

July 13, 2020

Objection Reviewing Officer

USDA Forest Service

Northern Region

26 Fort Missoula Road

Missoula, MT 59804

This letter is an objection, pursuant to 36 CFR section 218, to the Horsefly Project Draft Decision Notice and Finding of No Significant Impact on behalf of the Alliance for the Wild Rockies and Native Ecosystems Council collectively, “AWR.”.

The Responsible Official is William Avey, Supervisor of the Helena-Lewis and Clark National Forest. The Horse Fly Project is planned for the Belt Creek-White Sulphur Springs Ranger District of the Helena-Lewis and Clark National Forest in Meagher County about 12 miles north of White Sulphur Springs, Montana. The project area, approximately 20,100 acres, is located within the Miller

Gulch and Newland Creek drainages in the Little Belt Mountains.

NOTICE IS HEREBY GIVEN that AWR objects pursuant to 36 CFR section 218 to the Responsible Official's selection of the proposed action, Alternative 2 modified, which includes logging and/or burning on 10,754 acres and building 40.7 miles of new temporary roads.

AWR is objecting to this project on the grounds that implementation of the Selected Alternative would not be fully in accordance with the laws governing management of the national forests such as Clean Water Act, the ESA, NEPA, NFMA, the Lewis and Clark Forest Plan and the APA, and will result in additional degradation in already degraded watersheds and mountain slopes, further upsetting the wildlife habitat, ecosystem and human communities. Our objections are detailed below.

As a result of the Draft DN, individuals and members of the above-mentioned groups would be directly and significantly affected by the logging and associated activities.

Appellants are conservation organizations working to ensure protection of biological diversity and ecosystem integrity in the Wild Rockies bioregion (including the HLCNF). The individuals and members use the project area for recreation and other forest related activities. The selected alternative would also further degrade the water quality, wildlife and fish habitat. These activities, if implemented, would adversely impact and irreparably harm the natural qualities of the Project Area, the surrounding area, and would further degrade the watersheds and wildlife habitat.

1. Objectors names and addresses:

Lead Objector Mike Garrity, Executive Director, Alliance  
for the Wild Rockies

P.O. Box 505; Helena, MT 59624

Phone 406 459-5936

Objector Sara Jane Johnson

Director, Native Ecosystems Council,

P.O. Box 125

Willow Creek, MT;

Augusta, MT 59410

2. Signature of Lead Objector:

Signed this 13th day of July, 2020 by Lead Objector,

/s/ Michael Garrity

3. Lead Objector: Michael Garrity, Alliance for the

Wild Rockies

4. Name of the Proposed Project, Responsible Official,

National Forest and Ranger District where Project is:

Elk Smith Project;

William Avey, Supervisor, Helena-Lewis and Clark National Forest is the Responsible Official; The project is in the Belt Creek-White Sulphur Springs Ranger District of the Helena-Lewis and Clark National Forest. Supervisor Avey chose Alternative 2 in the Draft Decision Notice and FONSI.

NOTICE IS HEREBY GIVEN that AWR and Native Ecosystems Council (NEC) object pursuant to 36 CFR section 218 to the Responsible Official's adoption of the Alternative 2. As discussed below, the Horsefly Project as proposed violates the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), the Endangered Species Act (ESA), the Lewis and Clark Forest Plan and the Administrative Procedure Act (APA).

Location

This Draft Decision Notice calls for: logging (cutting by hand) and or prescribed burning on 10,754 acres of Helena-

Lewis and Clark National Forest (HLCNF) in Meagher County. The project is located in the Miller Gulch and Newland Creek drainages in the Little Belt Mountains on the Belt Creek-White Sulphur Springs Ranger District of the Helena-Lewis and Clark National Forest.

5. Specific Issues Related to the Proposed Projects, including how Objectors believes the Environmental Analysis or Draft Decision Notice and FONSI specifically violates Law, Regulation, or Policy: We included this under number 8 below.

Thank you for the opportunity to object on the Elk Smith Project. Please accept this objection from me on behalf of the Alliance for the Wild Rockies and Native Ecosystems Council.

6. Suggested Remedies that would Resolve the Objection:

We recommend that the “No Action Alternative” be selected. We have also made specific recommendations after each problem.

## 7. Supporting Reasons for the Reviewing Office to Consider:

This landscape has very high wildlife values, including for the threatened grizzly bear, lynx, big game species, and wildlife dependent upon unlogged. The project is also in lynx critical habitat. The project area will be concentrated within some of the best wildlife habitat in this landscape which is an important travel corridor for wildlife such as lynx, grizzly bears, and wolverine. The agency will also be exacerbating an ongoing problem of displacing elk to adjacent private lands in the hunting season due to a lack of security on public lands. The public interest is not being served by this project.

### Suggested Remedies to Resolve the Objection:

The agency can choose the No Action Alternative and the agency needs to complete the surveys for lynx required by U. S. District Court to review the proper designation of lynx critical habitat.

The HLCNF must also consult with the Fish and Wildlife Service forest wide on and the impact of the project on lynx, lynx critical habitat, grizzly bears and wolverines. Without these corrective actions, implementation of the the Horsefly project, will lead to severe, irretrievable impacts on almost all wildlife species on the Forest. These impacts, if continued across the HLCNF for other projects, will erode the viability of a huge number of wildlife species across this landscape.

8. Statements that Demonstrates Connection between  
Prior Specific Written Comments on the Particular  
Proposed Project and the Content of the Objection.

