William Baker writes in the Abstract the following:

"Wildfires have increased in the ~25.5 million ha of dry forests in the western US, but are wildfires already more severe than historical (preindustrial) wildfires, warranting suppression, or is more fire needed? Recent research suggests that a higher percentage are more severe, but is this from more high-severity fire (=70% mortality) or simply less lower-severity fire?"

"To resolve this question, I compared government fire-severity data from 2000-2020 with corresponding government Landfire historical data, representing the last few centuries."

The answer that Mr. Baker derived is the following:

"The fire rotation (expected time to burn across an area of interest) for high-severity fire was 477 years recently versus 255 years historically, a deficit, not a surplus. High-severity fire would need to increase 1.9 times to equal historical rates. Thus, reducing high-severity fire through fuel reductions is fire suppression, which has significant well-known adverse ecological impacts. These include reductions in (1) natural burn patches, snags, and non-forest openings, that favor diverse fire-adapted species, and (2) landscape heterogeneity that can limit future disturbances and enhance landscape ecological processes."

Continuing in the Abstract, Mr. Baker draws this conclusion.

"All fire severities are needed to provide a variety of post-fire settings that favor a broad suite of selection pressures and adaptations to emerging climate. This paper shows that to sustain and adapt dry forests and nearby communities to fire and climate change, the billions spent on fuel reductions to reduce high-severity fire can be redirected to protecting the built environment, fostering both safe and sustainable dry forests and human communities."

The summation that Mr. Baker makes in his Abstract is very similar to what GWA just stated in the paragraphs above. GWA would like to add one more scientific article to this discussion that proves our point.

In the publication by PNAS, an article entitled "Wildland-urban fire disasters

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aren't actually a wildfire problem" by David E. Calkin , et al., the authors make the several conclusions and statements. In the referencing of the several large, devastating fires of Hawaii, Oregon, California and Colorado, the authors make this statement.

"Society largely regards the wildfire problem as the destruction of human communities. Collectively, disaster fires, such as those mentioned here, have been lumped into a category of wildland-urban interface fires. These problem fires were defined as an issue of wildfires that involved houses. In reality, they are urban fires initiated by wildfires. That's an important distinction-and one that has big repercussions for how we prepare for future fires. To date, these repercussions have not received enough attention."

The article presupposes that the discussion needs to be reframed to where we actually understand that wildfires are not generally a product of wildness, but of the urban interface.

"To effectively address this urban conflagration crisis requires that we fundamentally redefine the WU fire problem. Calkin et al. (developed a community wildfire risk framework that starts with a focus at the individual home level and identifies realistic objectives, effective mitigations, and responsible parties to reduce WU fire risk. The framework highlights the critical role of individual homeowners and local government, while recognizing that the traditional federal and state land-management agencies with responsibilities for wildland fuels management and suppression response have limited impact on community destruction. However, many of the recent investments to address wildfire risk to communities, such as the Bipartisan Infrastructure Investment and Jobs Act of 2021 and the Inflation Reduction Act of 2022, are primarily directed toward fuel treatments in natural areas governed by public land-management agencies."

These statements promote the idea that in order to mitigate or reduce the threat of wildfires involving the WUI, the focus needs to center on locations within the urban infrastructure rather than in natural areas. This is where the dollars should be spent, rather than causing biological harm to the forests. GWA concurs with this sentiment.

Wildlife:

Our main objection to the practice of utilizing fuel reduction projects, as is the case of many others, relies upon the potential harm and damage to wildlife and their habitat. On page 23 of the Scoping Notice, there is this paragraph:

"The Cooke City Fuels and Forest Health Project has the potential to affect three threatened species, the Canada lynx, grizzly bear, and North American wolverine. The project area also includes designated critical habitat for Canada lynx. No other listed species or Custer Gallatin National Forest species of conservation concern have habitat in or are known to occur within the project area."

The continued sacrificing of wildlife and their habitat for the idea that vegetative

treatments are going to save the world, or even a little piece of it from fire, is unrealistic and GWA believes unproven. These three species of threatened wildlife under the ESA are iconic; they are a symbol of wilderness; they are a symbol of "wildness". Yet the US Forest Service seems to have no qualm about justifying forest treatment projects even if they cause disruption or harm to the species habitat. GWA cannot condone such behavior and activity.

