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April 28, 2023

To: Reviewing Officer
Northern Regional Office
Attn: South Plateau Landscape Area Treatment Objection
26 Fort Missoula Road
Missoula, MT 59804

Subject: *Gallatin Wildlife Association states Objection on the South Plateau Area Landscape Treatment Project*

From: Gallatin Wildlife Association
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Bozeman, MT 59718

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Clint Nagel, President
Gallatin Wildlife Association

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

Subject: On March 15, 2023, the Custer Gallatin National Forest reinitiated the opportunity to Object to the South Plateau Area Landscape Treatment Project. The Gallatin Wildlife Association (GWA) would like to take advantage of this opportunity. The following objection pertains to the decision by the Custer Gallatin National Forest (CGNF) to accept the Proposed Action Alternative in order to conduct vegetative treatments on the South Plateau area west of Yellowstone National Park (YNP). The Environmental Assessment of 2022 only presented two alternatives: the No Action alternative and the Proposed Action alternative. The latter was chosen with a "Finding of No Significant Impact."

Responsible Official:

Leanne Marten, Regional Forester, Northern Region, Region 1, U.S. Forest Service.
Project to be completed on the Custer Gallatin National Forest, Hebgen Lake Ranger District.

Standing:

Original Comments on the revised EA release were submitted October 27, 2022. In fact, these comments will be GWA's fourth set of comments on the SPLAT Project including the original release of the EA back in 2020. GWA has spent considerable time in the formation of comments in order to present the best available science. We stand by our original comments and statements.

Rationale:

In matters pertaining to the South Plateau Landscape Treatment Project on the CGNF, GWA will state our objections as a result upon the agency's "finding of no significant impact" (FONSI) of the Proposed Action. We cannot understand how that finding was derived when one considers the many issues we have raised of biological integrity and biodiversity. We have discussed several matters of contention. We feel there was not enough examination of GWA's overall concern on the cumulative impacts of man on the CGNF landscape.

In so doing, we feel the agency and society are perpetuating centuries of interference and manipulation upon the Greater Yellowstone Ecosystem (GYE). GWA believes the Forest Service is actually precluding the natural progression on the forest. Acts of logging, thinning, and even extensive areas of burning, and fire suppression have and are interfering with natural progression of a forest's life cycle. Death of trees are a natural occurrence, whether it be from fire, pests, or other natural causes. But years of man-made interference have come at a risk, a risk of disturbing the biological integrity and biodiversity of what we see occurring on the landscape.

The Scope of the Project:

The size and scope of the project area is large compared to the small section of CGNF landscape in extreme southern corner of Forest Service land adjacent to YNP to the east and the Idaho/Montana border to the west. Yet this sliver of land is critical to the overall ecological integrity and biodiversity of flora and fauna of the GYE.

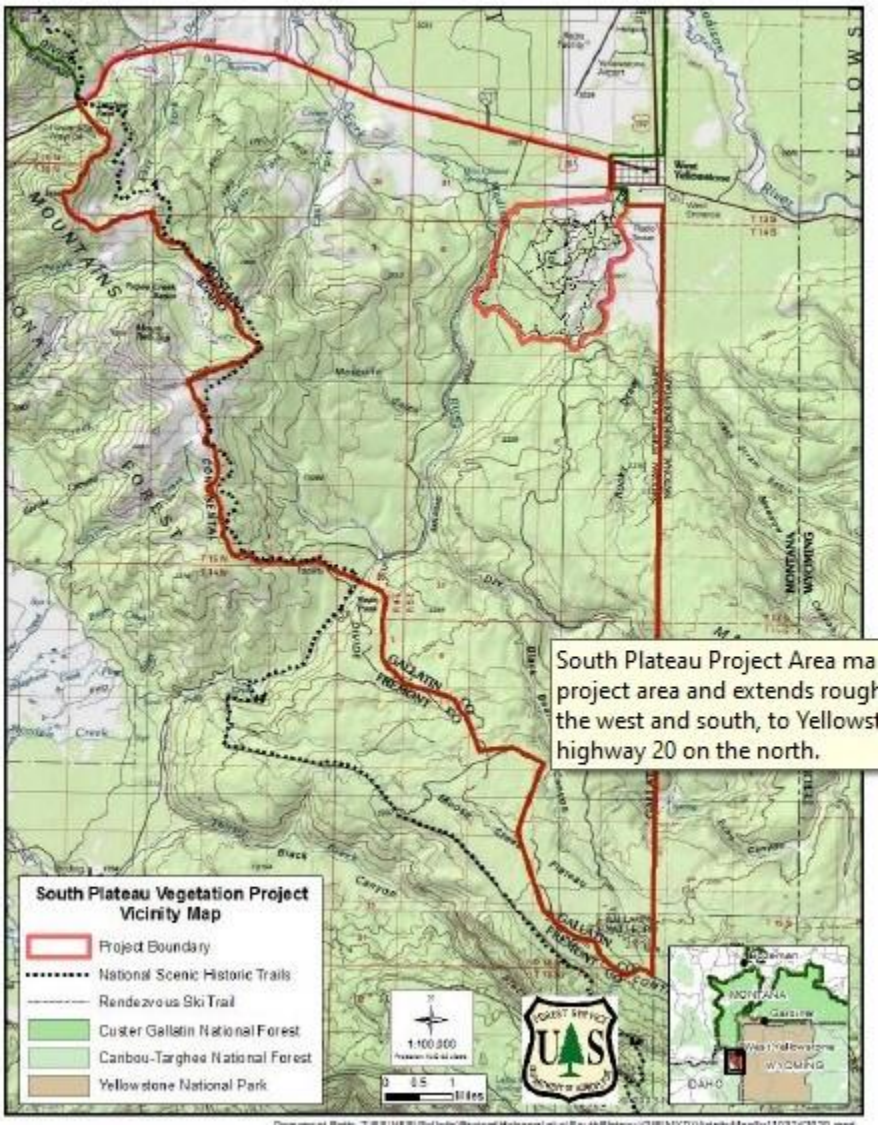
Table 1. Proposed action maximum extent.

Proposed Action	Maximum Extent
Total Treatment[1]	16,462 acres
Clearcut Harvest	5,551 acres
Commercial Thinning	6,593 acres
Non-Commercial Thinning	2,514 acres
Temporary Road	56.8 miles
Fuels Treatment[2]	1,804 acres

[1] Total Treatment is the combined total acreage of all the proposed actions (clearcut, thinning, and fuels treatments).

[2] Fuels treatment acres are for units treated with the primary goal of fuels management; fuels treatments may be applied as a secondary treatment to any unit. Total acres may be increased: if another type of treatment unit is dropped, it may be treated for fuels if the treatment is analogous or less intensive than the previously proposed type.

GWA believes that due to size and scope of the SPLAT Project, this action deserves a full Environmental Impact Statement (EIS) analysis. With YNP being adjacent to these lands on the CGNF, and the fact that YNP has been named a Biosphere Reserve in 1976 and a World Heritage Site in 1978, this action deserves nothing less than a full EIS.



We Object Because:

We object to the FONSI as we have several misgivings about the Proposed Alternative. We were presented with only two options: the No Action and the Proposed Action Alternative. We chose the former, the U.S. Forest Service chose the latter. We can live with a different set of opinions, but we really must challenge the decision that the Proposed Action would have no significant impact upon the landscape. We must recognize that action or a no action decision has a result. There are implications to

everything we do. To think otherwise is arrogant and tells us perhaps one of today's societal ills. We need to do better in a natural world.

Climate Change:
Since our September 15, 2021 comments, GWA has presented several articles of scientific evidence as to the dangers of climate change. We have argued that proceeding ahead with the mentality of the past was a failed recipe for the future. Climate change needs to be taken seriously and one way to do that is to apply mitigation practices that match the science. This current decision by the Forest Service does not do that. In fact, climate change exacerbates today's problems of land-use and wildlife management. Declining wildlife populations, loss of habitat, habitat degradation, habitat fragmentation, and disease are all exacerbated from the magnifying nature of climate change. Twenty first century land-use problems necessitate more prevalent and universal science-based answers.

GWA would like to reference our first article, an article found in Inside Climate News under Politics and Policy. The article entitled "*Logging Plan on Yellowstone's Border Shows Limits of Biden Greenhouse Gas Policy,"* Marianne Lavelle[1] addresses the fact that U.S. government agencies are expected to quantify the climate impact of each agency's actions. But that apparently did not happen in this instance for she writes:

> *"But last month, the Yellow decided to move forward with a 16,000-acre logging project on the border of Yellowstone National Park without applying the new White House guidance, which would have involved a detailed projection of the resulting greenhouse gas emissions."*
>
> *"The Forest Service said it was already in the final stages of developing its management plan for the South Plateau in Custer Gallatin National Forest in Montana when the White House Council on Environmental Quality delivered the new guidance to federal agencies on Jan. 9."*
>
> *"As a result, the agency announced its decision on March 15 without calculating the cost of the sequestered carbon that would be released under the plan, which includes clear-cutting 5,500 acres of mature lodgepole pine trees and constructing 57 miles of logging roads in the heart of grizzly bear country."*
>
> *"Instead, the Forest Service produced a brief analysis concluding that the climate impact was likely to be small and "temporary."*

At first, GWA viewed this as a lost opportunity, one that did not have to happen. We are tired of governmental agencies minimizing their role in the mitigation of climate change. But on the other hand, we can also say "it is never too late." There is nothing that prevents further action on part of the CGNF to make good on current Forest Service policy. For the Forest Service to say their brief analysis is likely to be small and temporary, is turning out to be a trope. The Forest Service seems to be routinely minimizing their role in fighting climate change, arguing that small, local actions on the forest will have negligible impacts globally. While this may be true in practicable terms, it is not true when cumulative impacts are analyzed.

Marianne further states:

> *"Environmentalists say the Forest Service is minimizing the impact of losing so many mature and old-growth trees at a critical moment in the climate battle, even if the stands grow back over the coming decades. They argue that the project is at odds not only with the new White House guidance but also with an executive order Biden signed last year on protecting carbon-rich older trees on public lands."*

> *"The notion that clear-cutting more than 5,000 acres of mature forest has a negligible effect on carbon sequestration just doesn't hold up against the science," said Ellen Montgomery, director of the public lands campaign at Environment America."*

> *"Federal agencies have broad discretion on how and when to apply the new guidance from the Council on Environmental Quality, or CEQ. Such guidance is not binding or legally enforceable, but is the administration's view of what the law requires."*

This double speak is unfortunate. GWA does not believe we are in a situation where we can act without a sense of urgency, yet this seems to be the mantra many land-use agencies are providing the public, saying whatever actions are being proposed would have minimal impact on the global scale. We have long said the U.S. Forest Service needs to change the paradigm in how they manage a forest. This Alternative obviously does not do that. The USFS needs to apply a new scientific paradigm to its management portfolio.

There has been a whole new science (within the last few decades) in how forests in a large ecosystem function. That understanding should place a new and more critical emphasis on the protection of our forests. Our forests and every forest of the world have a new role to play in keeping our planet in equilibrium from the release and capture of carbon. The forest's role in fighting or mitigating climate change is more important or just as important than perhaps any other function or use.

The forest's ability to sequester carbon, especially old growth forests, is an important factor to consider as our planet seems to be out of balance. This requires a paradigm shift; from one of a utilization rationale to one of protection. This gets us back to the original purpose of our national preserves and forests formulated during the late 19th century. People at that time saw value in protecting the forests and the watershed for the benefit of society, beyond the traditional uses. The sooner we instill that new purpose in our management practices, the better our world and Nation will be.