We wrote in our February 10, 2020 comments:

***How often will the closures be monitored to be sure they are effective?***

***How will the Forest Service ensure that illegal roads or trails are not being built?***

We wrote in our February 6, 2020 comments:

## ***CHRONIC, RECURRING ROAD CLOSURE VIOLATIONS***

***You state: “Logging activity, road construction, and use of closed roads for hauling would result in short-term displacement of elk. These roads would be decommissioned post project implementation and with the cessation of logging activity elk use of these areas should resume.” This conclusion, and your analysis in general, fail to take a hard look at the true environmental impacts of chronic, recurring illegal road use in the Little Belts.***

***We recently sent a FOIA request to the Forest Service for records of road closure violations between mid-2014 and mid-2019. In response, the Forest Service disclosed over 50 reported road closure violations in the Little Belts in that 5-year time-frame. Attachment 1 provides a map of these violations, and Attachment 2 provides the underlying data from the Forest Service law enforcement incident reports. Significantly, this data only includes the witnessed and reported violations. It is fair to assume that there are many more violations that regularly occur and are not witnessed and reported. It is also fair to assume that you have made no effort to request this available***

*information from your own law enforcement officers, much less incorporate it into your analysis. Considering your own admissions that road density is the primary factor that degrades elk and grizzly habitat, this is a material and significant omission from your analysis— all of your ORD and HE calculations are wrong without this information.*

*Moreover, in light of the fact that you are exempting this project from Forest Plan hiding cover standards designed to protect and conserve elk habitat, the only protection left for elk habitat would be the Forest Plan open road density limits and mandates to maintain existing HE. This makes your failure to analyze road closure violations even more egregious – both in the Project analysis and your analysis of the Forest Plan amendment. Chronic, illegal road use is reasonably foreseeable and must be addressed in the cumulative effects analysis for both the Project and the Forest Plan amendment.*

*Additionally, your emphasis on elk populations across entire hunting districts is disingenuous and has little relevance to whether you are meeting your Forest Plan obligations to maintain sufficient elk habitat on National*

*Forest lands. As you note, the Forest Plan estimated that 70% of elk were taken on National Forest lands in 1986. What percentage of elk are currently taken on National Forest lands? You refuse to disclose this information. Have you asked Montana FWP for this information? Any honest biologist would admit that high elk population numbers do not indicate that you are appropriately managing National Forest elk habitat; to the contrary, high elk numbers indicate that you are so poorly managing elk habitat on National Forest lands that elk are being displaced to private lands where hunting is limited or prohibited. Your own Forest Service guidance document, Christensen et al 1993 states: "Reducing habitat effectiveness should never be considered as a means of controlling elk populations."*

*In the Horsefly Project area, you represent that "the existing condition of linear motorized route density is 3.2 miles/mi<sup>2</sup> on National Forest System lands in the action area and during implementation that would increase to 3.7 miles/mi<sup>2</sup>." Nonetheless, you plan to add 0.7 miles of permanent road, construct 28.9 miles of new "temporary" road, and reconstruct 12.4 miles of existing "non-*

*system,” i.e. illegal, roads. You also disclose that you plan to “survey” another 25 miles of illegal roads to analyze whether you want to obliterate them. Do your open road density calculations include the 37.4 miles of “non-system” i.e. illegal roads in the Project area? Do your open road density calculations include all of the recurring illegal road use documented in your own law enforcement incident reports, as set forth in the attached map and data sheet?*

*The Travel Plan for the Little Belts was issued in 2007. You represent that the Travel Plan “analyzed the open road density, as well as elk security as measured by areas at least 250 acres in size and greater than 1/2 mile from an open road or motorized trail.” You represent that “Open road density (for public access) was reduced in all management areas and road density standards were met or exceeded in the Little Belt . . . Mountains (USDA*

*Forest Service 2007a, page 35, Table 19).” You also represent that “Elk security was increased in all hunting districts across the Little Belt . . . Mountains during both the archery and rifle season by the Travel Plan Decision (USDA Forest Service 2007a, page 36 Table 20).”*

*However, you also indicate that “[a]s funds become available some or all of these routes would be obliterated per the 2007 Little Belt . . . Mountains Travel Management Plan.”*

*Please clarify what is going on. Have you closed or obliterated all roads that were promised to be closed or obliterated in the 2007 Little Belts Travel Plan? Or, are you still waiting for funds to close or obliterate those roads? This distinction matters because you cannot honestly claim that you are meeting road density standards promised by the Travel Plan if you have not yet completed the road closures/obliterations promised by the Travel Plan. Furthermore, as noted above, you have a major problem with recurring, chronic violations of the road closures created by the Travel Plan, which means that your assumptions in the Travel Plan that all closures would be effective has proven false. For this reason, you cannot tie to the analysis in the Travel Plan because it is invalid. You must either complete new NEPA analysis for the Travel Plan on this issue or provide that new analysis in the NEPA analysis for this Project. Either way, you*

*must update your open road density calculations to include all roads receiving illegal use.*

*In your analysis you set forth a habitat effectiveness estimate from 13 years ago – in the 2007 Travel Plan. It is unclear whether the numbers were based on actual 2007 conditions or a promised goal for a future condition.*

*Please produce the full 2007 Travel Plan on your website, as well as its full NEPA analysis. You state that the 2007 Travel Plan indicates that HD 416 (which is 174 square miles) had an average ORD of 1.18, which is 57%*

*habitat effectiveness and HD 454 (which is 100.2 square miles) is 1.38, which is 54% habitat effectiveness. The scale you are using renders the habitat effectiveness metric completely meaningless. The uselessness of your Travel Plan habitat effectiveness estimates is made clear from your project-level disclosures that ORD is three times higher than the HD averages. Certainly, you are not taking a hard look at habitat effectiveness in this Project area if you are relying on the habitat effectiveness estimates from 13 years ago in the Travel Plan at the HD scale.*