To prove the point, a quick excerpt from a scientific article entitled "Habitat fragmentation and its lasting impact on Earth's ecosystems". Authored by Nick
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M. Haddad , et al., it states in the Abstract the following:

"We conducted an analysis of global forest cover to reveal that 70% of remaining forest is within 1 km of the forest's edge, subject to the degrading effects of fragmentation. A synthesis of fragmentation experiments spanning multiple biomes and scales, five continents, and 35 years demonstrates that habitat fragmentation reduces biodiversity by 13 to 75% and impairs key ecosystem functions by decreasing biomass and altering nutrient cycles. Effects are greatest in the smallest and most isolated fragments, and they magnify with the passage of time."

The continuation of these type of US Forest Service projects only undercut the biodiversity of a forest and the forest's integrity yet does nothing to minimize the risk of forest fires, as we have already seen.

Canadian Lynx: The indirect and direct effects along with cumulative effects to Canadian lynx are discussed on page 23 and 24 of the Scoping Notice. These impacts are plentiful and numerous, raising serious doubts about the ability of this project to justify the proposed work. The excerpts pulled out of the scoping text that describe indirect, direct, and cumulative effects pertaining to Canadian lynx are shown below in italics.

* "Overall, the project would decrease lynx foraging habitat by 1,361 acres (24 percent). All other treatments proposed in lynx habitat would occur in non-foraging habitat. Approximately 32 percent of the Beartooth Plateau LAU is in designated Canada lynx critical habitat. The proposed action would decrease potential lynx foraging habitat (PCE1a) in designated critical habitat by approximately 1,113 acres and potential denning habitat (PCE1c) by approximately 1,320 acres."

* "The proposed action would retain a mosaic of habitats for lynx to forage in and travel through in the affected LAU. Although proposed vegetation management would narrow some forested connections and reduce the effectiveness of existing cover, connectivity would not be severed through implementation of project activities."

* "Vegetation management, road management, and associated activities could disturb Canada lynx during implementation. This is unlikely to have measurable impacts on lynx considering the existing level of human disturbance in the project area. Consultation with the U.S. Fish and Wildlife Service for Canada lynx will be completed on proposed activities before the decision is signed for the project."

* "Past activities that have impacted lynx habitat in the project area include vegetation management, wildfires, and development on private lands."

* "There are no ongoing or reasonably foreseeable future vegetation management projects with a potential to affect lynx habitat in the affected LAU. However, further

development and vegetation management on private lands is possible."

These bullet points are more than enough reason to resist attempts to conduct vegetative treatments on the landscape. The USFS admits to the potential or observed harm that vegetative treatments have been observed to have had on other projects like the areas outside of Cooke City or harm that is suspected to take place. The highlighted sections above portend to be based upon assumptions rather than on fact. To use words like unlikely or suggest that "connectivity would not be severed" are debatable points and GWA finds no trust in them.

Grizzly Bear: Here again, listed below in bullet point fashion are the indirect, direct, and cumulative effects upon the species of grizzly bear. As we see below, the Scoping Notice admits that the project area lies within three grizzly bear subunits within the Primary Conservation Area. This is more than concerning, it is a flagrant acknowledgement that somehow these natural lands are more important for managing wildfire than maintaining the natural habitat for endangered species, all because they are in proximity or are part of the WUI. GWA does not share that priority.

"The project area lies within three bear management subunits (subunits) in the Primary Conservation Area (PCA) of the Greater Yellowstone Ecosystem. These include the Crandall 1, Crandall 2, and Lamar 1 subunits. Only small portions of each of these subunits are managed by the Custer Gallatin National Forest. The Crandall 1 subunit is primarily managed by the Shoshone National Forest with only 32 percent within the Custer Gallatin National Forest. The Crandall 2 subunit is also managed mostly by the Shoshone National Forest with only 1 percent within the Custer Gallatin. The Lamar 1 subunit is primarily managed by Yellowstone National Park with only 10 percent of the area within the Custer Gallatin National Forest and another 5 percent within the Shoshone."

The Scoping Notice lays out the existing and the potential harm to the grizzly bear. Again, those sections of text highlighted in yellow are questionable in their nature and presentation and are in need of further scientific support. It is not enough anymore to simply state that effects are temporary or short-term, or that impacts would be insignificant. How do we know these disturbances would be insignificant or temporary? Such vague statements are not evidence and should not be taken as fact. These bullet points are notable and deserve comment.

* "Vegetation management is proposed on 772 acres in the Crandall 1 subunit, 322 acres in the Crandall 2 subunit, and 2,596 acres in the Lamar 1 subunit. Regeneration harvest would reduce cover by 35 acres in the Lamar 1 subunit. All other proposed treatments would retain some level of vegetative cover within units, although the effectiveness of existing cover would be reduced."

