SIERRA CLUB
MONTANA CHAPTER

April 20, 2021

Matt Anderson, Forest Supervisor/Responsible Official
Seth Carbonari, Westfork District Ranger

Re: Sierra Club Comments on Mud Creek Vegetation Management Project Draft Environmental Assessment

Dear Supervisor Anderson,

The Montana Chapter and Idaho Chapter of the Sierra Club submit the comments below on the *Draft Environmental Assessment (DEA)* for the Mud Creek project of the Bitterroot National Forest (BNF) on behalf of our 20,000 members and supporters in Montana and Idaho as well as over 3.7 million members and supporters nationwide who care deeply about the management of our national forests. Our members recreate, hunt, fish, backpack and camp in the BNF and enjoy the natural forests, and fish and wildlife found within them. We also incorporate herein by reference the comments of the Native Ecosystems Council, Alliance for the Wild Rockies, and Friends of the Bitterroot dated April 7, 2021, and the comments of those same organizations and WildEarth Guardians dated April 19, 2021.

A growing consensus of scientists around the world is calling for drastic action to address the interrelated threats of loss of biodiversity and climate change, centered on protection of public lands and waters. A draft plan[1] released earlier this year by the U.N. Convention on Biological Diversity outlines a path for combating the biodiversity crisis that many scientists say is the start of Earth's sixth mass extinction. The plan centers on protection of 30 percent of all land and sea. In the United States, with only 12 percent of our country's lands currently protected,[2] reaching that goal means we need to work as quickly as possible to ensure our public lands are protected to the greatest extent.

Unfortunately, extraction of fossil fuels on our public lands and forests in the United States are contributing to the climate crisis—despite their immense value to work as carbon sinks that can reduce climate pollution significantly. We must prioritize using our public lands to store carbon instead. Studies have shown that smart land conservation and management practices could offset 21% of US greenhouse gas emissions.[3] Public lands, including the BNF, present tremendous preservation opportunities and we must act now to permanently protect them.

[1] https://www.cbd.int/doc/c/efb0/1f84/a892b98d2982a829962b6371/wg2020-02-03-en.pdf
[2] https://www.americanprogress.org/issues/green/reports/2019/08/06/473242/much-nature-america-keep/
[3] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6235523/

I. Failure to Adequately Consider and Disclose Climate Change and Carbon Sequestration Impacts.

The DEA relies on assessments conducted pre-National Environmental Policy Act (NEPA) process to reject the need to analyze carbon storage in a holistic context. Carbon storage is a complex interaction of natural forces like forest growth and maintenance, fire, and timber harvest effects, among others. The working assumption underlying the DEA is that if the area is not harvested all the forest carbon will be released by catastrophic wildfire, insects or disease. This approach fails to consider the probability of high severity fire in the treated landscape. In essence, it seeks to make known releases of forest carbon to counter the uncertain loss of carbon due to wildfire. There is no accounting of the prevalence of fire openings, resulting landscape heterogeneity, or the probability of fire in the project area. Given the significant level of even-aged management across a long time span (20 years) and the high level of uncertainty of loss of carbon, these impacts should be considered in a full environmental impact statement (EIS) under NEPA. Also, considering these many factors, we urge the Forest Service to take a precautionary approach and protect remaining intact wildlands, rivers and wildlife linkages to the greatest extent possible in order to partially mitigate these impacts.

We question any assertion that carbon storage would be positively affected by an increase in the production of forest products. In logging operations, 28% of the carbon in felled trees is emitted from the burning of logging "slash" debris (branches from felled trees), and 53% of the remaining tree carbon is then lost almost immediately to the atmosphere through the milling and manufacturing process.[4] This means that about two-thirds of the carbon stored in the trees that are logged is emitted into the atmosphere. Logging not only removes the carbon stored in trees from forest ecosystems, but it also compacts and damages soils, removes vital nutrients that are stored in trees, and disturbs the carbon contained in soils.[5] All of these impacts from logging combine to significantly reduce forest productivity (the rate at which trees and plants will grow), which substantially reduces the capacity of our forest ecosystems to absorb, sequester, and store CO2 over time. The fuel required for felling, loading, and hauling of felled trees to the sawmill or biomass facility also add carbon to the atmosphere, yet those carbon emissions are not considered.[6]

We strongly believe that the Forest Service has not provided adequate assessment of carbon stocks or emissions to support its assertions that the project would provide an increase in climate

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[4] Harmon, M.E., et al. 1996. Modeling carbon stores in OR and WA forest products: 1900-1992. Climatic Change 33: 21- 50.