*Christensen et al (1993) states: “Any motorized vehicle use on roads will reduce habitat effectiveness. Recognize and deal with all forms of motorized vehicles and all uses, including administrative use.” Please disclose this to the public and stop representing that roads closed to the public should not be included in habitat effectiveness calculations. The facts that (a) you are constructing or reconstructing over 40 miles of road for this project, (b) you have problems with recurring illegal use, and (c) you already admit that you found another 25 miles of illegal roads in the project area that you have not committed to obliterating, means that your conclusion that this Project will have no effect on open road density or habitat effectiveness is implausible to the point of being disingenuous. You cannot exclude these roads simply because you say they are closed to the public. Every road receiving motorized use must be included in the HE calculation. You must consider all of this road use in order to take a hard look that is fully and fairly informed regarding habitat effectiveness. In the very least you must add in all “non-system” roads, i.e. illegal roads, as well as recurring illegal road use (violations) in your ORD calculations. Also, as a side note, your calculations in*

*Table 12 give the HE of the existing condition, not the HE during the project.*

*You disclosed an ORD in your grizzly report of 3.2. As demonstrated below, open road density of 3.2 equates to a habitat effectiveness of less than 40%. ORD will increase to at least 3.7 during the Project, according to your grizzly report, which is about 30% habitat effectiveness.*

*Thesenumbers are not disclosed to the public in the EA analysis of habitat effectiveness.*

*Additionally, when you disclose road density at the MA level (3.1 for MA A; 3.2 for MA B; 2.1 for MA C) you fail to disclose the corresponding habitat effectiveness. All of the MAs have less then 50% habitat effectiveness.*

*Christensen et al 1993 finds: “Areas where habitat effectiveness is retained at lower than 50 percent must be recognized as making only minor contributions to elk management goals. If habitat effectiveness is notimportant, don't fake it. Just admit up front that elk are not a consideration.”*

***You fail to make this admission and instead represent that you are meeting all relevant objectives.***

***You are also violating your Forest Plan requirements. You are violating ORD limitations for MA A, MA B, and MA C:***

- ***Management Area A: “Roads Management (LR2b) Achieve moderate public access by permitting Motorized use on all arterial roads and most collector roads, plus some local roads. Moderate access is defined as 1.5 - 3.0 miles of open road per square mile of area (Montana Cooperative Elk Logging Study, 1982 describes the method for determining open road densities).”***

- ***Management Area B: “Roads Management (LR2c) Achieve moderate public access by permitting motorized use on all arterial roads and most collector roads, plus some local roads. Moderate access is defined as 1.5 - 3.0 miles of open road per square mile of area.”***

- ***Management Area C: “Achieve low public access through permitting motorized use on all arterial and most***

*collector roads. . . . Low access is defined as 0.5 to 1.5 miles of open road per square mile of area.”*

*Also, Forest Plan Management Standard C-1 (4) requires: “Incorporate recommendations from the Montana Cooperative Elk-Logging Study in the planning of timber sales and road construction projects. These recommendations are listed in Appendix F.” You have failed to incorporate the following recommendation from Appendix F: “ROAD MANAGEMENT*

*Recommendation: Where maintenance of elk is an important consideration, open road densities should be held to a low level, and every open road should be carefully evaluated to determine the possible consequences for elk.”*

*Also, Forest Plan Management Standard C-1 (6) requires: Manage motorized use on National Forest system lands through the Forest Travel Plan, in cooperation with the public, State of Montana, and other Federal agencies, to reduce effects on wildlife during*

*periods of high stress (hunting seasons and wintering periods). Also see Chapter III and Appendix 0. The Montana Fish and Game Commission Road Management Policy and the Forest Service Road Regulations are shown in Appendix G.” Appendix G states: “The Lewis and Clark Forest will use this policy to guide the Forests’ road management plan [].” You have failed to comply with this policy, which states:*

*Also, Forest Plan Management Area C Goal states: “Maintain or enhance existing elk habitat by maximizing habitat effectiveness as a primary management objective. Emphasis will also be directed toward management of indigenous wildlife species. Commodity resource management will be practiced where it is compatible with these wildlife management objectives.” Also – MA C Standard: “Habitat effectiveness will be positively managed through road management and other necessary controls on resource activities.” Also – “Elk habitat effectiveness will be maintained.” You are violating all of these provisions for all of the above-stated reasons.*

The Forest Service responded on page 5 of the Decision Notice;

*In recognizing the importance of these current road closures to meet desired road density objectives for big game as well as other resource concerns, my recreation and engineering staff routinely survey, maintain and repair any damage as needed to physical road closure devices, barriers and signage to meet objectives of the travel management plan to ensure these closures are effective within the project area In the event that illegal road use occurs, the Forest Service Enforcement Division handles these cases as applicable under the code of Federal Regulations.*

On appendix C, page 172. The Forest Service wrote:  
***Elk habitat effectiveness will be maintained.***

***Standard is being met at the Forest level. Designated trails are open to ORV's in addition to restricted seasonal use to address user conflict, safety and protection of resources based on the 2007 Lewis and Clark Travel Plan.***

On appendix C, page 179. The Forest Service wrote:

***Open all areas and trails to ORVs, except where use is restricted by season, type of vehicle, or type of activity. Closures or restrictions may be used to: (1) resolve user conflict; (2) promote user safety; or (3) protect resources. Elk habitat effectiveness will be maintained.***

***Standard is currently being met and would continue during and following project implementation.***

The Standard is not being met and therefore this is a NEPA, NFMA and APA violation.

The Horsefly project is in violation of NEPA for not responding to our comments. The standard is not being met at the project level and there is no evidence provided that it is being met at the Forest Plan level.

The project is in violation of NEPA, NFMA, the Forest Plan, The Travel Plan, the APA and the ESA because of the reoccurring road closure violations. your assumptions in the Travel Plan that all closures would be effective has proven false. For this reason, you cannot tier to the analysis in the Travel Plan because it is invalid.

Remedy: Choose the No Action Alternative or you must either complete new NEPA analysis for the Travel Plan on this issue or provide that new analysis in the NEPA analysis for this Project. Either way, you must update your open road density calculations to include all roads receiving illegal use.