The Forest Service needs to address and adhere to the science. For example, we would like to refer to the link found in Earth Island Journal[2], which includes these statements:

https://www.earthisland.org/journal/index.php/articles/entry/logging-carbon-emissions-us-forests/

> *"On the other hand, industrial logging — even when conducted under the euphemism of "thinning" — results in a large net loss of forest carbon storage, and a substantial overall increase in carbon emissions that can take decades, if not a century, to recapture with regrowth. Logging also tends to make fires burn faster and more intensely while*

degrading a forest ecosystem's ability to provide natural protections against extreme weather events.

Consider this: About 28 percent of tree carbon is contained in branches, and this is emitted when they are burned after logging operations. An additional 53 percent of the carbon in trees removed from forests is emitted as waste in the manufacturing and milling process. Overall, about two-thirds of the carbon in trees that are logged for lumber quickly become greenhouse gas emissions."

In other words, the science indicates that dead and living trees store carbon. In an article entitled Forests-Carbon 101, on the Oregon Wild[3] website, there is this statement:

https://oregonwild.org/forests/climate-change/forest-carbon-101

"Oregon's oldest forests are particularly good at capturing and storing carbon, and they continue to absorb carbon even after tree growth appears to have slowed. The logging industry has falsely claimed that fast-growing young forests are better at absorbing carbon; however, research shows that old forests store far more carbon. Logging older trees and replacing them with younger ones emits tremendous amounts of CO2 and creates a "carbon debt" that takes many decades or centuries to repay."

The science is out there. GWA does not support the automatic harvesting or thinning of trees simply because it was the practice of the last century. The CGNF needs to look for new alternatives. GWA could provide all sorts of science on this subject. Following is one more!

In another research paper published in Ecological Applications in 2018, Zald, Harold, Dunn, Christopher J.[4], derived the following as reported in their paper "*Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape"*. From the Abstract:

1. *"Using Random Forest ensemble machine learning, we found daily fire weather was the most important predictor of fire severity, followed by stand age and ownership, followed by topographic features. Estimates of pre-fire forest biomass were not an important predictor of fire severity."*

2. *"Our findings suggest intensive plantation forestry characterized by young forests and spatially homogenized fuels, rather than pre-fire biomass, were significant drivers of wildfire severity."*

In other words, day-to-day weather (such as hot and dry spells, especially periods of drought) and those highly-managed forests are more susceptible to severe fires than those that aren't managed to that degree. Forests with high biomass are not driving factors of wildfire severity. In summary, it states the following principals. These principals prove the point that forest management may not be the solution we once thought it was.

3. *"First, it brings into question the conventional view that fire exclusion in older forests is the dominant driver of fire severity across landscapes."*

4. *"There is strong scientific agreement that fire suppression has increased the probability of high severity fire in many fire-prone landscapes (Miller et al. 2009, Calkin et al. 2015, Reilly et al. 2017), and thinning as well as the reintroduction of fire as an ecosystem process are critical to reducing fire severity and promoting ecosystem resilience and adaptive capacity (Agee and Skinner 2005, Raymond and Peterson 2005, Earles et al. 2014, Krofcheck, et al. 2017)."*

5. *"However, in the landscape we studied, intensive plantation forestry appears to have a greater impact on fire severity than decades of fire exclusion."*

6. *"Second, higher fire severity in plantations potentially flips the perceived risk and hazard in multi-owner landscapes, because higher severity fire on intensively managed private lands implies, they are the greater source of risk than older forests on federal lands."*

7. *"These older forests likely now experience higher fire severity than historically due to decades of fire exclusion, yet in comparison to intensively managed plantations, the effects of decades of fire exclusion in older forests appear to be less important than increased severity in young intensively managed plantations on private industrial lands."*

In other words, treating our natural forests as if they were under plantation management is not the proper solution to mitigate climate change. It is also contrary to a better fire prevention, land-use management and wildlife management. This research indicates that much of the accepted fire mitigation practices are in reality not conducive to the purpose given. They are the wrong approach.

In our closing comments of 2021 during the initial EA, we made this statement.

> *"Vegetation treatments, including other forests manipulations in the face of climate change, is not only a risk but is morally wrong. We say that because we as a society do not fully understand and/or acknowledge the impact the policies and practices we implement upon the landscape."*

We also said climate change is a driver of terrestrial ecological loss. We do not see how the Proposed Action Alternative counteracts this reality.

Before we move on to another complaint/objection, GWA would strongly urge the U.S. Forest Service including the CGNF to become more aware of the new and increasingly relevant science about carbon sequestration. We refer the CGNF and Region 1 of the U.S. Forest Service to review the following reference.

Found here at: https://conbio.onlinelibrary.wiley.com/doi/10.1111/csp2.12944

Just published on April 22, 2023, two days ago from this writing, an article entitled *"Protect large trees for climate mitigation, biodiversity, and forest resilience."* Published in Conservation Science and Practice by Society for Conservation Biology, the authors Mildrexler, David J[5]., et al, makes this statement in their Abstract.

"Protecting the climate system requires urgently reducing carbon emissions to the atmosphere and increasing cumulative carbon stocks in natural systems. Recent studies confirm that large trees accumulate and store a disproportionate share of aboveground forest carbon. In the temperate forests of the western United States, a century of intensive logging drastically reduced large-trees and older forest, but some large trees remain. However, recent changes to large tree management policy on National Forest lands east of the Cascade Mountains crest in Oregon and southeastern Washington allows increased harvesting of large-diameter trees (≥53 cm or 21 inches) that account for just 3% of all stems, but hold 42% of total aboveground carbon. In this article, we describe synergies with protecting large trees for climate mitigation, biodiversity, and forest resilience goals to shift species composition, reduce fuel loads and stem density, and adapt to climatically driven increases in fire activity in eastern Oregon."

Vegetative Treatments:

GWA objects to the premise that thinning and harvesting are proper ways to manage a forest. This seems to be the methodology that is in play in today's society. It is provided as an excuse (perhaps a rationale) for the proposed actions agencies desire to take. We see this practice resulting in more harm than good. Climate change can exacerbate these acts upon the forest, thereby on the soil's biota, surrounding vegetation, and eventually on the wildlife in direct and indirect fashion.

There is science on this practice, but for sake of time and other resources, we will refer to the recent findings and thinking on the subject by atmospheric physicist Dr. Joseph Warne. Here he talks about flawed wildland fire models. During his declaration from Unite the Parks v. U.S. Forest Service[6], E.D. Cal (2021), he provides these comments.

"When ladder fuels are removed, the ground-level windspeed and turbulent mixing both increase, leading to faster fire spread and greater oxygen-transport efficiency; this, in turn, results in increased fire intensity."

"As recent high-resolution numerical fire simulations show (e.g., Banerjee et al. 2020, Atchley et al. 2021), in many cases this aerodynamic effect is more important than the fire-dampening effects of the fuels reduction being evaluated. Nevertheless, comparisons using operational fire models do not predict this result because they ignore aerodynamic differences between model runs with and without ladder fuels, using the same specified windspeed for both cases."

"Two recent studies using high-resolution numerical fire simulations demonstrate just how consequential neglecting canopy wind-drag effects can be, leading to potentially disastrous results if aggressive ladder-fuel removal is applied."

"…and both papers demonstrate that the removal of ladder fuels reduces the sub-canopy wind drag, ultimately leading to increased fire spread. In other words, they both show how fuels-reduction treatments can increase fire spread, which is the opposite of what the operational model studies predict."

"Furthermore, the Banerjee et al. 2020 paper goes further and also shows that aggressive ladder fuel removal increases the likelihood of overstory crown fires compared to more modest ladder fuel reductions, which is again opposite to operational model-run predictions."

"In their study, Coen et al. demonstrate that drought and fuel load were secondary effects compared to fire-induced atmospheric motions, which operational fire-behavior models neglect."

"Additional evidence that vegetation treatments may be excluding important fire physics is suggested by the most comprehensive study to-date of wildland-fire data, which was conducted by Bradley et al. (2016), a true and correct copy of which is included as Exhibit I. They analyze satellite data for 1500 fires from 1984 to 2014, affecting 23.5 million acres of forestland. Their results show that the more heavily forestland is managed, the more severely it burns, and the least-managed land (i.e., our National Parks and Wilderness Areas) are the most firesafe (correcting for forest type, topography, and climate variables)."

"By omitting atmospheric dynamics and wind-drag effects associated with vegetation treatments, fuels reductions designed to reduce fire intensity and fire spread are undoubtedly producing the opposite effect. Also, poorly designed ladder-fuel removal is likely increasing the incidence of crown-fire events that are killing our last large, old-growth trees."

Continuing in our premise that the Forest Service's historical, but error-conceived methodology, one where thinning and harvesting are an effective tool in managing a forest, GWA would like to refer the CGNF to a recently released scientific paper. It appears this well-adopted methodology, one that is admittedly well accepted in today's society, may have been wrongly obtained, based upon biased and falsified science. The recent scientific article (excerpts below) state that much of today's thinking in wildland fire science is based upon the low-intensity model, where there was little to no high-intensity fires on the landscape. But this conclusion was based upon falsified and omitted evidence.

It is provided as an excuse (perhaps a rationale) for the proposed actions agencies desire to take. In the article entitled, "*Countering Omitted Evidence of Variable Historical Forests and Fire Regime in Western USA Dry Forests: The Low-Severity-Fire Model Rejected,*" by Baker, William[7], et al, there are these excerpts from the article.

*"The U.S. Office of Research Integrity (**https://ori.hhs.gov/investigations**, accessed on 10 January 2023) indicates that potential scientific misconduct is particularly important where there are significant public policy implications or where there may be more than one instance. We showed that there is a repeated pattern of omission in H, and that pattern of omission continues [74,133,134]. Omission of evidence and false evidence in H have significant land management implications, as millions of hectares of dry forests could be inappropriately managed in a futile and ecologically damaging attempt to prevent high-severity fires that are well documented in the omitted evidence to have occurred historically. The two accompanying public policy papers [22,23], which are substantially based on the false and omitted evidence in H, are thus shown here to not have a sound scientific basis."*

"The mixed-severity model is supported, and the low-severity model is rejected also for forest structure, which means dry forests had both low and high tree density and substantial heterogeneity in density from interaction with mixed-severity fires."