[5] Elliot, W.J., et al. 1996. The effects of forest management on erosion and soil productivity. Symposium on Soil Quality and Erosion Interaction. July 7, 1996, Keystone, CO; Helmisaari, H.S., et al. 2011. Logging residue removal after thinning in Nordic boreal forests: Long-term impact on tree growth. Forest Ecology and Management 261: 1919-27; Achat, D.L., et al. 2015. Forest soil carbon is threatened by intensive biomass harvesting. Scientific Reports 5: Article 15991.

[6] The impacts of PM2.5 fine particulate matter from those same sources should also be considered in the analysis of air and soil pollution.

resilience, increase resistance to change, or manage the landscape to better respond to climate change. We also believe that the potential increase in timber harvest and associated infrastructure, and the allowance of mechanized and motorized recreation detracts from these management goals. **The Forest Service should develop and implement management decisions that immediately reduce carbon emissions and increase carbon stocks** including:

- Acknowledge the losses of carbon that are inevitable;
- Analyze the specific quantitative impact on snowpack and water availability from the levels of harvest projected;
- Explain the Forest Service's plan for preserving carbon storage on the forest itself and analyze the differences between alternatives in this regard;
- Develop and analyze an alternative maximizing carbon storage on the forest as standing trees
- Conduct a full EIS with alternatives illustrating the tradeoffs in treatment approaches for forest carbon.

In addition, the Forest Service must revise its plans to increase carbon storage short and long term based on the above requested and required analysis.

II. Failure to Analyze Impacts to and Protect Grizzly Bears and Habitat.

The DEA fails to analyze impacts on the Endangered Species Act (ESA) listed grizzly bear (*Ursus arctos horriblis*), claiming that the project area is not occupied and therefore no analysis is required (DEA-90; PW-001.pdf pg. 8). The Wildlife Effects Analysis (PW-001.pdf, p. 8) states that "the species is currently "not present" in the project area or any of the delineated Grizzly Bear Analysis Units around the project area" as the justification to exclude grizzly bear effects analysis. While confirmed sightings of grizzly bear within the project area have not occurred recently, the increased sightings of individual grizzly bears in the Bitterroot valley and in the Selway-Bitterroot Wilderness that corresponds closely with the Selway-Bitterroot Recovery Area in recent years belies the need to consider grizzly habitat effects to support recovery. The Bitterroot Ecosystem Subcommittee of the Interagency Grizzly Bear Committee recently established a Science Committee to recommend establishment of relocation sites within the Bitterroot Ecosystem to promote natural colonization of grizzly bears, further recognizing that grizzly bears are expected to be and will be encouraged to be in the area in the coming years.

In the case of Endangered Species Act listed species such as grizzly, Section 7 of the ESA imposes a duty to conserve those listed species and to act to achieve survival and recovery of the species (*Sierra Club v. Glickman*, 156 F3d 606 (5th Cir 1998)). Despite any recent ESA rule changes, the requirement to contribute to recovery is core to the ESA statute and necessary in order to achieve its stated goal to conserve species and the ecosystems upon which they depend. The project area either abuts or overlaps the Selway-Bitterroot Recovery Area designated by the US Fish and Wildlife Service (USFWS) for grizzly bears. As such, the project area, especially the Blue Joint Wilderness Study Area and inventoried roadless areas in the western and northern portions of the project area, merit analysis for proposed activity effects on security in areas that could harbor grizzly bears in the near future and certainly within the project time frame.

Moreover, recent studies authored by Interagency Grizzly Bear Study Team scientists indicate that the project area could function as a linkage area with the Greater Yellowstone Ecosystem. The van Manen et al[7] and Peck et al[8] studies show that the majority of the project area could function as a connectivity area (Figure 1). Peck et al made the following comments about the probability of grizzly bear use in these zones: "[t]herefore, with the exception of areas with low numbers of predicted passages (e.g., wide open valleys), we anticipate that sporadic bear sightings and possible interactions with humans may occur almost anywhere along the gradient of our model predictions." Connectivity is an essential element of both survival and recovery of ESA listed species. Specific, appropriate project requirements that are clear and affirmative boundaries are needed to achieve the duty imposed by Section 7 of the ESA. Thus, connectivity for grizzly must be explained and supported by the best available science (36 CFR §219.3 and §219.4). Such an explanation is not present in the current DEA in violation of the ESA and NEPA requirements for disclosure and analysis of environmental impacts. The BNF needs to address grizzly connectivity in consultation and avoid interfering with recovery by reducing connectivity values of the project area.