We wrote in our comments:

***1. Did the Forest Service conduct NEPA analysis (i.e. an EA or EIS) for the Meagher County Community Wildfire protection plan which the Forest is using for this project?***

***2. If the Forest Service did not conduct NEPA for the Fire Meagher County Community Wildfire protection plan, please immediately start that NEPA process.***

***3. Please provide a map showing the WUI and the locations of all homes in comparison to the project area.***

*4.If the Forest Service did not conduct NEPA for the Meagher County Community Wildfire protection plan, please disclose the cumulative effect of the Horse Fly project EIS to avoid illegally tiering to a non-NEPA document. Specifically analyze the decision to prioritize mechanical, human-designed, somewhat arbitrary treatments as a replacement for naturally-occurring fire.*

*5.Did the Forest Service conduct ESA consultation for the Meagher County Community Wildfire protection plan?*

We could not find a response by the Forest Service on this issue.

The project is therefore in violation of NEPA, NFMA, the APA and the ESA.

Remedy: Please choose the No Action Alternative or withdraw the DN and FONSI and write a supplemental EA that fully complies with the law.

requires a “hard look” at climate issues, including cumulative effects of the “treatments” in the proposed project when added to the heat, drought, wind and other impacts associated with increased climate risk.

Regeneration/Restocking failure following wildfire, prescribed fire and/or mechanical tree-killing has not been analyzed or disclosed. There is a considerable body of science that suggests that regeneration following fire is increasingly problematic.

NEPA requires disclosure of impact on “the human environment.” Climate risk presents important adverse impacts on cultural, economic, environmental, and social aspects of the human environment. – people, jobs, and the economy – adjacent to and near the project area.

“Challenges in predicting responses of individual tree species to climate are a result of species competing under a never-before-seen climate regime – one forests may not have experienced before either.

In an uncertain future of rapid change and abrupt, unforeseen transitions, adjustments in management approaches will be necessary and some actions will fail. However, it is increasingly evident that the greatest risk is posed by continuing to implement strategies inconsistent with and not informed by current understanding of our novel future....

Achievable future conditions as a framework for guiding forest conservation and management, *Forest Ecology and Management* 360 (2016) 80–96, S.W. Golladay et al.  
(Please, find attached with our comments,

Stands are at risk of going from forest to non-forest, even without the added risk of “management” as proposed in the project area.

The Helena Lewis and Clark National Forest has not yet accepted that the effects of climate risk represent a significant issue, and eminent loss of forest resilience

already, and a significant and growing risk into the “foreseeable future?”

It is now time to speak honestly about unrealistic expectations relating to desired future condition. Forest managers have failed to disclose that at least five common tree species, including aspens and four conifers, are at great risk unless atmospheric greenhouse gases and associated temperatures can be contained at today’s levels of concentration in the atmosphere. (See attached map). This cumulative (“reasonably foreseeable”) risk must not continue to be ignored at the project-level, or at the programmatic (Forest Plan) level.

Global warming and its consequences may also be effectively irreversible which implicates certain legal consequences under NEPA and NFMA and ESA (e.g., 40 CFR § 1502.16; 16 USC §1604(g); 36 CFR §219.12; ESA Section 7; 50 CFR §§402.9, 402.14). All net carbon emissions from logging represent “irretrievable and irreversible commitments of resources.”

It is clear that the management of the planet’s forests is a nexus for addressing this largest crisis

ever facing humanity. Yet the EA fails to even provide a minimal quantitative analysis of project- or agency-caused CO<sub>2</sub> emissions or consider the best available science on the topic. This is

immensely unethical and immoral. The lack of detailed scientific discussions in the EA concerning climate change is far more troubling than the document's failures on other topics, because the consequences of unchecked climate change will be disastrous for food production, sea level rise, and water supplies, resulting in complete turmoil for all human societies. This is an issue as serious as nuclear annihilation (although at least with the latter we're not already pressing the button).

The EA provided a pittance of information on climate change effects on project area vegetation. The EA provides no analysis as to the veracity of the project's Purpose and Need, the project's objectives, goals, or desired conditions. The FS has the responsibility to inform the public that climate change is and will be bringing forest change. For the Galton project, this did not happen, in violation of NEPA.

The EA fails to consider that the effects of climate change on the project area, including that the "desired" vegetation conditions will likely not be achievable or sustainable. The EA fails to provide any credible analysis as to how realistic and achievable its desired conditions are in the context of a rapidly changing climate, along an unpredictable but changing trajectory.

The Forest Plan does not provide meaningful direction on climate change. Nor does the EA acknowledge pertinent and highly relevant best available science on climate change. This project is in violation of NEPA.

The EA does not analyze or disclose the body of science that implicates logging activities as a contributor to reduced carbon stocks in forests and increases in greenhouse gas emissions. The EA fails to provide estimates of the total amount of carbon dioxide (CO<sub>2</sub>) or other greenhouse gas emissions caused by FS management actions and policies—forest-wide, regionally, or nationally. Agency policymakers seem comfortable maintaining a position that they need not take any leadership on this issue, and obfuscate via this EA to justify their failures.

The best scientific information strongly suggests that management that involves removal of trees and other biomass increases atmospheric CO<sub>2</sub>. Unsurprisingly the EA doesn't state that simple fact.

The EA fails to present any modeling of forest stands under different management scenarios. The FS should model the carbon flux over time for its proposed stand management scenarios and for the various types of vegetation cover found on the GNF.

The EA also ignores CO<sub>2</sub> and other greenhouse gas emissions from other common human

activities related to forest management and recreational uses. These include emissions associated with machines

used for logging and associated activities, vehicle use for administrative actions, and recreational motor vehicles. The FS is simply ignoring the climate impacts of these management and other authorized activities.