*"It appears it is primarily the high-severity component of mixed-severity fires that concerns proponents of the rejected low-severity fire model. Are they forever hoping to retain the false image of low- to moderate-severity fires, in perpetual balance with old growth, which has now even been labeled "good fire" by some scientists [**1**]? Will they continue the fight to eliminate high-severity "bad fire", using expensive mechanical fuel reductions and fire suppression even though, as shown here, high-severity fire was part of historical fire regimes in dry forests and is occurring at rates that recently are below or within the HRV? Will false evidence, omission of evidence, and misleading labeling of historical high-severity fires be ongoing? This study shows this is an unnecessary, futile, and false effort—**Section 3** demonstrates that H's own evidence shows no increase, at this point, relative to historical rates of high-severity fires. Moreover, the high-severity component of mixed-severity fires was and still is quite infrequent, with fire rotations from 175 to 2000 years (**Table 1**), allowing for considerable, if temporary, persistence of old, park-like dry forests. This finding is very consistent with Hessburg et al.'s [**11**] (p. 20) finding of contingent equilibrium in historical eastern Washington mixed-conifer forests: "Low-severity fires and equilibrium dynamics likely occurred in eastern Washington dry forests, where they fostered fire tolerant, park-like pine stands, however, these dynamics were perhaps ephemeral in nature, lasting one or more centuries at a location, and then switching concordant with regional climate forcing to non-equilibrium states." We end by noting again that H did not even mention the findings of this large, key study, by the second author of H, that supports the mixed-severity fire model and rejects H's low-severity fire model. H is documented here to have left behind a falsification of the scientific record, yet was used as a key basis for public land-management policy proposals [**22**,**23**] likely to have ecologically detrimental effects on dry forests [**7**]."*

Before our comments on this paper, a few clarifications need to be made first. The "H" being referred to in the above reference, refers to "Hagmann", one of the authors of scientific paper entitled *"Historical patterns of fire severity and forest structure and composition in a landscape structured by frequent large fires: Pumice Plateau ecoregion"*. This is one of the scientific papers that utilizes the low-severity fire model. The other acronym is "HRV," a reference to "historical range of variability."

The substance of this recent paper questions the "old mantra" that the high-severity fires we see today on the western landscape are new and therefore justify the dire need to use intensive vegetative management tools such as those prescribed in this project. The perception that high-severity wildland fires did not historically occur have been based on false science and omitted science. They have given way to an attitude of the over-utilization of "active-forest management" tools, practices, and methodology. We urge the U.S. Forest Service to forgo this thinking and practice. As of right now, there is no scientific rationale that this practice is necessary in the Southern Plateau.

The following piece of text is from fellow GWA Board Member who has specific knowledge on the history of logging in the area.

"Soil, Climate, Previous Logging

***Soil**: Soil in the Hebgen basin is primarily obsidian sand that is nearly devoid of organic matter. The sand does not retain water decreasing moisture available for plant use. The City of West Yellowstone was forced to build a municipal sewage collection/treatment plant*

to replace individual septic systems due to contamination of well water in the town as sewage easily reached ground water. How will trees and plants grow if this desert dry soil does not contain nutrients or water? No research or data was presented to show that this unique obsidian sand is capable of supporting forest tree growth comparable to commonly found mountain soils.

https://fieldguide.mt.gov/displayES_Detail.aspx?ES=4267

Previous Logging: *Unfortunately, only the USFS would be able to document the details of this. There was a stud mill operating in West Yellowstone in the 50s, 60s, and 70s. I don't know the volume or acres of timber clear cut to feed the mill. The ranger district employed a forester, a forestry technician, and a scaling technician(primarily worked at the mill weighing trucks and measuring logs to determine the volume of timber delivered to the mill). The flats and Hebgen basin were covered in a checker board of small (I would estimate each one covered 20 to 40 acres) clear cuts. I believe some timber supply was cut from the adjoining ranger district in Island Park, Idaho. The timber was cut 50 to 70 years ago and since that is less than the timber cycle (Time for a tree to grow to merchantable size) so wouldn't any new cutting be additive in determining the total timber removed from the forest?*

Questions: How many acres and board feet on the Hebgen Lake Ranger District were cut to feed the mill? How many years was the mill in operation? How many miles of road were created to facilitate harvesting timber for the mill?

Climate: *West Yellowstone is easily the coldest location in USFS Region 1. What is the average annual time period of snow cover?*

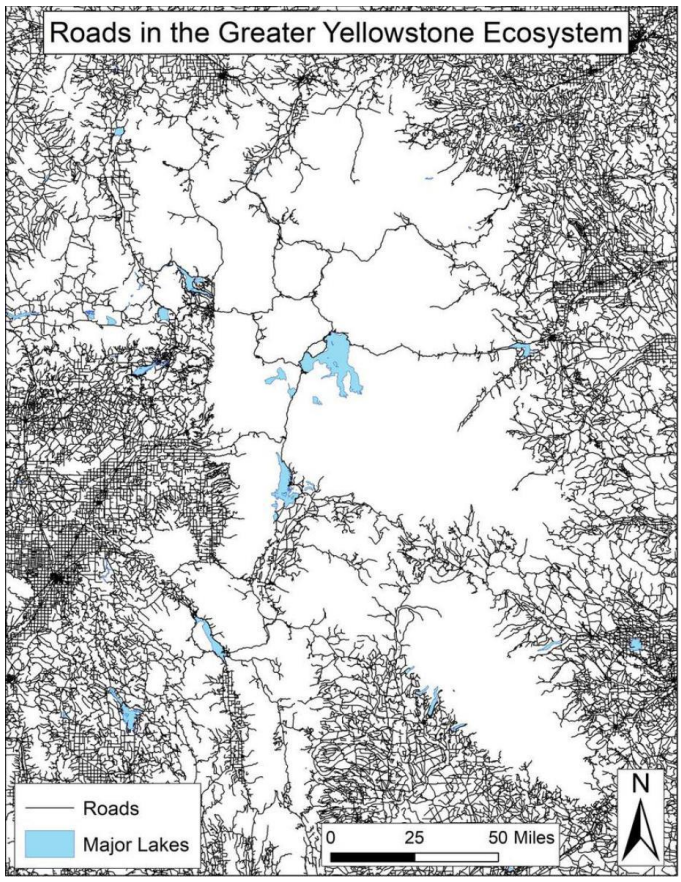
https://www.extremeweatherwatch.com/cities/west-yellowstone/record-low-by-day

It is highly possible that pine bark beetles would be subjected to killing or crippling temperatures at intervals in a 90 year timber cycle.

How fast do trees grow in Hebgen Basin compared to growth rates in warmer, wetter and lower locations? What is the minimum DBH (diameter breast high) and related age of commercial lodgepole that would yield merchantable lumber?"

Road Density:

GWA was disappointed in the revelation that the proposed action will still result in 56.8 miles of temporary roads during the project phase. The fact that these are temporary roads and won't all be on the landscape at one time is little consolation. Temporary roads, once in operation, have the same effect upon the landscape and wildlife as if they were permanent. That phraseology of using the word temporary might make us feel better, but that will little relief for wildlife. By the way, we know of no scientific proof or evidence that temporary roads have fewer ecological impacts upon the landscape than permanent roads.



This road density map provided by the USGS showcases the intricate and overwhelming impact that existing roads have already placed upon the landscape. GWA does not support more roads. Roads are one of the greatest sources of habitat fragmentation and loss. In spite of the assurances, GWA believes there will be long-lasting impacts from road construction and operation, whether or not they are temporary. Another side effect of roads is that they increase the likelihood of increased fire danger as people have greater opportunity to venture back into the wild.

GWA wonders about the cumulative impact as defined by the Council of Environmental Quality in Title 40, Chapter V. Part 1508.7. Man has altered the landscape so much that we can no longer recognize a natural landscape. And we believe that if we can't, wildlife can't either. But either way, land disturbance has significant impacts on soil, and soil biota conditions and nutrients affecting vegetation growth.

Wildlife, Endangered and Threatened Species:
In reviewing the proposed action by the CGNF, we cannot definitively say our comments were addressed. Some modifications were provided to the grizzly bear and other species, but not nearly enough to mitigate the impact upon the biodiversity of the landscape. We shall just restate our original comments.

Grizzly Bear: Much of our original comments centered around the grizzly bear. We advise the Forest Service to reread our previous comments on that section as it relates to

the Primary Conservation Area and the USFWS bear management units. We do not see this proposed action minimizing the threats to the habitat or the bear.

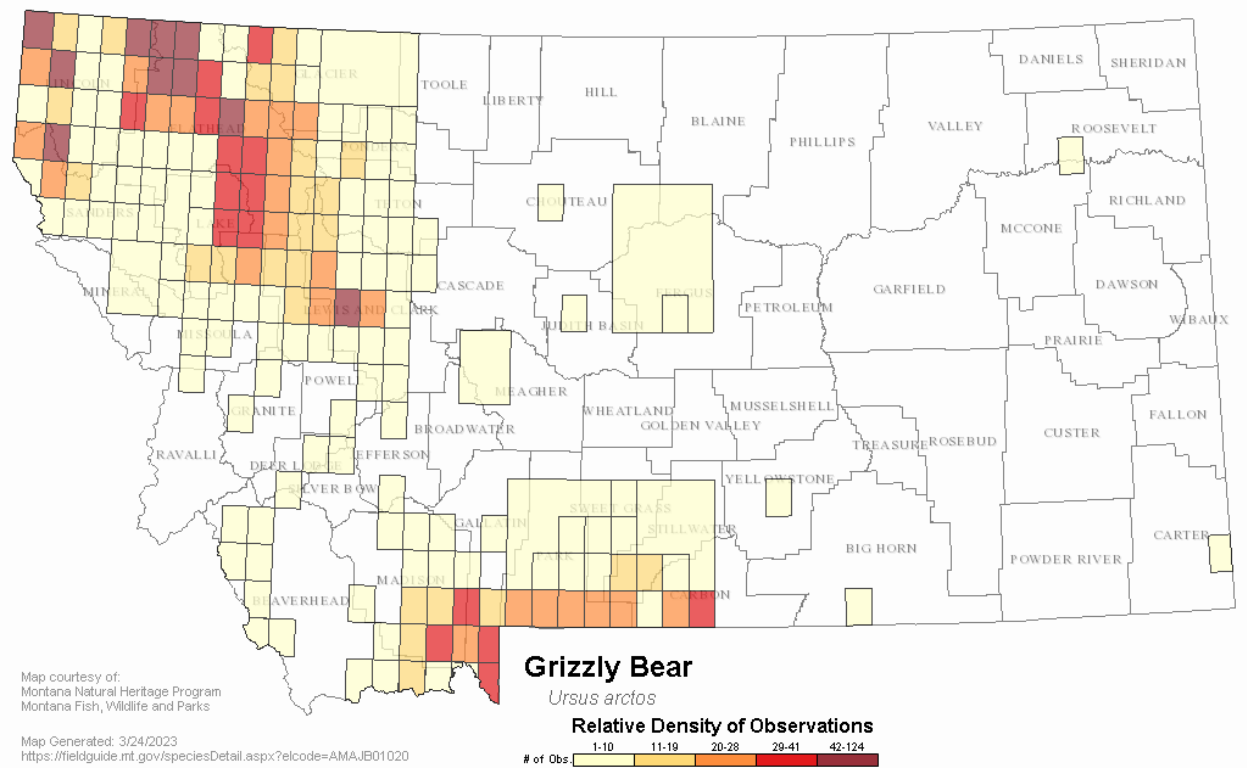
Referring back to our previous comments.

According to the *Final Draft of the 2016 Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Ecosystem*[8], there are some application rules (we will call them exceptions) if there are permanent changes in secure habitat. These exceptions require mitigation remedies and some are shown here on pages 62 and 63 of the Final Draft.