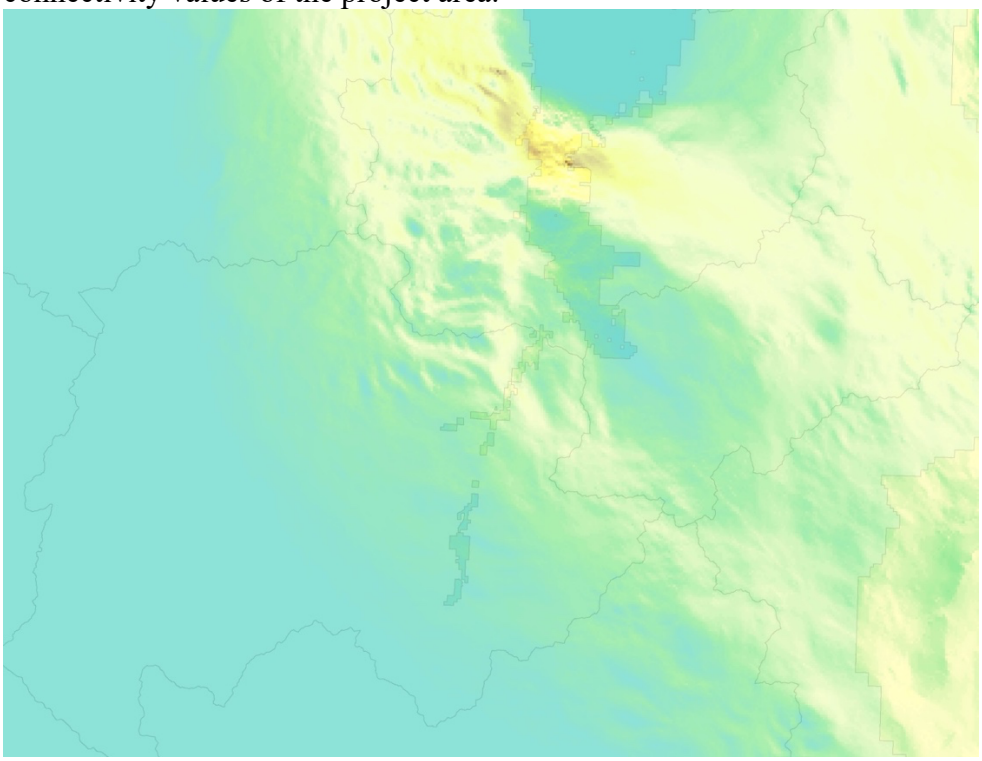

Figure 1. Modeled male grizzly dispersal pathways through the Southern Bitterroot National Forest from van Manen et al. (2017). Yellow to brown indicates modeled areas with grizzly passage potential. Data for the grizzly connectivity areas found at:
https://www.sciencebase.gov/catalog/item/59149ee6e4b0e541a03e9a58

[7] van Manen, F.T., Peck, C.P., Costello, C.M., Haroldson, M.A., Landenburger, L.A., Roberts, L.L., Bjornlie, D.D., and Mace, R.D., 2017, Potential movement paths for male grizzly bear (*Ursus arctos*) dispersal between the Northern Continental Divide and Greater Yellowstone Ecosystems, 2000-2015: U.S. Geological Survey data release, https://doi.org/10.5066/F72V2F2W.

[8] Peck, CP, van Manen, FT, Costello, CM, Haroldson, MA, Landenburger, LA, Roberts, LL, Bjornlie, DD, Mace, RD (2017). Potential paths for male-mediated gene flow to and from an isolated grizzly bear population. Ecosphere 8(10): e01969. Doi.org/10.1002/ecs2.1969

In order to properly analyze grizzly bear connectivity value of the project area and the potential impact on grizzlies colonizing the recovery area that move outside its borders, the following must be included in the analysis:

- The effects of new roads, permanent and temporary, on grizzly bear use, movement and habitat security. Reductions of open road density recommended. Avoiding new roads and immediate removal and restoration of temporary roads recommended for grizzly habitat effectiveness and security;
- The effects of new trails or changes in trail use and the potential for increasing human encounters;
- The effects of vegetation management, including commercial, non-commercial and prescribed fire on grizzly bear use, movement and habitat security; and
- Limitations on re-entry (10 years recommended) following management activities.

We request revision of the Biological Assessment and re-initiation of consultation with USFWS based on the above information, a finding of significant effects under NEPA and preparation of an Environmental Impact Statement fully analyzing and avoiding impacts of the project on grizzly connectivity.

III. Failure to provide for habitat conditions necessary to contribute to viability of Species of Conservation Concern.

The 2021 USFS Forest Planning Rules created a new framework for analyzing the impacts of USFS management on species that have population viability concern on the forest unit or beyond. Specifically, the rules provide as follows:

§219.9 Diversity of plant and animal communities
(b) *Additional, species-specific plan components.* (1) The responsible official shall determine whether or not the plan components required by paragraph (a) of this section provide the ecological conditions necessary to: contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area.

(c) *Species of conservation concern.*
For purposes of this subpart, a species of conservation concern is a species, other than federally recognized threatened, endangered, proposed, or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species' capability to persist over the long-term in the plan area.