The Committee of Scientists, 1999 recognize the importance of forests for their contribution to global climate regulation. Also, the 2012 Planning Rule recognizes, in its definition of Ecosystem services, the “Benefits people obtain from ecosystems, including: (2) Regulating services, such as long term storage of carbon; climate regulation...”

We have no more time to prevaricate, and it’s not a battle we can afford to lose. We each have a choice: submit to status quo for the profits of the greediest 1%, or empower ourselves to limit greenhouse gas emissions so not just a couple more generations might survive.

Remedy: Choose the No Action Alternative. Revise the Forest Plan to take a hard look at the science of climate change. Alternatively, draft a new EIS for this project if the FS still wants to pursue it, which includes an analysis that examines climate change in the context of project activities and Desired Conditions. Better yet, it’s time to prepare an EIS on the whole bag of U.S. Government climate policies.

We wrote in our February 6, 2020 comments:

***The Forest Service must complete a full environmental impact statement (EIS) for this Project because the scope of the Project will likely have a significant individual and cumulative impact on the environment.***

The Forest Service did not respond.

Because of the violations detailed above and the reasons we asked for an EIS the project is in violation of NEPA and the APA.

The Remedy is to withdraw the draft Decision Notice and write an Environmental Impact Statement.

We wrote in our comments:

***Is the EA making the assumption that the project area forests are Unnaturally Dense and “Overgrown”, and the assumption that Denser Forests Necessarily Burn More Intensely?***

***Our forests actually have a carbon deficit, due to decades of logging. Historical forests were variable in density, with both open and very dense forests (Baker et al. 2018). Recent studies by U.S. Forest Service scientists, regarding historical tree density, omitted historical data on small tree density and density of nonconifer trees. When the missing historical data were included, it was revealed that historical tree density was 7 times higher than previously reported in ponderosa pine forests, and 17 times higher than previously reported in mixed-conifer forests (Please find Historical Fire Regiems in Pondersossa Pane***

*and Mixed Forests by Baker et al. 2018 attached).  
Wildland fire is driven mostly by weather, while forest density is a “poor predictor” (Please find Zald and Dunn 2018 attached).*

### *Do Occasional Cycles of Drought and Native Bark Beetles*

#### *Make Forests “Unhealthy”?*

*We believe the evidence shows the opposite.*

*During droughts, native bark beetles selectively kill the weakest and least climate-adapted trees, leaving the stronger and more climate-resilient trees to survive and reproduce (Six et al. 2018). In areas with many new snags from drought and native bark beetles, most bird and small mammal species increase in numbers in such areas because snags provide such excellent wildlife habitat (Stone 1995).*

#### *Do Forests with More Dead Trees Burn More Intensely?*

*The largest analysis, spanning the entire western U.S., found no effect (Hart et al. 2015). Later, after needles and*

*twigs fall and quickly decay into soil, and after many snags have fallen, such areas have similar or lower fire intensity*

*(Hart et al. 2015, Meigs et al. 2016).*

*Does Reducing Environmental Protections, and Increasing*

*Logging, Curb Forest Fires?*

*Based on the largest analysis ever conducted, this approach*

*increases fire intensity (Please find Bradley et al. 2016 attached). Logging reduces the cooling shade of the forest*

*canopy, creating hotter and drier conditions, leaves behind kindling like “slash” debris, and spreads combustible invasive weeds like cheatgrass.*

*Do “Thinning” Logging Operations Stop Wildland Fires?*

*“Thinning” is used as a euphemism for intensive commercial logging projects that kill and remove many of the trees in a stand, often including mature and old-growth trees. With fewer trees, winds, and fire, can spread faster through the forest. In fact, extensive research shows that commercial logging, conducted under the*

*guise of “thinning”, often makes wildland fires spread faster, and in most cases also increases fire intensity, in terms of the percentage of trees killed (Cruz et al. 2008, 2014).*

## *Would Landscape-Scale Prescribed Burning Reduce Smoke?*

*Prescribed fires do not stop wildland fires when they occur*

*(Stephens et al. 2009), though they can alter fire intensity.*

*However, any shortterm reduction in potential fire intensity following prescribed fire lasts only 10-20 years, so using prescribed fires ostensibly as a means to reduce the intensity of wildland fires would require burning a given area of forest every 10-20 years (Rhodes and Baker 2008). This would represent a tenfold increase, or more, over current rates of burning (Parks et al. 2015). High-intensity fire patches produce relatively lower particulate smoke emissions (due to high efficiency of flaming combustion in higher-intensity fire patches) while low-intensity prescribed fires produce high particulate smoke emissions, due to the inefficiency of smoldering combustion. Therefore, even though high intensity fire patches consume about three times more biomass per*

*acre than low-intensity fire (Campbell et al.2007), low-intensity fires produce 3-4 times more particulate smoke than high-intensity fire, for an equal tonnage of biomass consumed (Ward and Hardy 1991, Reid et al.*

*2005). As a result, a landscape-level program of prescribed burning would cause at least a ten-fold increase in smokeemissions relative to current fire levels.*

*Please find “Does increased forest protection correspond to higher fire severity in frequent- fire forests of the western United States?” attached.*

*Schoennagel et al (2004) states: “we are concerned that the model of historical fire effects and 20th-century firesuppression in dry pon- derosa pine forests is being applieduncritical- ly across all Rocky Mountain forests, including where it is inappropriate.*

The Forest Service did not respond.

The project is in violation of NEPA, NFMA and the APA for not meeting the purpose and need.

Please see the paper attached to our comments by Dr. William Baker titled:

“Are High-Severity Fires Burning at Much Higher Rates

Recently than Historically in Dry-Forest Landscapes of the Western USA?”

Dr. Baker writes: ***“Programs to generally reduce fire severity in dry forests are not supported and have significant adverse ecological impacts, including reducing habitat for native species dependent on early-successional burned patches and decreasing landscape heterogeneity that confers resilience to climatic change.”***

Dr. Baker concluded: ***“Dry forests were historically renewed, and will continue to be renewed, by sudden, dramatic, high-intensity fires after centuries of stability and lower-intensity fires.”***

The Remedy is to withdraw with the Draft Decision Notice and write an EIS that fully complies with the law.