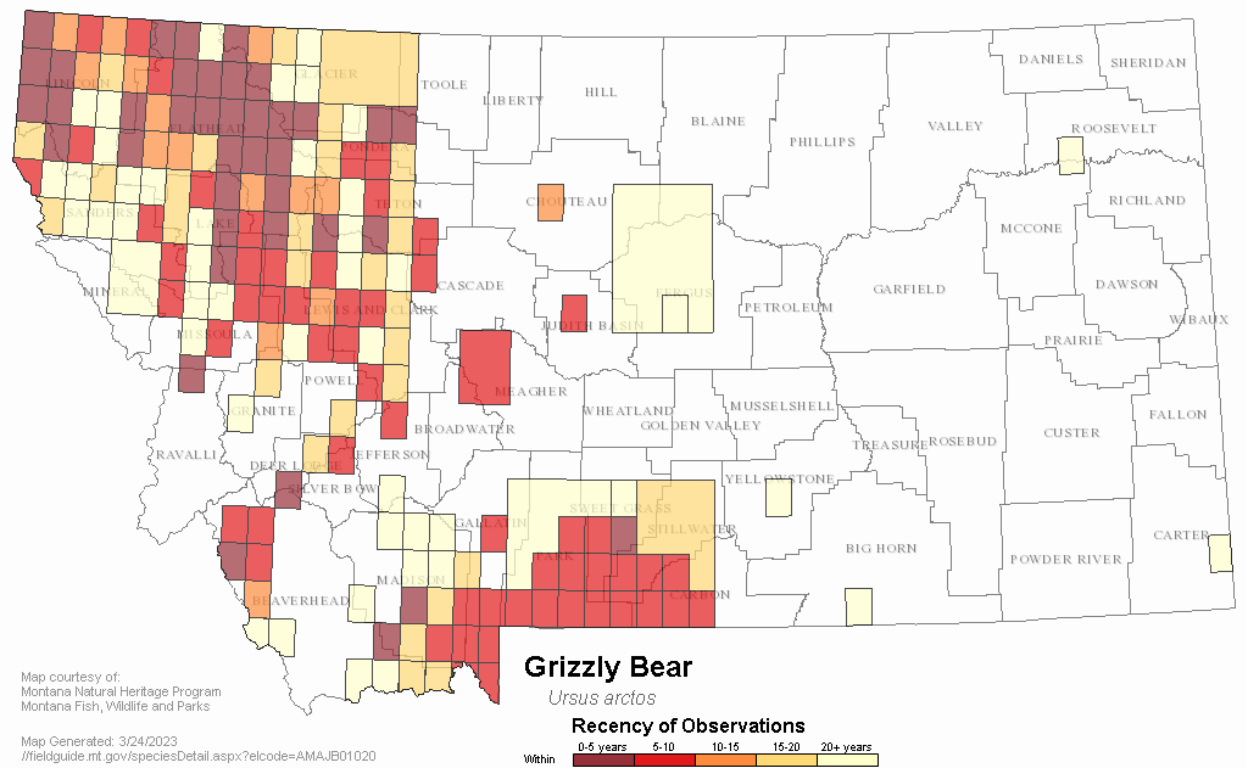
> *"Application Rules for Permanent Changes in Secure Habitat:*
>
> *Permanent changes to secure habitat are allowed inside the PCA when associated with an authorized Federal project involving construction of new motorized routes (i.e., roads or trails), reconstruction of existing motorized routes, or opening of a previously decommissioned route if, and only if, the following conditions are met:*
>
> > *• Any loss in secure habitat below baseline levels is replaced by restoring secure habitat of equivalent quality and quantity (e.g., through decommissioning) in the same bear management subunit. Habitat quality must be assessed based on the best collective scientific understanding of grizzly bear habitat ecology and the rationale for all mitigation measures must be fully documented.*
> >
> > *• Replacement habitat must be in place before project implementation or concurrent with project development as an integral part of the project plan. Replacement habitat must remain in place for a minimum of 10 years before it can be subsequently replaced and mitigated for per application rules (this duration is based up one the generation time for a female grizzly bear, or the time it takes to replace herself in the population)."*

We at GWA must ask these questions. Have these rules or requirements been met? How do we know, and if that be the case, how do we know they are sufficient? This is where GWA has a hard time excepting the actions of governmental agencies. It seems no matter how well-intentioned preventative protections are put in place, there are always instilled built-in exceptions (by those same governmental agencies) which run counter to the overall good of the species. That may not be the intent, but that is the reality. When this occurs, it just further cumulates habitat fragmentation on a landscape and as said, it is counterproductive. There needs to be more diligence in promoting or advancing secure habitat for grizzly bears.

As to whether grizzlies occur in the area, GWA will showcase two maps made public by the Montana Natural Heritage Program[9] and Montana Fish, Wildlife, and Parks in an online feature called the Montana Field Guide. Both maps, released in March of 2023, show the number of observations of grizzly bears and the recency of those observations across the state. We obviously will focus on the area at hand in extreme southern Gallatin County, the area south and west of Hwy 20 and West Yellowstone and YNP respectively. The first map highlights the density of grizzly bear observations in southern Gallatin County as 29-41 observations.



The map following showcases the recency of grizzly bear sightings. Again, we want to make note that this map was released in March of 2023, highlighting itself the recency of grizzly bear observations.



Again, to focus on extreme southern areas of Gallatin County, west of YNP, one can see the second most recent example of observations in the legend. This highlights the obvious, that grizzly bears exist in the area and are prevalent upon the landscape. The SPLAT Project will have impacts upon the grizzly bear.

Not only is that fact brought out in the EA, but it was admitted to in the press. In an article dated March 23, 2023 entitled *"Logging Project near Yellowstone National Park enters final round of consideration,"* Brett French[10] of the Billings Gazette reports the Forest Service making this statement.

> *"The Forest Service said the work may have some temporary effects on wolverines, grizzlies and lynx, but in the long term could improve their habitat in the area. The agency also said although there would be a temporary decrease in elk security habitat, there is plenty available in the adjacent Henry's Mountains. An estimated 4,650 acres of moose winter foraging habitat would potentially be affected."*

The constant downplaying of affects and minimizing harm to the habitat and species once again seems to be a constant trope along with a found less hope that events and conditions will improve over time. This is not science. It may be true that over time, sometimes long periods of time, conditions may improve, but is that the kind of rationale we are trying to achieve. How much harm will be done in the present tense is the question, and what are the cumulative effects of that harm over time.

Second, GWA would like to refer the CGNF and the U.S. Forest Service to a very timely and relevant science article by Dr. David Mattson[11] of the U.S. Geological Survey. The article entitled "*USE OF LODGEPOLE PINE COVER TYPES BY YELLOWSTONE GRIZZLY BEARS"* published in the Journal of Wildlife Management in 1997 draws a very pertinent conclusion. Part of that is found here:

> *"These results do not support the premise that widespread conversion of lodgepole pine forests to early successional stages would benefit grizzly bears in the Yellowstone area. There is no rationale here for the systematic harvest of older stands to increase bear use of berries. Yellowstone's grizzlies consume few berries probably because of climatic constraints especially upon globe huckleberry production (Mattson et al. 1991, Mattson and Reinhart 1994)."*

Further on, there is this finding:

> *"Even so, these results suggest that Yellowstone's grizzlies would not respond strongly to any changes in lodgepole pine forest structure, per se, with the following 2 provisos. First, I cannot address the effects of changes in landscape level structure of lodgepole pine forests beyond the range of what was analyzed here. This point holds for effects of the 1988 fires, especially given the attrition of snags expected during the next 2 decades (Lyon 1984) and the possible complications to movement posed by such an accumulation of large woody debris (Fancy and White 1985). Second, because whitebark pine seeds are a high-quality food, and because seed production is limited to mature or near-mature trees, grizzlies will be affected adversely by the removal of lodgepole pine-dominated stands that contain productive whitebark pine (Mattson and Reinhart 1994)."*

There are other references which could be provided upon request, but these last two references should lead us to the proposition that all may not be as easy as it seems. This is the importance of exploring the vast amount of science and research that has been done. For these reasons and others, GWA does not support the Proposed Alternative.

Wolverine: Wolverines are known as a fierce, solitary species that are primarily nocturnal, and hard to observe. Because of that, it is hard to get an exact number as to their population and distribution. With only an estimated population size of 300 in the lower 48 contiguous states, the species is being proposed for listing under the Endangered Species Act. GWA supports listing for the wolverine and is the basis for our primary concerns as it relates to this project.

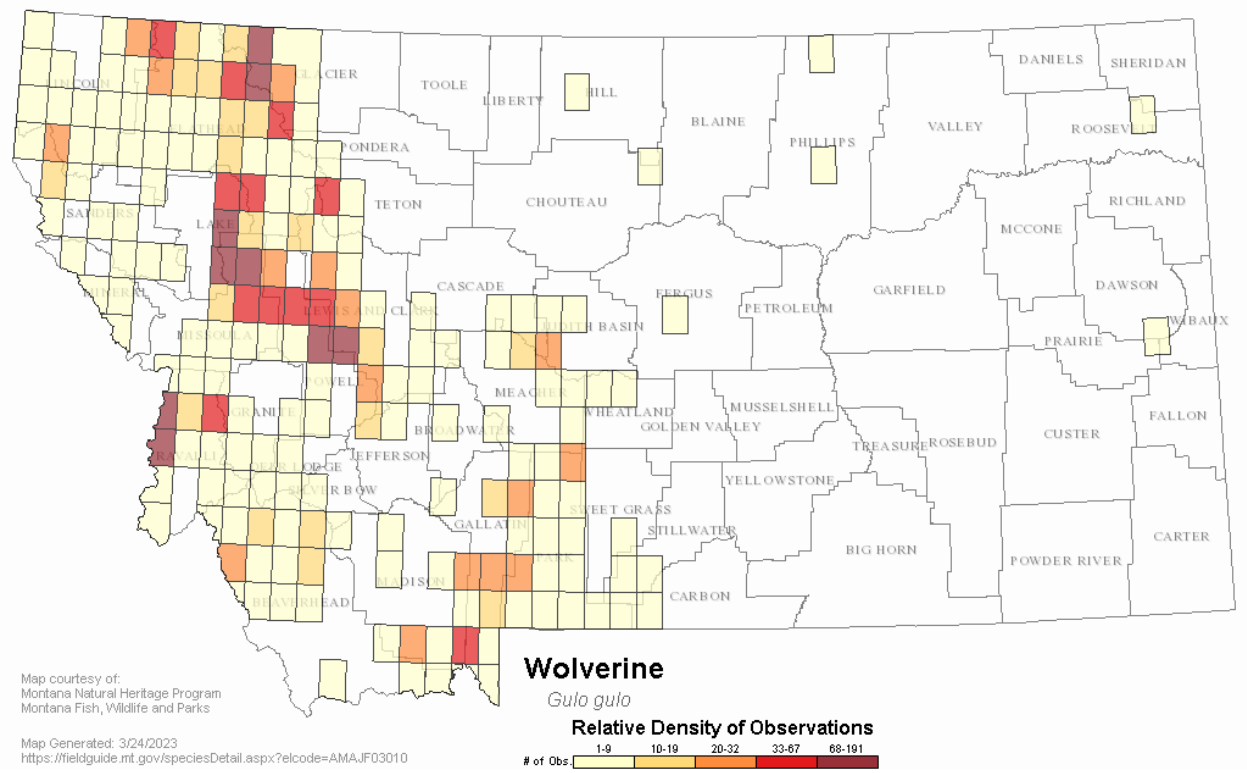
As stated in the revised EA of October 2022, there is this statement as found on page 67.