* "Approximately 336 acres of vegetation treatment is proposed in secure habitat, including 123 acres in the Crandall 1 subunit, 73 acres in the Crandall 2 subunit, and 140 acres in the Lamar 1 subunit. Implementation of the proposed project could disturb grizzly bears in the vicinity of activities. Disturbance effects would be temporary and short-term. All three affected subunits have high levels of secure habitat (over 80 percent), so bears disturbed by project activities could move to more secure areas nearby."

* Although proposed vegetation management would narrow some forested connections and reduce the effectiveness of existing cover, connectivity would not be severed through implementation of project activities. Vegetation management, road management, and associated activities could disturb grizzly bears during implementation, but these impacts would be temporary and short-term."

* Many activities have caused and continue to cause disturbance to grizzly bears within the affected subunits. These include non-motorized and motorized recreation, vegetation management, road maintenance and use, trail maintenance, utility maintenance, prescribed fire, wildfire suppression, and human activities associated with mines. All these activities are expected to continue in the future. The combined effects to habitat and security from past, ongoing and reasonably foreseeable activities would have localized effects on individual grizzly bears, but individuals would adapt to these changes. Impacts at the scale of the subunit would be insignificant.

GWA challenges those statements above highlighted in yellow because they are either based upon assumptions or suppositions. GWA values the secure habitat of grizzly bears in high regard for we have witnessed many projects on the Custer Gallatin National Forests sacrifice or trade away the secure habitat for the bear in order for the completion of the project. Once again, it appears that wildlife is always being asked to make sacrifices for the ongoing of the US Forest Service program, yet we (man) fail to recognize that wildlife should be part of that program.

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Wolverine: The wolverine is the 3 species mentioned in the Scoping Notice that's listed as a threatened species by the United States Fish and Wildlife Service (USFWS). The species is generally perceived as a solitary animal, isolated from other individuals, making them a rarity to find in the wild and hard to determine their population numbers or distribution. However, once again, wolverine habitat is known to exist in the project area, according to the Scoping Notice with 13,216 acres of modeled wolverine maternal (denning) habitat and 18,544 acres of primary wolverine habitat.

* Most proposed project activities would occur in areas where all three overlap.

* No impacts to wolverine denning are expected. Implementation of project activities could result in disturbance to wolverine movement and foraging. Wolverines may temporarily avoid areas while disturbance is occurring. Considering the size of the project area in relation to the home range size of wolverine, these impacts would be insignificant.

* Proposed activities could also change the distribution of prey species, including forest ungulates, over the short-term. Treatments would improve habitat conditions for these species over the long-term by increasing habitat diversity and forage production. It is unlikely that available prey resources would change appreciably at the scale of a wolverine home range.

* Proposed project activities would not create a barrier to wolverine movement in or through the project area. Consultation with the U.S. Fish and Wildlife Service

for North American Wolverine will be completed on proposed activities before the decision is signed for the project.

- * Past activities that have impacted wolverine habitat in the project area include timber harvest, wildfires, and winter recreation.

- * Ongoing winter recreation causes disturbance to wolverines in maternal (denning) and primary habitat. Most of the project area is in the Cooke City winter recreational emphasis area and sees high levels of winter motorized recreation.

- * Wolverines may avoid areas where project activities are occurring, but this effect would be insignificant at the scale of a wolverine home range.

GWA couldn't disagree more with the concept or idea that these treatments would only be temporary or insignificant upon the species of wolverine. These are surely assumptions not based upon fact or science. The following excerpts
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were taken from The Wolverine Foundation's website .

"Low wolverine densities, fragmentation of suitable habitat, and high demographic sensitivity to adult mortality raise concerns that harvesting of wolverines at the southern extent of their North American range could have a detrimental effect on their metapopulation dynamics. The current understanding is that no other type of human activity has the same potential to cause populations to become dangerously small or locally extirpated (Ruggiero et al. 2007)."

"Another concern regarding wolverine conservation in North America is fragmentation and disturbance of habitats due to resource extraction (including timber harvesting), backcountry skiing, snowmobiling and roads."

Because the wolverine density is so sensitive to the actions of man, we do not see how the USFS can allow justification of such treatments upon the landscape and just chalk it off as not being detrimental to the overall population. Whatever happened to the harm actions such as this may cause to the individual animal? It is easy to say it won't affect the total population within the United States, but what about the population within the Greater Yellowstone Ecosystem. Then that scenario becomes more concerning.