Remedy: Withdraw the Draft Decision and formally consult with the FWS.

Dr. Baker's paper is the best available science. Please explain why this project is not following the best available science. The Draft Decision Notice is in violation of NEPA.

Remedy, choose the No Action Alternative or write an EIS that complies with the law.

In "Fire Ecology in Rocky Mountain Landscapes" by William Baker, Dr. Baker writes on page 435, "**...a prescribed fire regime that is too frequent can reduce species diversity (Laughlin and Grace 2006) and favor invasive species (M.A. Moritz and Odion 2004). Fire that is entirely low severity in ecosystems that historically experience some high-severity fire may not favor germination of fire-dependent species (M.A. Moritz and Odion 2004) or provide habitat key animals (Smucker, Hutto, and Steele 2005).**" Baker continues on page 436: "**Fire rotations equal the average mean fire interval across a landscape and are appropriate intervals at which individual points or the whole landscape is burned. Composite fire intervals underestimate mean fire interval and fire rotation (chap 5) and should not be used as prescribed burning intervals as this would lead to too much fire and would likely lead to adversely affect biological diversity (Laughlin and Grace 2006).**"

Please find (Laughlin and Grace 2006) attached.

We wrote in our comments:

***“The Forest Service should use the best available science regarding protecting these structures.***

***Fire Ecology in Rocky Mountain Landscapes, by William Baker says the Forest Service is over stating the frequency of wildfire. I have included this book as an attachment in my previous comments and incorporate it into these comments.***

***Dr. Baker writes that we use to think we could control wildfire with tools such as prescribed burns. He writes the science shows this is not true. All we can do is have the good sense to get our homes and infrastructure protected or out of fire prone settings, as fire will eventually come. This project attempts to tame wildlife, something Dr. Baker says is impossible. This project therefore violates NFMA by not following the best available science and not meeting the purpose and need of the project.”***

It is a violation of NEPA to not consider the best available science. We asked you to consider Baker’s Fire Ecology in Rocky Mountain Landscapes and it is not even in your bibliography.

I am mailing Fire Ecology in Rocky Mountain Landscapes” by William Baker via U.S. mail. Please put the entire book in the project file.

Dr. Baker estimates the high severity fire rotation to be 135 - 280 years for lodgepole pine forests. (See page 162.).

Baker writes on page 457-458 of Fire Ecology in Rocky Mountain Landscapes: *“Fire rotation has been estimated as about 275 years in the Rockies as a whole since 1980 and about 247 years in the northern Rockies over the last century, and both figures are near the middle between the low (140 years) and high (328 years) estimates for fire rotation for the Rockies under the HRV (chap. 10). These estimates suggest the since EuroAmerican settlement, fire control and other activities may have reduced fire somewhat in particular places, but a general syndrome of fire exclusion is lacking. Fire exclusion also does not accurately characterize the effects of land users on fire or match the pattern of change in area burned at the state level over the last century (fig 10.9). In contrast, fluctuation in drought linked to atmospheric conditions appear to match many state-level patterns in burned area over the last century. Land uses that also match fluctuations include logging, livestock grazing, roads and development, which have generally increased flammability and ignition at a time when the climate is warming and more fire is coming.”*

Schoennagel et al (2004) states: “High-elevation subalpine forests in the Rocky Mountains typify ecosystems that experience infrequent, high-severity crown fires []. . . The

most extensive subalpine forest types are composed of Engelmann spruce (*Picea engelmannii*), subalpine fir (*Abies lasiocarpa*), and lodgepole pine (*Pinus contorta*), all thin-barked trees easily killed by fire. Extensive stand-replacing fires occurred historically at long intervals (i.e., one to many centuries) in subalpine forests, typically in association with infrequent high-pressure blocking systems that promote extremely dry regional climate patterns.” Please find Schoennagel et al (2004) attached.

Schoennagel et al (2004) states: “it is unlikely that the short period of fire exclusion has significantly altered the long fire intervals in subalpine forests. Furthermore, large, intense fires burning under dry conditions are very difficult, if not impossible, to suppress, and such fires account for the majority of area burned in subalpine forests.

Schoennagel et al (2004) states: “Moreover, there is no consistent relationship between time elapsed since the last fire and fuel abundance in subalpine forests, further undermining the idea that years of fire suppression have caused unnatural fuel buildup in this forest zone.”

Schoennagel et al (2004) states: “No evidence suggests that spruce–fir or lodgepole pine forests have experienced substantial shifts in stand structure over recent decades as a result of fire suppression. Overall, variation in climate rather than in fuels appears to exert the largest influence on the size, timing, and severity of fires in subalpine forests []. We conclude that large, infrequent stand replacing fires are ‘business as usual’ in this forest type, not an artifact of fire suppression.”.

Schoennagel et al (2004) states: “Contrary to popular opinion, previous fire suppression, which was consistently effective from about 1950 through 1972, had only a minimal effect on the large fire event in 1988 []. Reconstruction of historical fires indicates that similar large, high-severity fires also occurred in the early 1700s []. Given the historical range of variability of fire regimes in high- elevation subalpine forests, fire behavior in Yellowstone during 1988, al-though severe, was neither unusual nor surprising.”

Schoennagel et al (2004)states: “Mechanical fuel reduction in subalpine forests would not represent a restoration treatment but rather a departure from the natural range of variability in stand structure.”

Schoennagel et al (2004) states: “Given the behavior of fire in Yellowstone in 1988, fuel reduction projects probably will not substantially reduce the frequency, size, or severity of wildfires under extreme weather conditions.”