> *"The North American wolverine is known to occur in the Henry's Mountains. The wolverine is "proposed" under the Endangered Species Act."*

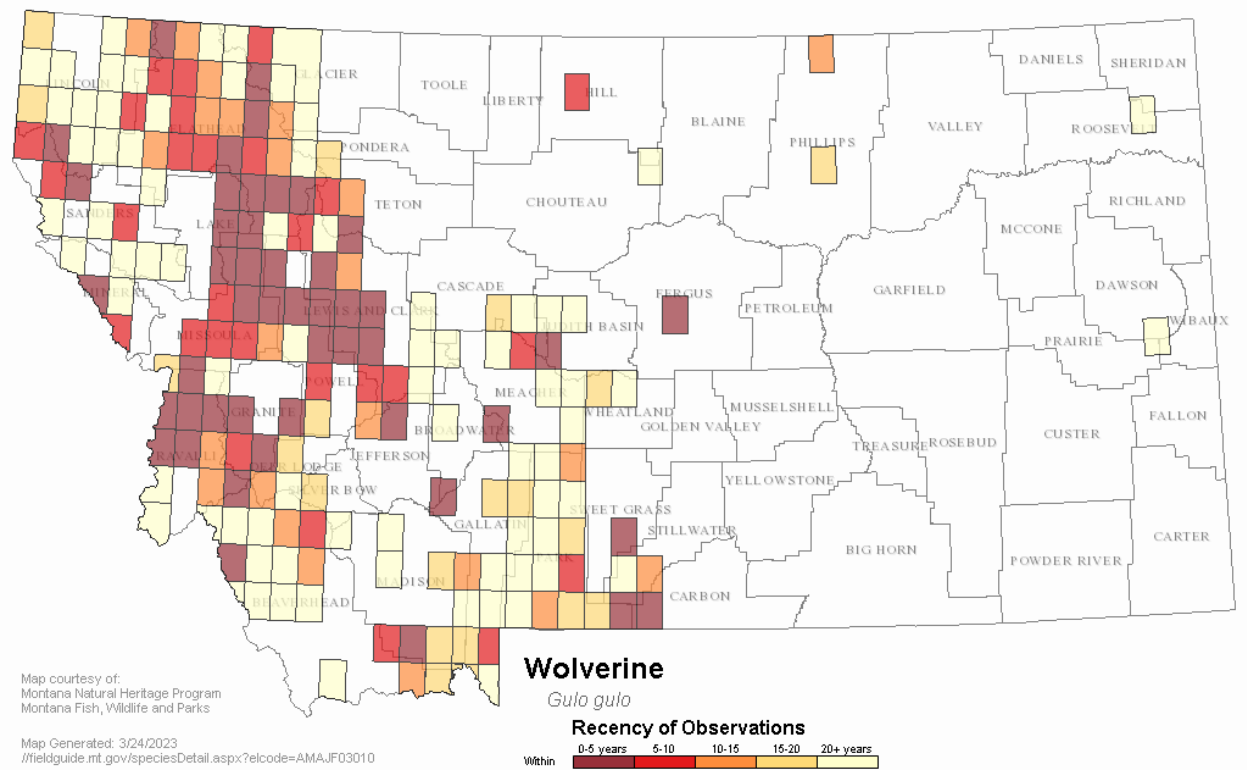
Shortly down from that statement on the same page there is also the following statement that the average home range size of an adult female in the Greater Yellowstone Area is 128 mi^2. As a result, "*the analysis area could accommodate one to two adult females, if consisted of suitable habitat*." The Henry's Mountains are a small mountain range lying on the Continental Divide traversing the landscape from a northwest to southeast direction west of West Yellowstone, Montana. The mountain range extends from the

region near Earthquake Lake southeastward to a plateau geography west of West Yellowstone into the project area. The area is known for their high volume of snow, which is a known favorite condition of the wolverine.

Once again, utilizing maps from the Montana Natural Heritage Program[12], they highlight the common occurrence of observations in the vicinity of the project area. We urge the viewer to look at the area of extreme Gallatin County which showcases the density of wolverine observations in the vicinity of the South Plateau timber project.



In addition to those observations, the map below will once again highlight the recency of those observations. In realizing both maps (above and below) and from the admission in the EA of October 2022, this should be verification that the wolverine species occurs in the vicinity of the project area, if not in the project area itself.



Before we move on, GWA will once again include the reference found in Brett French's article in the Billings Gazette. We made the application to grizzly bears earlier, but as we see, application can also be made to wolverines. Here as well as in the EA itself, the Forest Service admits that wolverines are in the project area.

> *"The Forest Service said the work may have some temporary effects on wolverines, grizzlies and lynx, but in the long term could improve their habitat in the area. The agency also said although there would be a temporary decrease in elk security habitat, there is plenty available in the adjacent Henry's Mountains. An estimated 4,650 acres of moose winter foraging habitat would potentially be affected."*

There seems to be a growing frequency among state and federal land-use/wildlife management agencies to minimize the adverse impacts man has on wildlife and their respective habitat. Perhaps it is derived from the thinking, if we minimize the adverse impact on the species, the agencies will get the desired result associated with the proposed action. This EA appears to be no different, especially as it relates to the statements concerning the wolverine.

On page 67 of the revised EA, there is this statement.

> *"As the proposed actions are not a primary or secondary threat to the wolverine, and wolverine are capable of and would cope with disturbance associated with treatment activities, and no barriers to wolverine movement or dispersal would result, it has been determined that the South Plateau Project is not likely to jeopardize the continued existence of the wolverine."*

But then on the same page, there is this statement.

> *"The Proposed Action may displace wolverine from the project area through disturbance of both individual wolverines and their prey (outside of winter), but wolverine would be able to alter their travel routes into adjacent areas to avoid project activities and, in the context of the analysis area."*

These segments of texts from the EA really do seem to conflict with each other. But not only that, they seem highly subjective. We are not sure of the reference in the above paragraph as far as primary and secondary threats. Who determined the criteria and what are the criteria that defines whether a threat is primary or secondary?

Secondly, you can't say in one paragraph – "*and no barriers to wolverine movement or dispersal would result"*

Yet in the other paragraph say – "*The Proposed Action may displace wolverine from the project area……. but wolverine would be able to alter their travel routes into adjacent areas to avoid project activities."*

Those statements are nearly contradictory and highly based upon supposition. What is the proof or where is the evidence of this being so? Other than the CGNF trying to minimize the negative impacts upon the wolverine, we fail to understand how both statements could ecologically be true at the same time. The EA admits there are no barriers to wolverine movement, but it does so without acknowledging the fact that finding alternate routes or movements, is in and of itself a barrier to the free and unhabituated movement.

Another problem with the prior statement seems to draw the conclusion that wolverines can co-exist with high human disturbance. GWA has previously addressed that assumption on this and in other comments providing science that refutes this assertion. The Craighead Institute's paper, *Wilderness, Wildlife, and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area,* (Craighead, Lance[13], 2015, pages 102, 103, 106) places the history of wolverines in Montana in perspective. We will just present a portion of our previous comments here:

> *"A review of wolverines and recreation recommended that managers should avoid placing new recreational trails and roads through previously unfragmented habitats, and they also should be located away from potential denning areas. Negative impacts on wolverines were found from snowmobiles, skiing, hiking, and human presence (Snetsinger and White 2009). No data were found on effects of biking and horseback riding."*

On page 400 within the Draft Environmental Impact Statement of the Revised Custer Gallatin Forest Plan, there is this truth stated about the threats of human conflict:

> *"Given the strong association between wolverine habitat and snow cover, winter recreation uses such as skiing and snowmobiling may also be key stressors for this species."*

The CGNF does not appear to be consistent. How can the wolverines cope with active vegetative treatments on one hand, but be stressed out on the other by cross-country skiers and snowmobiles? We admit that winter can be a more stressed time than summer, but outside of that difference, how can you justify the two positions? And by trying to do so, what is the science for that?

GWA can provide more science as to why we favor protection of wolverine habitat and their sensitivity to man's activities, but we will just provide one more.

GWA urges CGNF to become familiar with a scientific study conducted by Matt Scrafford, a wolverine biologist in Alberta, Canada. He trapped and collared three wolverines in northern Alberta. Justina Ray (Ray, Justina[14], 2018), President and Senior Scientist of Wildlife Conservation Society of Canada, wrote of the research in Canadian Geographic. The link and snippets of the last few paragraphs are below:

https://www.canadiangeographic.ca/article/why-wont-wolverines-cross-road

> *"These findings led both researchers to a similar set of recommendations. The first and foremost is to limit road building as much as possible in high quality habitat areas for wolverines and grizzly bears. The second is to reduce the overall road footprint by "clustering" roads in an area as much as possible, especially high traffic routes. Finally, Scrafford and Lamb note that roads that do run through key habitat areas must be carefully managed. Public access to backcountry roads, for example, should be restricted when wolverines are denning. Similarly, disused roads should be decommissioned to reduce stress and mortality for wildlife."*
>
> *"Wolverines are listed as a Species of Special Concern in Canada and may be at risk in Alberta, though due to the elusive nature of the animal, precise population data is lacking. Still, unchecked road building in the forests predators depend on is a key factor in the disappearance of these and other iconic animals. If we want wolverines (and grizzlies) to thrive in our wild areas, we need to put up a stop sign on indiscriminate road building."*

GWA believes this research says it all. Yet, here in this action, the CGNF is proposing nearly 57 miles of additional roads, temporary or not. The science and common sense should tell us, as a society, this is not how we should move forward if we are really, serious about protecting rare and endangered species. But we continue in that same vain none-the-less. On page 103 of the draft EA of the South Plateau, it says this:

> *"The Proposed Action may displace wolverine from the project area through disturbance of both individual wolverines and their prey (outside of the winter). Most of the project area provides dispersal habitat, and dispersal habitat is widespread and abundant across the analysis area, so wolverine would be able to alter their travel routes into adjacent areas in order to avoid project activities."*

Many state and federal land-use/wildlife management agencies place themselves in this common refrain - the project may impact individual animals, but it will not affect the species overall. That refrain does not bode well, when in the case of the wolverine, you may have only one or two species to begin with. That is a very weak argument and is not

scientifically sound. Just the fact that this project could and most likely would force the wolverine outside their normal comfort zone of travel or habitat could be a stressor, especially in winter. There are many scenarios whereby we could actually be placing the wolverine in a more dangerous setting. They could become a casualty by vehicle collision, or forced to face off other wolverines or other species of wildlife which would be life threatening. It is us only as mankind being presumptuous in saying – *"they will be okay."*

We said "NO" in our original comments and we say "NO" now. Einstein is quoted as saying, doing the same thing and expecting a different result is the definition of insanity. If we should be brazened enough to speak for wildlife, our valued wildlife would be saying-stop being insane.

American Pine Marten: This is the kind of species that can easily fall through the cracks by wildlife managers. It is a small non-game species that does not attract much attention. We can say that now, however, until one day we can't. And that will be the day we discover; the species is nearly extinct. This species was discussed in the original EA of 2020 as a management indicator species. However, this species was not mentioned at all in the most recent 2022 EA. Despite that, we are going to discuss the American Pine Marten now, for we believe it will be harmed by this project.