Climate Change, Carbon Sequestration, and Wildfire:

As stated, the purpose of this project is to reduce the potential wildfire risk. This project and so many other vegetative treatments like it have become routine across our western forests. However, the treatment being pushed by politicians and many land-use management agencies is to log, thin, and/or utilize prescribed burning to curtail the buildup of forest fuels and maintain forest health. The first two of these treatments are basically a rendition of the same old prescriptions practiced across our country in the last century and a half. The difference? At that time, those actions weren't undertaken with the principle of reducing wildfire risk, they were undertaken with premise of getting the cut out. Now we use them today, but we have given those actions a new name.

Our understanding of forest and climate science has come a long way since then. We know these practices do little in mitigating climate change but exacerbate the effects of a warming world. They are not mitigative, they are cumulative in making a warming climate warmer. Local and regional land-use management agencies seem to degrade or minimize the influence that local forest actions have on the global climate, failing to realize that old metaphor, death by a thousand cuts. To highlight this metaphor, GWA will reproduce some factual statements

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from the Climate Forests Coalition and how they relate to our climate here at home.

* "17.2 billion metric tons of carbon stored in U.S. federal forests. Federal forest protections are critical to safeguarding communities from the future impacts of climate change."

* "35 million metric tons of carbon sequestered from the atmosphere by federal forestlands. There is no other technology that can match forests for carbon removal at this scale."

* ">95% Forest carbon is stored in forest ecosystem pools vs harvested wood products."

We point out these facts for the basic reason that forests do a better job of sequestering carbon than those attempts to log, thin, or alter them. According to

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California State Parks website , our forests have far more value alive than being cut for alternative purposes.

"Undisturbed forests do the best job at sequestering carbon. Cutting down trees inevitably alters carbon storage, and releases carbon dioxide into the air as the wood decays. Twenty percent of greenhouse gas emissions come from deforestation and other forms of land use change."

This is contrary to the Scoping Notice as stated on page 27.

"However, over the long-term, management activities that are consistent with Forest Plan desired conditions are likely to increase carbon storage and reduce emissions by reducing disturbance risk and storing carbon in wood products, as well as recapturing carbon as forests regrow.

Specifically, harvesting and prescribed fire treatments will achieve a more resilient forest condition that maintains critical ecosystem functions into the future and will improve the ability of the Forest to maintain carbon stocks and enhance carbon uptake. The Forest as a whole is expected to remain a modest carbon sink when projects are implemented commensurate with Plan analysis (such as this Cooke City Project)."

GWA disagrees with that stated notion found in the Scoping Notice and with the belief that harvesting, and fire treatments will achieve a more resilient forest. There is a great abundance of science stating otherwise. We have asked the question in past commentaries; how does an agency know if perhaps they are removing trees and vegetation that already has the greatest resistance to fire and disease? Once again, mankind is forcing himself into a natural process to determine what's healthy and what isn't. GWA is strongly against the insinuation

that mankind knows better than nature itself as to the betterment of our native forests.

GWA will close on this one more piece of scientific evidence published in the scientific journal of *Frontiers in Forests and Global Change*. In the article entitled "Forest Carbon Emission Sources Are Not Equal: Putting Fire, Harvest, and Fossil

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Fuel Emissions in Context" by Kristina J. Bartowitz , et al., there is this lengthy statement found in the Abstract.

Climate change has intensified the scale of global wildfire impacts in recent decades. In order to reduce fire impacts, management policies are being proposed in the western United States to lower fire risk that focus on harvesting trees, including large-diameter trees. Many policies already do not include diameter limits and some recent policies have proposed diameter increases in fuel reduction strategies. While the primary goal is fire risk reduction, these policies have been interpreted as strategies that can be used to save trees from being killed by fire, thus preventing carbon emissions and feedbacks to climate warming. This interpretation has already resulted in cutting down trees that likely would have survived fire, resulting in forest carbon losses that are greater than if a wildfire had occurred. To help policymakers and managers avoid these unintended carbon consequences and to present carbon emission sources in the same context, we calculate western United States forest fire carbon emissions and compare them with harvest and fossil fuel emissions (FFE) over the same timeframe. We find that forest fire carbon emissions are on average only 6% of anthropogenic FFE over the past decade. While wildfire occurrence and area burned have increased over the last three decades, per area fire emissions for extreme fire events are relatively constant. In contrast, harvest of mature trees releases a higher density of carbon emissions (e.g., per unit area) relative to wildfire (150-800%) because harvest causes a higher rate of tree mortality than wildfire. Our results show that increasing harvest of mature trees to save them from fire increases emissions rather than preventing them. Shown in context, our results demonstrate that reducing FFEs will do more for climate mitigation potential (and subsequent reduction of fire) than increasing extractive harvest to prevent fire emissions. On public lands, management aimed at less-intensive fuels reduction (such as removal of "ladder" fuels, i.e., shrubs and small-diameter trees) will help to balance reducing catastrophic fire and leave live mature trees on the landscape to continue carbon uptake.