Schoennagel et al (2004) states: “The Yellow-stone fires in 1988 revealed that variation in fuel conditions, as measured by stand age and density, had only minimal influence on fire behavior. Therefore, we expect fuel- reduction treatments in high-elevation forests to be generally unsuccessful in reducing fire frequency, severity, and size, given the overriding importance of extreme climate in controlling fire regimes in this zone. Thinning also will not re-store subalpine forests, because they were dense historically and have not changed significantly in response to fire suppression. Thus, fuel- reduction efforts in most

Rocky Mountain subalpine forests probably would not effectively mitigate the fire hazard, and these efforts may create new ecological problems by moving the forest structure out-side the historic range of variability.”

Please find Schoennagel et al (2004) attached.

The draft decision is in violation of NEPA, NFMA, the ESA and the APA because the project will adversely affect biological diversity, is not following the best available science and the purpose and need will not work.

Remedy: Choose the No Action Alternative or write an EIS that fully complies with the law.

We wrote in our comments:

***Please formally consult with the FWS on the impact of the project on wolverine.***

The Forest Service did not respond except to say they did not consult at the project level.

This is a violation of NEPA, the APA and the ESA since wolverine are a proposed species and the Federal District Court as ruled that the Forest Service must consult on the effects of projects on wolverine with the FWS.

***THE AGENCIES MUST CONDUCT ESA  
CONSULTATION FOR THE  
WOLVERINE.***

*Wolverines may be present in the Project area. The Forest Service concedes that the Project “may affect” wolverines. The agencies’ failure to conduct ESA consultation for a species that may be present and may be affected by the Project violates the ESA. Wolverines are currently warranted for listing under the ESA. As the agencies are well aware, the scheduled, court ordered listing date for the wolverine is this year. In fact, FWS has recently filed the attached document in federal court committing to a January 18, 2013 listing date for the wolverine. Accordingly, the wolverine will be listed under the ESA before the final decision is made to authorize and implement this Project, and long before any project activities commence. Regardless, even candidate species must be included in a biological assessment. The Forest Service’s biological assessment for the Project does not address wolverines. The Forest Service needs to do a supplemental EIS/ESA consultation that recognizes the wolverine as an ESA-listed species in the project area.*

***THE AGENCIES MUST PREPARE REGIONAL  
DIRECTION FOR THE  
WOLVERINE.***

*The agencies do not have in place any recovery plan and regional management direction amendment for wolverine.*

***Page 46 of the ROD says “The alternatives would not affect the ability of wolverines to move through the area and would not produce any barriers to wolverine movement. Impacts on winter foraging would be minimal. This is not based on the best available science and is a violation of NEPA, NFMA, the ESA and the APA.***

***Ruggiero et al 2000;***

***Wolverines generally scavenge for ungulates along valley bottoms and forage and den in remote, high-elevation areas (Hornocker and Hash 1981; Morgan and Copeland 1998). Thus if managers wished to provide habitat for wolverines, they could pay particular attention in the planning process to ungulates winter range and other aspects of habitat quality for ungulates to provide a consistent supply of carcasses for wolverine to scavenge. In addition, wolverines generally avoid areas of human activity. To limit the threat of human-caused disturbance or mortality, managers could restrict access to portions of the landscape where wolverines are most likely to occur.***

***Wolverine Ecology and Conservation in the Western United States, by Robert Michael Inman Faculty of Natural Resources and Agricultural Sciences Department of Ecology, Uppsala, 2013 wrote on page 26, “Wolverines***

*selected areas of higher elevation, where there was steeper terrain, more snow, fewer roads, less human activity, and which were closer to high elevation talus, tree cover, and areas with April 1 snow cover.”*

*On page 29, Inman wrote, “While there is no indication that dispersal is currently being limited by human development in a manner that has negative consequences for the wolverine metapopulation, it is reasonable to assume that willingness to disperse through developed areas and/or survival of dispersers moving through developed areas would be impacted by increasing road and housing densities at some point.”*

The Forest Service responded on page 5 of the B.A. *“Proposed species (wolverine *Gulo gulo luscus*) were addressed in a separate document covered under a programmatic consultation (USDA Forest Service 2014b, USDI Fish and Wildlife Service 2014b).”*

The Forest Service did not prepare a biological assessment for wolverine for the project. Instead, the Forest Service produced regional guidance for all of the National Forests in Forest Service Region One/Northern Region that directs agency biologists not to provide an analysis of wolverine jeopardy in project biological assessments, and not to provide any such analysis to FWS for a concurrence.

In its Order dated 4/4/16, the U.S. District Court of Montana ruled: “The United States Fish & Wildlife Service's Withdrawal of its Proposed Rule to list the distinct population segment of the North American wolverine occurring in the contiguous United States as a threatened species under the Endangered Species Act, 79 Fed. Reg. 47,522 (Aug. 13, 2014), is hereby VACATED.” Therefore the status of the wolverine is Proposed for listing under the ESA, and the FS must undergo formal consultation with the U.S. Fish & Wildlife Service.

Wolverines use habitat ranging from Douglas-fir and lodgepole pine forest to subalpine white-bark pine forest (Copeland et al., 2007). Lofroth (1997) in a study in British Columbia, found that wolverines use habitats as diverse as tundra and old-growth forest. Wolverines are also known to use mid- to low-elevation Douglas-fir forests in the winter (USDA Forest Service, 1993).

Aubry, et al. 2007 note that wolverine range in the U.S. had contracted substantially by the mid- 1900s and that extirpations are likely due to human-caused mortality and low to nonexistent immigration rates.

May et al. (2006) cite: “Increased human development (e.g. houses, cabins, settlements and roads) and activity (e.g. recreation and husbandry) in once remote areas may thus cause reduced ability of wolverines to perform their daily activities unimpeded, making the habitat less optimal or causing wolverines to avoid the disturbed area (Landa & Skogland 1995, Landa et al. 2000a).”