For the Forest Service to report a "finding of no significant impact" is unbelievable in terms of discussion of this species. This species and any other species should be considered in every forest project EA, especially if that project will have impacts upon that species. And that is the case here in terms of the pine marten. It met the definition of a species being affected from Forest Service projects. The draft EA of 2020 states the species uses moist forest types and mature forests. Old-growth forests come to mind. But as stated on page 565 of the Final Environmental Impact Statement for the CGNF Revised Forest Plan, it also provides this statement:

> *"…. pine marten are species with known affiliations for mature to over-mature forest conditions, including the presence of large trees, snags and logs, and relatively high canopy cover. While these individual habitat components are most abundant in mature and old growth forest, they can be found in earlier successional stages as well."*

Knowing that and with the knowledge of old-growth habitat seemingly to be quite rare in the project area, the following statement is found on page 149 of the draft EA of 2020:

> *"Vegetation treatments proposed in this project have the potential to affect pine marten habitat. Habitats meeting the Green and others (1992) definition of old growth, as well as those that do not, would be affected by the proposed treatment activities."*

This gets our attention and with good reason. Under the section called Environmental Consequences on page 151 of the draft EA of 2020, the paragraph opens with the following:

> *"As shown in Table 79, under the Proposed Action a total of 28 acres of preferred pine marten habitat would be commercially thinned, which accounts for 8% of the 334 acres currently available in the analysis area. A total of 4,258 acres of suitable marten habitat*

lies within the current stand pool (14 acres aspen, 10 acres burning, 3,175 acres clearcut, 256 acres Douglas-fir Thin, 134 acres Fuels treatment, 89 acres pre-commercial thinning, and 580 acres Thinning), which accounts for 53% of the 7,977 acres of suitable habitat currently available in the analysis area. In all, a total of 4,286 acres of suitable and preferred pine marten habitat lies within the current stand pool. These acres are displayed in Figure 28. As regeneration harvest would remove most of the overstory structure in affected stands, reducing cover and increasing susceptibility to predators, these acres would not be considered suitable habitat for marten post-implementation."

Further on, it states the following:

The proposed treatments would alter preferred and suitable pine marten habitat to a lower quality condition by simplifying forest structure. Potvin and others (1999 and 2000) found that marten avoided clearcuts where shrubs and coniferous regeneration were sparse.

It is clearly evident; this project will be harmful to the American pine marten. These actions fly in the face of our goal to maintain and/or improve biological diversity. GWA tries to be an advocate for all species, not just the ones that garner the public's attention. Table 61 of the draft EA of 2020 (on page 152) states and verifies the paragraph above in just how severely pine marten habitat would be disrupted:

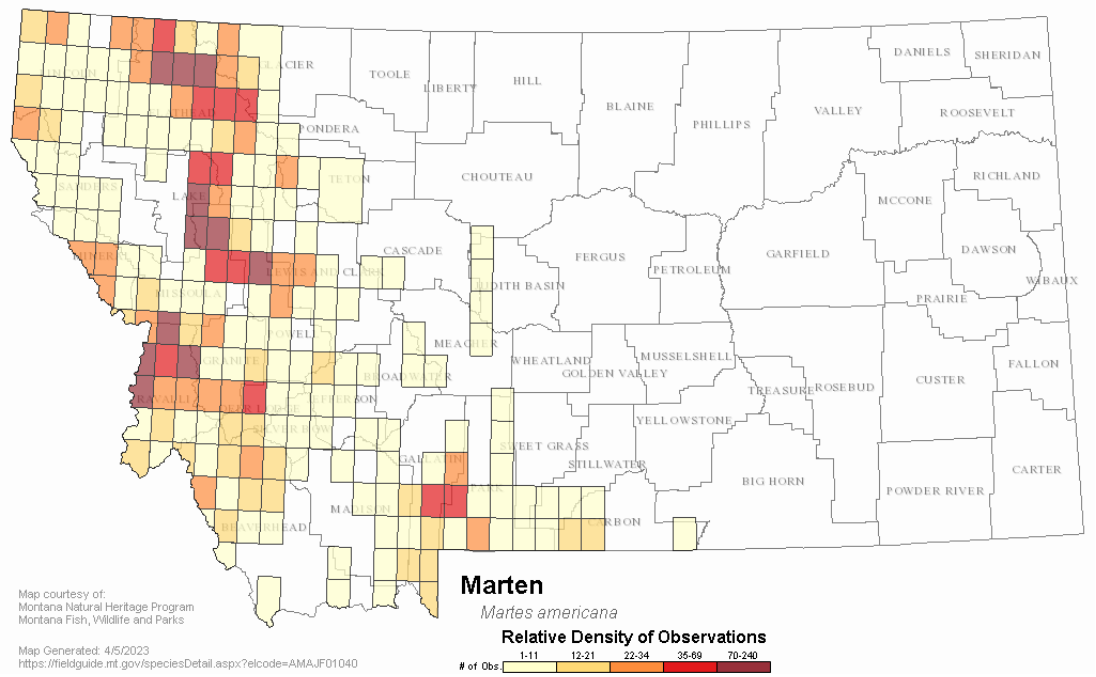
Table 61. Effects of the Proposed Action on pine marten habitat

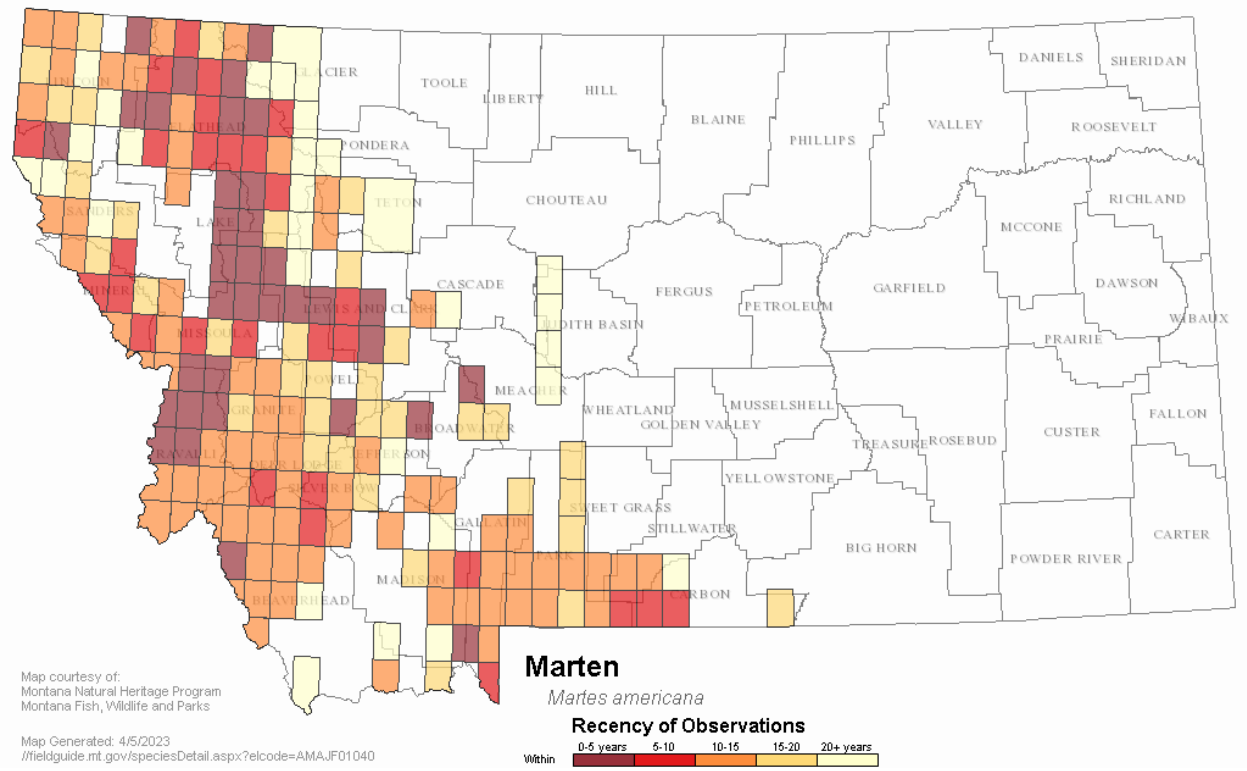
Habitat Type	Proposed Action	
	Acres	**%**
Preferred	28	8%
Suitable	4,258	53%
Total	4,286	52%

GWA finds this amount of disruption unsatisfactory for a species of any region. The summary and conclusion of concerning the Pine Marten on page 152 of the draft EA of 2020 is profound.

"Primary and suitable marten habitat would be affected by the proposed treatment activities. Up to 53% of current primary and suitable habitat in the analysis area lie within the current stand pool."

As we did with grizzly bear and the wolverine, we would like to share maps from the Montana Natural Heritage Program[15] highlighting American pine marten observations in Montana. For the project area, we once again want to showcase the extreme southwest part of the state adjacent to YNP. The first map below shows the density of most recent observations in the state. The second map once again shows the recency of those observations.





As can be shown, the American pine marten has quite extensive observations exactly in the location of the project area. GWA finds the omission of these facts from the most

recent revised draft EA of 2022 absolutely appalling. Once again how can the public make an objective, scientific and morality laden decision when facts such as this are removed from the public's knowledge. For those residents, citizens and concerned advocates for wildlife, all of them have a right to know the full extent of a project's impact. This EA fails in that context.

Canadian lynx: GWA did not provide comments on the draft EA of 2020 concerning this species, but we did in the revised draft of EA 2022. As the current EA states, the Canadian lynx is listed as a threatened species under the Endangered Species Act of 2000. On page 56 of the document, the EA specifically states:

> *"Clearcut harvest is limited to 4,600 acres in lynx habitat to ensure that NRMLD standards VEG S1 and S2 (which serve as cumulative effects thresholds by addressing the quantity and rate of change for winter snowshoe hare habitat on the landscape) would be met…….*
>
> *Under a maximum impact scenario given the project Design Features, the project would affect about 19% of lynx foraging habitat currently in the Lynx Analysis Unit…..*
>
> *Accordingly, the proposed project may affect, and is likely to adversely affect lynx."*

However, then the EA makes this statement:

> *"However, the proposed project is not expected to significantly impact the species because it would be consistent with lynx management direction, including all standards and associated exemptions. The NRLMD standards were analyzed and determined to provide protection to lynx habitat."*

The first thing GWA would like to ask: which is it? We've seen many statements and conclusions like this before. Basically, the EA is assuming that project actions may harm the population of a particular species in the project area, but not harm the species overall. We basically find these types of statements counterproductive and disingenuous. They provide an excuse to continue the project in face of continued negative impacts. The numbers that really provide an insight to the real harm of the project is that 4,600 acres of lynx habitat will be subjected to a clearcut harvest and about 19% of the lynx foraging habitat will be affected. These are the numbers that have meaning and these numbers are significant. The CGNF is basically saying we know there will be impacts upon wildlife and their habitat, but that is okay, because the overall species will not be significantly harmed. CGNF may be willing to accept those impacts. GWA is not.

On page 57 of the revised draft EA, there is this statement.

> *"The temporal context for analysis is from project implementation to approximately 40 years in the future, because where thinning treatments are applied, it would take approximately 40 years for stands to enter a multistory habitat structure. Clearcut harvest stands would require a minimum of 15 years to enter a structural stage that would support snowshoe hare foraging during the winter."*

There is no way that a federal agency should accept these types of timeframes when considering impacts upon wildlife. Most species of wildlife have a fairly short lifespans when compared to humans. It is the arrogance that we see shining forth here. We may not think these disruptions are large in our eyes, but to that of wildlife, it can be their full existence. This could provide a disruption for several years, decades, but we say we are okay with that because we can see ourselves outliving those scenarios. This is much to the fault of our arrogance.