Those sections of text highlighted in yellow reinforce and reiterate the positions that GWA was stating above. While the clarification on page 9, 10 in Table 4 of the Scoping Notice provides the specificity of the actions to be taken within the project area, the USFS is talking about the harvest of trees that are 9" at DBH. GWA would not necessarily classify these trees as young or ladder fuels. These would be mature trees, especially depending upon species. Between size and spacing criteria stated, GWA questions the veracity of the program as it is leaning more toward a logging program, than the thinning of underbrush being touted. We remain very skeptical in the project that it would adhere to the parameters about the removal of ladder fuels.

What is being proposed in the Scoping Notice seems to contradict the science as stated above in the reference. This is even more concerning when the Scoping Notice lists a summary of treatments within inventory roadless areas. On page

12, there is this statement.

"Vegetation sizes to be removed in the IRA are primarily less than 9 inches diameter at breast height (DBH) in the various treatments. Individual larger trees may be removed based on forest health and to ensure further growth and establishment of the stand."

GWA cannot condone the actions above scheduled to take place in the Inventoried Roadless Areas.

Current conditions on the Ground:

The following observations were taken

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from GWA board members who have recently visited the project area on June 30, 2024. Their consensus states that many sections of the project area do not warrant fuel reduction treatments. The following pictures (Figure 2, 3) were taken within the project area, north of Hwy 212. Observations were noted on their trip at Coulter Campground and followed roads into the project area northward. Notes from those who visited the project area are as follows.

- * Some areas had some burn scars (a few burned snags) probably from the 1988 Yellowstone fire.

- * The area did not have widespread mature forests.

Figure 2

- * The area had patchy forested areas. Picture was taken near the Beartooth Roadless Area.

- * Picture two was also taken near the Beartooth Roadless Area.

- * Project area has a huge footprint in a critical area for wildlife.

- * From observations, the project area did not seem to justify a fuel reduction project.

Notes below are from those who visited the project area from Park County

Environmental Council on the southside of Hwy 212.

Here the forests have a different appearance than that reported on the north side of Hwy 212.

Figure 3

* Here the forests appear healthy and do not need fuel reduction treatment.

* "They are situated along Soda Butte creek, on north facing slopes where they hold plenty of moisture, and protect the riparian area. Great efforts have gone into restoring Soda Butte Creek after the impacts of mining in the area. Logging could create erosion and introduce excessive sediments to the creek."

* "These forests sit on the wilderness boundary, and have wilderness qualities, providing critical habitat and a seamless interface between Silver Gate and Cooke City and the wilderness to the south."

* "Logging these forests under the guise of fuels reduction, no matter how selective and sensitive the approach, will only create lasting impacts that will diminish the quality of the forest and open the forest to drying effects and yes, actually making it more prone to fire and burning."

* "These forests survived the 1988 fires that swept through that area; in fact, they were too wet to burn when the USFS tried to blackburn them as the wildfires approached. They do not need a hand to be more fire resistant".

* "A majority of the area south of Highway 212 are Inventoried Roadless areas that will be negatively impacted by the incursions of logging by opening the forest to potential illegal roads and mechanized use."

These observed conditions by alternate groups correspond to GWA's belief that the Fuel Reduction Treatment as proposed is not currently necessary.

In Conclusion:

GWA has many serious concerns over the fuel reduction project on the Custer Gallatin National Forest near Cooke City and Silver Gate, Montana. Our primary concern about these forest fuel reduction projects is multifold. One, GWA believes that monies could be more efficiently and effectively spent by focusing upon the actual structures and infrastructure itself, rather than on applying destructive land altering techniques to public land to mitigate wildfires. A technique, we might add, yet to be proven. Private landowners and stakeholders alike should utilize the new materials and technologies available to them, rather than politically push the federal government to take on the responsibility of fireproofing the natural landscape. This is paramount of utilizing public lands for the benefit of private gain.