Ruggiero, et al. (2007) state: “Many wolverine populations appear to be relatively small and isolated. Accordingly, empirical information on the landscape features that facilitate or impede immigration and emigration is critical for the conservation of this species.”

Ruggiero et al. (1994b) recognized that “Over most of its distribution, the primary mortality factor for the wolverines is trapping.” Those authors also state, “Transient wolverines likely play a key role in the maintenance of spatial organization and the colonization of vacant habitat. Factors that affect movements by transients may be important to population and distributional dynamics.”

Roads and human density are important factors influencing current wolverine distribution (Carroll et al. 2001b); and wolverine habitat selection is negatively correlated with human activity – including roads (Krebs et al. 2007). Wolverine occurrence has shown a negative relationship with road densities greater than 2.8 mi/mi<sup>2</sup> (1.7 km/km<sup>2</sup>) (Carroll et al. 2001b).

(T)he presence of roads can be directly implicated in human-caused mortality (trapping) of this species. Trapping was identified as the dominant factor affecting wolverine survival in a Montana study (Squires et al. 2007).

Krebs et al. (2007) state, “Human use, including winter recreation and the presence of roads, reduced habitat value for wolverines in our studies.”

Wisdom et al. (2000) state:

Carnivorous mammals such as marten, fisher, lynx, and wolverine are vulnerable to over-trapping (Bailey and others 1986, Banci 1994, Coulter 1966, Fortin and Cantin 1994, Hodgman and others 1994, Hornocker and Hash 1981, Jones 1991, Parker and others 1983, Thompson 1994, Witmer and others 1998), and over-trapping can be facilitated by road access (Bailey and others 1986, Hodgman and others 1994, Terra-Berns and others 1997, Witmer and others 1998).

...Snow-tracking and radio telemetry in Montana indicated that wolverines avoided recent burns (Hornocker and Hash 1981).

Copeland (1996) found that human disturbance near natal denning habitat resulted in immediate den abandonment but not kit abandonment. Disturbances that could affect wolverine are heli-skiing, snowmobiles, backcountry skiing, logging, hunting, and summer recreation (Copeland 1996, Hornocker and Hash 1981, ICBEMP1996f). Please find Hornocker attached.

Carroll et al. (2001b) state:

The combination of large area requirements and low reproductive rate make the wolverine vulnerable to human-induced mortality and habitat alteration. Populations probably cannot sustain rates of human-induced mortality greater than 7–8%, lower than that documented in most studies of trapping mortality (Banci 1994, Weaver et al. 1996).

... (T)he present distribution of the wolverine, like that of the grizzly bear, may be more related to regions that escaped human settlement than to vegetation structure.

Wisdom et al. (2000) offered the following strategies:

- Provide large areas with low road density and minimal human disturbance for wolverine and lynx, especially where populations are known to occur. Manage human activities and road access to minimize human disturbance in areas of known populations.
- Manage wolverine and lynx in a metapopulation context, and provide adequate links among existing populations.
- Reduce human disturbances, particularly in areas with known or high potential for wolverine natal den sites (subalpine talus cirques).
- The EA fails to consider and use the best available science and fails to insure population viability in violation of NFMA and additionally, violating NEPA's requirements that the FS demonstrate scientific integrity. See 36 C.F.R. 219.3; 40 C.F.R. 1502.24. The FS fails to set meaningful thresholds and assumes that project-caused habitat losses are insignificant. Of such analyses, Schultz (2010) concludes that “the lack

of management thresholds allows small portions of habitat to be eliminated incrementally without any signal when the loss of habitat might constitute a significant cumulative impact.” In the absence of meaningful thresholds of habitat loss and no monitoring of wolverine populations at the Forest level, projects will continue to degrade wolverine habitat across the Beaverhead-Deerlodge NF over time.

Remedy: Choose the No Action Alternative and consult with the FWS on the impact of the project and on the Forest Plan on wolverines. THE AGENCIES MUST COMPLETE A BIOLOGICAL ASSESSMENT, Get a BIOLOGICAL OPINION from FWS, INCIDENTAL TAKE STATEMENT, AND MANAGEMENT DIRECTION

We wrote in our comments:

***Disclose how Project complies with the Roadless Rule;***

The Forest Service did not respond.

This is a violation of NEPA. The DDN calls for 40.7 miles of new roads. The Forest Service did admit there are many miles of illegal roads that appear to violate the Forest Plan and the roadless rule. The Forest Service provided no evidence that they are complying with the roadless rule.

The remedy is the withdraw the Draft Decision Notice and write an EIS that fully complies with the law.

The legal notice published on May 29, 2020 in the Helena Independent Record tells people that is they want to file their objection electronically thye should email it to [appeals-northern-regional-office@fs.fed.us](mailto:appeals-northern-regional-office@fs.fed.us). This email address does not work. The correct email address to file an objection is [appeals-northern-regional-office@usda.gov](mailto:appeals-northern-regional-office@usda.gov). I only know this because I have filed appeals recently. Someone who has not, would try to send it to the incorrect email address listed in the leagal notice. This is a violation of NEPA. The Remedy is to withdraw the legal notice and issue a new one with a new 45 day appeal deadline. If this is not possible, the Draft Decision Notice must be withdrawn and a new one issued.

## CONCLUSION

The remedy is to choose the No Action Alternative or prepare a legally valid EIS, comply with all NEPA, ESA, APA, Roadless Rule, Forest Plan and NFMA requirements noted herein.

Pursuant to 36 CFR Part 218, and the APA, the Regional Office must respond to each of the above issues. As shown above, the DN/FONSI and EA must be overturned and vacated and the project cannot be approved as currently re- viewed and proposed.

Thank you for your attention to these concerns.

Sincerely yours,

Michael Garrity (Lead Objector)  
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406-459-5936

And for

Native Ecosystems Council

P.O. Box 125

Willow Creek, MT 59760