Finally in the subject matter of connectivity for Canadian lynx, a couple of statements on page 58 caught our attention. The revised draft EA does state that in order to maintain habitat connectivity, the CGNF needs to permit "*enough*" vegetation cover arranged in a way that allows lynx to move around. There is a subjective adjective here "enough". What exactly does that mean? Who decides if there is enough and on what basis?

Another problem with a connectivity statement is this further down on the page is this.

> *"Thinning and fuels treatments may occur in the linkage area, but these types of treatments generally leave enough trees to provide adequate cover to maintain travel and resting habitat for lynx."*

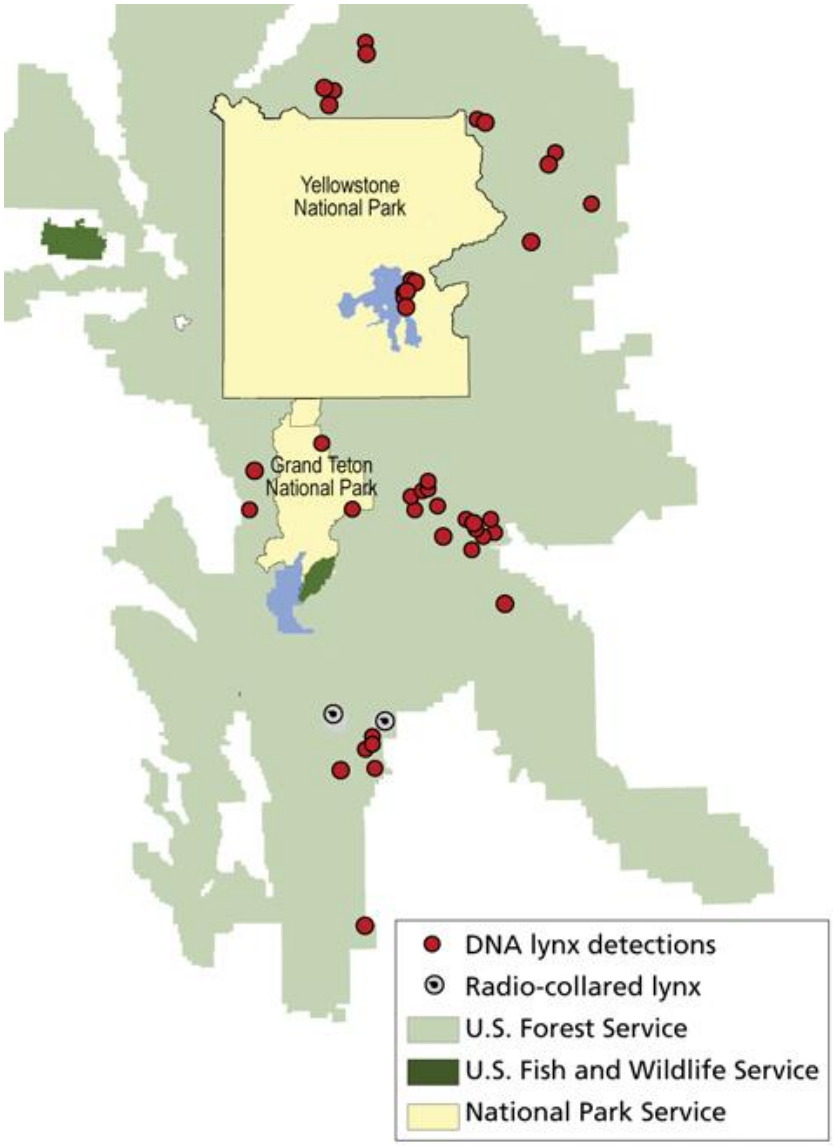
The qualifier "generally" is another subjective word. How are we, the general public, supposed to measure this statement. This makes it very hard for us to derive in any objective way, the impacts of these actions. Does this mean these treatments are or are not going to leave enough trees to provide adequate cover to maintain travel and resting habitat for lynx. And by the way, there is that word *"enough"* again. Who is going to decide whether there will be *"enough"* trees existing for such a purpose? We find an acknowledgement that these criteria are important to the lynx, but we have no assurances that we (the CGNF or the Forest Service) know how to meet that obligation.

Finally, we would like to discuss the actual existence of Canadian lynx in the area. We are trying to rely on the science and the reality on the ground to inform our position of Canadian lynx. From Yellowstone National Park's website[16], we find this information.

https://www.nps.gov/yell/learn/nature/canada-lynx.htm#:~:text=Canada%20lynx%20are%20rarely%20seen%20in%20Yellowstone%20National%20Park

> *"Historical information suggests lynx were present, but uncommon, in Yellowstone National Park during 1880 to 1980. The presence and distribution of lynx in the park was documented during 2001 to 2004, when several individuals were detected in the vicinity of Yellowstone Lake and the Central Plateau. A lynx was photographed in 2007 along the Gibbon River, and another lynx was observed near Indian Creek Campground in the northwestern portion of Yellowstone during 2010. Tracks of an individual were verified near the Northeast Entrance in 2014. Reliable detections of lynx continue to occur in surrounding National Forest System lands. Evidence suggests lynx successfully reproduce in the GYE, though production is limited.*

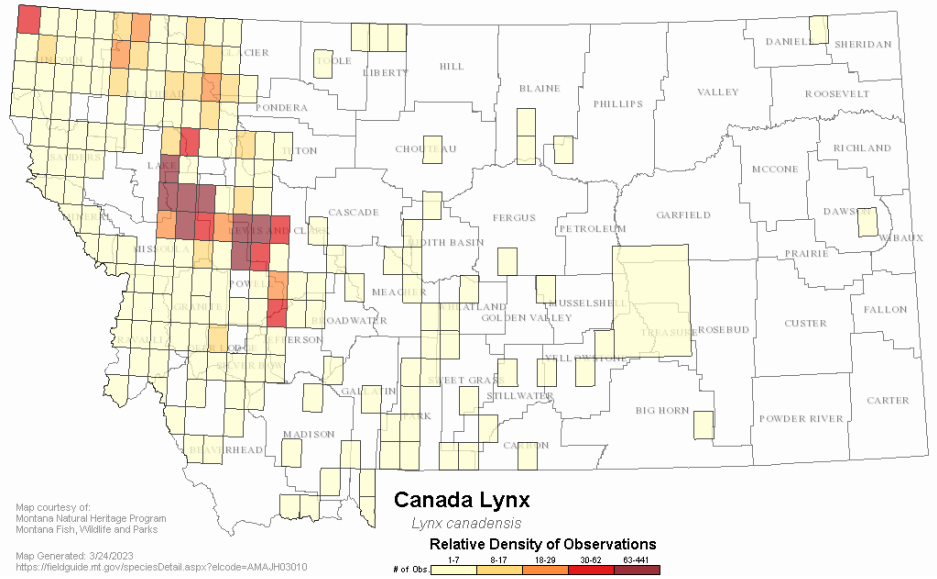
In 2000, the US Fish and Wildlife Service listed the lynx as "threatened" in the lower 48 states. Portions of the park and surrounding area is considered much of the critical habitat for the species in the Greater Yellowstone Ecosystem."



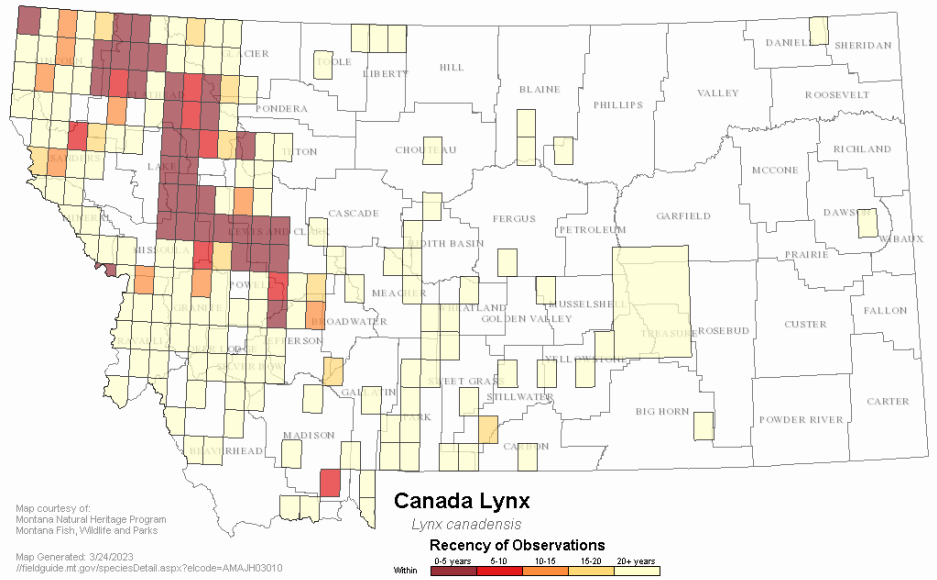
The following information is from the same website pertaining to Canadian lynx habitat within the park.

"Lynx habitat in the Greater Yellowstone Ecosystem is often naturally patchy due to natural fire frequency and generally limited to conifer forests above 7,700 feet where the distribution of its primary prey, snowshoe hare, is often insufficient to support lynx residency and reproduction. The lower quality habitat means home ranges in this ecosystem are larger than those farther north, with lynx traveling long distances between foraging sites."

Continuing in this discussion, GWA would like to showcase one more map, once again, from the Montana Natural Heritage Program[17] on observations and recency of observations on Canadian lynx distribution and likely population.



While there may be some skepticism whether or not Canadian lynx actually inhabit the project area, when the two maps from MNHP and YNP are compared together, the evidence is clear that Canadian lynx are at least in the vicinity. That fact borne out from the map below. The recency of observations may even conclude the species has recently found habitat suitable for existence in the vicinity of the project area.



This information along with the acknowledgement from the draft EA of the existence of lynx habitat, 19% specifically listed as to be affected by project activity, highlights the

importance of getting this determination right. Not only should we concern ourselves with a project displacing existing wildlife, but also of the likelihood of the future existence of wildlife likely to occur. The cumulative effect, if you will, that continued disruption on the landscape will curtail any future and new habitation of the species. If nothing else, the evidence seems most likely to show that the species are traveling through the habitat/project area.

Wildlife Connectivity:

Wildlife constantly moves upon the landscape and depending upon the species, they need large amounts of acreages and square miles of natural habitat in order to do so. That may be even more true today than ever before because of climate change and the amount of habitat fragmentation which exists on the landscape. The Proposed Action addresses this issue, albeit GWA believes it does so on a minimum level at best. Yet wildlife connectivity is one of the more important functions that a Forest Plans can address.

Nine of the eleven mentions of connectivity in the revised EA pertain to Canadian Lynx. We find that strange considering connectivity corridors are just as important for other species, such as grizzly bears. Canadian lynx are not the only species that need vast amounts of free, open land, land free of fragmented habitat. Grizzly bears, wolverines, moose, elk, the listing continues and all need land to roam. They move about the landscape in order to escape from predators, in order to search for new food sources, to escape from a warming climate, or other negative changes in their habitat. They also need to roam as it is engrained within their behavior to migrate during seasonal changes or simply to promote genetic diversity.

The South Plateau region of the CGNF is one of the more critical geographical areas for wildlife movement within the GYE. From here species can move northward or westward to the Centennials, Gravellies, or the Madison Range. GWA does not believe the CGNF has done enough due diligence to completely study the impacts of the potential disruption to wildlife movement.