Our second hesitation on these projects is obviously the harm done to the local environment. Projects such as these open the forest floor to more direct sunlight causing more harmful effects of drying the soil biome, altering microbiotic changes to the forest floor and soil crusts, allowing invasive species of weeds, fragmenting wildlife habitat and disrupting the movement of many species of

wildlife, in this case endangering endangered species. The following excerpts document our skepticism; fires are exacerbated by the very treatment methodology being promoted

GWA urges the Custer Gallatin National Forest to review a paper by C.M.

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Countryman , recently republished in Fire Management Today, November 2021, Vol. 79, No. 3.

(The article is adapted from Fire Control Notes 17(4) (October 1956), page 15-19. It was first published in the Society of American Foresters meeting proceedings in 1955. The author was a forester for the USDA Forest Service at the California Forest and Range Experiment Station, Berkeley, CA.)

"Although the general relations between weather factors, fuel moisture, and fire behavior are fairly well known, the importance of these changes following conversion and their combined effect on fire behavior and control are not generally recognized. The term "fire climate," as used here, designates the environmental conditions of weather and fuel moisture that affect fire behavior. It does not consider fuel created by slash because, regardless of what forest managers do with slash, they still have to deal with the new fire climate. In fact, the changes in wind, temperature, humidity, air structure, and fuel moisture may result in greater changes in fire behavior and the size of the control job than does the addition of more fuel in the form of slash.

Conversion that opens up the canopy by removal of trees permits freer air movement and more sunlight to reach the ground. The increased solar radiation in turn results in higher temperatures, lower humidity, and lower fuel moisture. The magnitude of these changes can be illustrated by comparing the fire climate in the open with that in a dense stand. It is the same kind of difference that occurs when a closed, mature stand is clearcut.

In the open, solar radiation impinges directly on the Earth's surface. Because both the Earth and the air above it are poor conductors, heat is concentrated at the surface and in the layer of air next to it. Ground fuels can thus become superheated. In full sun at midday, it is not uncommon for surface temperatures to reach 165 °F (74 °C) or more, based on unpublished data on file at the California Forest and Range Experiment Station in Berkeley, CA (see also Geiger 1950; Kittredge 1948).

Clearcutting, then, can change the fire climate so that fires start more easily, spread faster, and burn hotter."

You add those ecological concerns along with the societal statistic from Western

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Fire Chiefs Association that 90% of wildfires are human caused, that should guide us in our wildfire and forest management. In addition to that, Pacific

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Biodiversity Institute states 95% of human-caused wildfires occur within ½ mile of a road. This must be a marker for our society in how we transcend to the future because following old practices from 150 years ago will not work in the 21st century, not if we want to protect the resource we have left.

Our third issue of concern is based upon principle, but also on fact. Forest fuel reduction and logging projects have a cumulative effect on the total release of carbon in the world's atmosphere. The saying we can die "a death by a thousand cuts" is never applied more aptly than in this scenario. For the U.S. Forest Service to say, these projects will not have a negative impact upon the world's supply of carbon is to minimize each forest's role in the world's climate.

The Scoping Notice has two Alternatives, the No Action Alternative A and the Proposed Action Alternative B. GWA cannot support or endorse the Proposed Alternative; we must be in favor of Alternative A, the No Action Alternative. While we advocate for wildlife, we also advocate for their habitat. At some point, land management agencies must realize man-made interference over the last 150 years has not always proven to be the best medicine for the forest. We will end our comments on the following reference found in a paper entitled: "WILDFIRE AND SALVAGE LOGGING: Recommendations for Ecologically Sound Post-Fire Salvage Management and Other Post-Fire Treatments On Federal Lands in the West" by Beschta, Robert L., Dr ., et al.

"We also need to accept that in many drier forest types throughout the region, forest management may have set the stage for fires larger and more intense than have occurred in at least the last few hundred years."

GWA will close with this premise. It is time for the NFS to develop a new paradigm in forest management; it is time to allow trees within a forest to do what they do best, sequester carbon, maintain forest integrity, and maintain forest biodiversity. These assets have more value for society than anything that has been done on a previous national scale throughout time. We have entered a new generation, a generation where we should apply the latest in wildfire science and forestry science methodology and technology. Relying on policies of the last 150 years has come and gone. They do not meet the needs of the 21st century.

Sincerely,

Clinton Nagel, President
Gallatin Wildlife Association

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