GWA will reference a 2018 wildlife assessment prepared for the Idaho Transportation Department[18]. On page 7 of the document entitled "*Wildlife Assessment for U.S. 20 Junction of State Highway 87 to the Montana State Line – Targhee Pass Project 14054 and 19913 – Milepost 402.269 to Milepost 406.300,"* GWA will let these quotes highlight the importance of wildlife connectivity in the vicinity of the project.

> *"Ungulate migration routes in and out of YNP traverse US 20 as animals make their way to winter range on the Sand Creek Desert in Idaho (southwest of YNP) and the Madison Valley in Montana (northwest of YNP) during fall and return across US 20 in the spring to access summer range and calving/fawning areas in YNP and Island Park (Figure 2). These movements may be as far as 70 kilometers in one season (Andreasen et al. 2014). For moose migrating out of the Island Park and YNP areas in fall, they arrive on winter range in some of the largest concentrations of migratory moose known. Long-distance migrations like these are declining world-wide and scientists urge the protection of these legacies and the ecosystem services they provide (Berger 2004, Wilcove and Wikelski 2008, Seidler et al. 2014). Seventy-five percent of migration routes for elk, bison and pronghorn have already been lost in the GYE (Berger 2003)."*

"Not only is the loss of migration a loss of natural heritage in a region defined by charismatic wildlife species, but it results in the truncation of basic ecological processes such as nutrient cycling, the limitation of recreational opportunities such as hunting and wildlife watching and can impact economic opportunities for local communities that rely on the value of hunting, fishing and wildlife watching (Kie et al. 2003). Spectacular herds of bison, moose, elk, pronghorn and deer reside in and around YNP and migration is a crucial piece of their life history that allows them to return to winter ranges which have less-severe winter conditions and better access to forage (Fryxell and Sinclair 1988, Alerstam et al. 2003). Some of these migrations cross US 20 in the Targhee Pass project area."

"Non-migratory moose also live year-round along US 20 in the Targhee Pass project area, sometimes crossing the highway multiple times a day (Andreasen et al. 2014). Wolverine and grizzly bears cross US 20 in the Targhee Pass project area as part of their daily movements and during once-in-a-lifetime dispersals away from natal ranges (Schwarz et al. 2009, Inman 2013, IGBST 2013 personal communication). Yellowstone cutthroat trout (YCT) live in the Henry's Lake watershed and spawn in tributaries adjacent to the Targhee Pass project area feeding into this world-class fishery."

We could quote further scientific information from this reference, but you have ability to search out further information as well. This reference beautifully lays out the importance and necessity of keeping this connectivity corridor open. Hopefully, this snippet of information will entice the CGNF to read and research more from this paper and rethink the practicality, the potentiality of harm, and the long-term impact this project could place upon wildlife and their respective corridors. As said above in the opening paragraph, 75% of migration routes for elk, bison and pronghorn have already been lost. So, for the revised EA to state that wolverine, grizzlies, and other wildlife can easily reroute themselves around project disturbance is perhaps optimistic or wishful thinking.

We should not have to say Hwy 20 borders the project area. We should not have to say that wildlife impacted from a highway corridor in Idaho will be the same wildlife that will be impacted from this project. This report describes the importance of this wildlife corridor better than we ever could. We encourage the CGNF and the U.S. Forest Service to utilize this information to fully comprehend the actions they are about to undertake. It is everyone's responsibility to make sure we do not screw this up.

GWA does recognize on page 91 of the revised EA, the scenarios of different wildlife design features such as Big Game Winter Range and Moose Winter Range. GWA believes the patches of untreated forests which are being recommended in size of .5 to 5 acres for moose winter range is insufficient. In fact, GWA believes that the mitigative steps the CGNF are proposing to take will be insufficient overall. They will not offset the severe impact this project will have on wildlife, their habitat, or their connectivity.

The Proposed Solution:

GWA fails to understand how CGNF or any entity can review the science before them, with the proposed actions, and determine the SPLAT Project would have a "finding of no significant impact" to wildlife. We must respectfully disagree with that finding. In the

alternatives presented before the public, GWA believes the better solution would be the "No Action" Alternative for reasons we have already stated.

The purpose in the original project proposal (prior to the revised Forest Plan of 2022) was proclaimed to reduce the anticipated effects from recurring large-scale disturbances of natural and social resources on the South Plateau (page 5 of the Environmental Assessment). It is also stated it was to reduce the risk or extent of insect and diseases infection. However, in the revised proposal, those lofty words are no longer found. The closest we could find to the purpose of the proposal was found on page 3 under Need for the Proposal. The purposes listed are as follows.

1.) Reduce the risk from and increase stand resistance and landscape resilience to insects and disease, particularly long-term losses of lodgepole pine stands.
2.) Contribute to a sustained yield of timber products and improve the productivity of forested timber stands.
3.) Treat hazardous fuels to increase fire suppression effectiveness and reduce risk to the public and first responders.

So, if one could describe this action, it is largely trying to be proactive. While we applaud that ideal, we would appreciate the effort even more if it was trying to be proactive in the fight against climate change and in the name of wildlife.

There is no doubt the U.S. Forest Service has projects similar to these across the western landscape, all trying to reduce fire potential. We suggest the Forest Service should focus and narrow those efforts to landscapes in and around Wildland Urban Interface. For this project, that would be near West Yellowstone, not in the wildest portions of the ecosystem.

George Wuerthner[19] stated in Counterpunch Magazine the following:

> *"The way to protect homes is to promote fire-safe policies around homes and limit subdivisions in the wildlands interface, not by degrading our forest ecosystems with logging."*

If the purpose is to "get the cut out", we say not during times of climate change. We've stated our rationale for that. We need to accept that climate change has exacerbated the cycle of disease and pests upon the landscape. Thinning and cutting of forests speeds up that process and adds to that vicious cycle.

The proposed solution is to change the paradigm of how we manage our forests and wildlands. There is value in having our forests intact, complete, and whole. This is how we fight climate change. We need to preserve the biological integrity and diversity of the forest. That is how we fight the negative impacts of climate change.

The link between Objection and prior Formal Comments:

These comments of today are similar if not identical to those of our original position. Our position, rationale, and the science we use has not changed. If anything, there is additional science that reinforces our reasoning. We presented the same and some new information

because it surely seems our original comments were ignored. The case we presented in our original comments is the same as we present now. What needs to change is the premise in which the U.S. Forest Service operates. There needs to be a realization that concepts which were in place during the Manifest Destiny era of our country's expansion no longer apply. There needs to be an openness to accept the data and science as we understand it today to prepare for a better world. We need to realize the quality of the forest is not man-dependent. The overall purpose on our part is to provide protection for the resource (in this case wildlife and their habitat) for future generations. That was the purpose in our prior comments and that is the purpose now.

Sincerely,

Clinton Nagel, President
Gallatin Wildlife Association

Cited References:

1. Lavelle, Marianne, "*Logging Plan on Yellowstone's Border Shows Limits of Biden Greenhouse Gas Policy",* Inside Climate News, April 7, 2023. https://insideclimatenews.org/news/07042023/logging-deforestation-custer-gallatin-national-forest/

2. Smith, Danna, Hanson, Chad, Koehler, Matthew, *Logging is the Lead Driver of Carbon Emissions from US Forests*, Earth Island Journal, Apr. 4, 2019. https://www.earthisland.org/journal/index.php/articles/entry/logging-carbon-emissions-us-forests/

3. *"Forests-Carbon 101"*, Oregon Wild.org, https://oregonwild.org/forests/climate-change/forest-carbon-101

4. Zald, Harold, Dunn, Christopher J., "*Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape",* Ecological Applications, 2018. https://www.researchgate.net/publication/324786837_Severe_fire_weather_and_intensive_forest_management_increase_fire_severity_in_a_multi-ownership_landscape

5. Mildrexler, David J. et al., *"Protect large trees for climate mitigation, biodiversity, and forest resilience",* Conservation Science and Practice by Society for Conservation Biology, April 22, 2023. https://conbio.onlinelibrary.wiley.com/doi/10.1111/csp2.12944

6. Warne, Joseph Dr., Declaration from Unite the Parks v. U.S. Forest Service, 2021.

7. Baker, William L., et al, "*Countering Omitted Evidence of Variable Historical Forests and Fire Regime in Western USA Dry Forests: The Low-Severity-Fire Model Rejected,"* MPDI, April 3, 2023. https://www.mdpi.com/2571-6255/6/4/146

8. *Final Draft of the Draft 2016 Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Ecosystem,* U.S. Fish and Wildlife Service, 2016. https://www.fws.gov/mountain-prairie/es/FINALCS.DRAFT_Feb_19_2016_FINAL.pdf

9. Montana Field Guide, Montana Natural Heritage Program, Montana Fish, Wildlife, and Parks, March 2023. https://fieldguide.mt.gov/speciesDetail.aspx?elcode=AMAJB01020

10. French, Brett, *"Logging Project near Yellowstone National Park enters final round of consideration,"* The Billings Gazette, March 23, 2023.

https://billingsgazette.com/news/state-and-regional/logging-project-near-yellowstone-national-park-enters-final-round-of-consideration/article_b2ed6cd6-c9a4-11ed-b0bf-076710c232bd.html

11. Mattson, David J., "*USE OF LODGEPOLE PINE COVER TYPES BY YELLOWSTONE GRIZZLY BEARS",* U.S. Geological Survey, Biological Resources Division, Journal of Wildlife Management, 1997. https://pubs.er.usgs.gov/publication/1015674

12. Montana Field Guide, Montana Natural Heritage Program, Montana Fish, Wildlife, and Parks, March 2023. https://fieldguide.mt.gov/speciesDetail.aspx?elcode=AMAJF03010

13. Craighead, Lance, "*Wilderness, Wildlife, and Ecological Values of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area",* 2015. http://www.craigheadresearch.org/wilderness-study-areas-and-wildlife.html

14. Ray, Justina, "*Why won't wolverines cross the road?",* Canadian Geographic, Feb. 14, 2018. https://www.canadiangeographic.ca/article/why-wont-wolverines-cross-road

15. Montana Field Guide, Montana Natural Heritage Program, Montana Fish, Wildlife, and Parks, March 2023. https://fieldguide.mt.gov/speciesDetail.aspx?elcode=AMAJF01040

16. Yellowstone National Park, National Park Service https://www.nps.gov/yell/learn/nature/canada-lynx.htm#:~:text=Canada%20lynx%20are%20rarely%20seen%20in%20Yellowstone%20National%20Park

17. Montana Field Guide, Montana Natural Heritage Program, Montana Fish, Wildlife, and Parks, March 2023. https://fieldguide.mt.gov/speciesDetail.aspx?elcode=AMAJH03010

18. "*Wildlife Assessment for U.S. 20 Junction of State Highway 87 to the Montana State Line – Targhee Pass Project 14054 and 19913 – Milepost 402.269 to Milepost 406.300",* Idaho Transportation Department, 2018. https://bloximages.chicago2.vip.townnews.com/postregister.com/content/tncms/assets/v3/editorial/1/e6/1e6077b6-24b8-5457-880c-2e32f8f16775/5c59021ec14e1.pdf.pdf

19. Wuerthner, George, "*Logging the South Plateau: Another Forest Service Con Job",* Counterpunch, February 26, 2021. https://www.counterpunch.org/2021/02/26/logging-the-south-plateau-another-forest-service-con-job/