The BNF has not revised its forest plan in more than 30 years. It has begun to revise the BNF forest plan in fits and starts in the last 8 years but failed to carry it forward to include the kind of species conservation review contemplated by the 2012 Forest Planning Rules. Indeed, the Regional Forester has neglected to designate species of conservation concern for the BNF to date. The analysis in the DEA uses the old "sensitive species" framework to examine several species, including flammulated owl, bighorn sheep, gray wolf, wolverine and black-backed

woodpecker (DEA pgs. 10-30). However, forest planning rules apply at the project as well as the forest plan level (*Forest Watch v.USFS*, 410 F.3d 115 (2d Cir 2005); *Ecology Center v. USFS*, 451 F.3d 1183 (10th Cir. 2006); *Utah Environmental Congress v. Richmond,* 483 F.3d 1127 (10th Cir. 2007)). The lack of an analysis of how this 20-year treatment regime would "provide the ecological conditions necessary to…maintain a viable population of each species of conservation concern" fails to comply with the 2012 Forest Planning Rules and the National Forest Management Act requirement to "provide for the diversity of plant and animal communities." The BNF cannot escape this requirement due to the inaction of the Regional Forester as it is in the same agency and the failures of superior levels of administration are equally chargeable to it.

The analysis fails to specify the project effects on the ecological conditions necessary to contribute to population viability of flammulated owls. Habitat preferences are discussed, however, the extent the project will modify those conditions is vague and indeterminate. The DEA argues that selectively logged stands can support flammulated owls (DEA 17), however, it does not address how much selective logging will occur in flammulated owl habitat or the prescriptions that will protect owl nesting and roosting trees. Instead it assures us that "some amount of flammulated owl habitat would be treated by the proposed action" and that "in the long term, these activities would improve stands." In a 20-year project occurring over 48,000 plus acres these statements provide little guidance as to what effects will be. Granted it is challenging to project the effects when the wildlife staff does not even know what will be done and how much under this project, however, that flaw must be addressed before the standards of the forest planning rule can be met with any degree of scientific certainty.

As a result of the flaws documented in this comment letter, we respectfully request that the BNF remedy the analytical and substantive shortcomings of the DEA for the Mud Creek project by preparing a full Environmental Impact Statement, instituting protections for grizzly bear habitat and connectivity areas, and meeting the standards of the 2012 Forest Planning Rules for diversity conservation.

IV. Failure to comply with NEPA - The Forest Service Must Prepare an EIS.

In 1970, NEPA was enacted "to help public officials make decisions that are based on [an] understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." 40 C.F.R. §1500.1(c). Recognizing that "each person should enjoy a healthful environment," NEPA ensures that the federal government uses all practicable means to "assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings," and to "attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences," among other policies. 42 U.S.C. § 4331(b), (c).

NEPA's purpose is to ensure informed decision making. NEPA sets forth specific procedural requirements federal agencies must follow as they carefully gather and evaluate relevant information about the potential impact of a proposed agency action on the environment. 42 U.S.C. § 4332. NEPA also aims to ensure that the agency will inform the public that it has indeed considered environmental concerns in its decision-making process, thereby guaranteeing

that the public is involved in and aware of agency processes. 40 C.F.R. §§1500.1(b); 1500.2(d); 1506.6.

Agencies are required to consider, evaluate, and disclose to the public "alternatives" to the proposed action and to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of resources." 42 U.S.C. §§ 4332(2)(C)(iii) & (E). Agencies' duty to consider "alternatives to the proposed action" is the "heart" of the NEPA process. 42 U.S.C. §§ 4332(2)(C)(iii).

NEPA requires that federal agencies prepare a "detailed statement" regarding all "major federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). This environmental impact statement must, among other things, describe the "environmental impact of the proposed action," and evaluate "alternatives to the proposal." *Id.* § 4332(2)(C)(ii), (iii)

The Forest Service's analysis to date has failed to comply with any of these fundamental tenets of NEPA. First, the agency has chosen to evaluate only an "action" and "no action" alternative. In a project of this geographic and temporal magnitude, the failure to analyze additional alternatives that would better address the concerns described above—with regard to climate change, grizzly bear, and species of conservation concern—this is inexplicable. At a minimum, the agency should have included alternatives aimed at minimizing impacts to climate and the species described above. More appropriately in the context of a project of this scale, the agency should have completed a comprehensive analysis of impacts and included analysis of a truly *reasonable* range of alternatives, as the statute requires.

Next, the Forest Service's assessment fails to provide any meaningful and science-based criteria for determining the project's likely significance. The EA asserts that "[T]his environmental assessment discloses the environmental consequences of implementing no action and the proposed action. The deciding official for this project is the Bitterroot Forest Supervisor. The deciding official will review the anticipated consequences to determine whether a significant effect on the quality of the human environment is likely to occur." EA at 8. Given the information analyzed, and more importantly, the information *not* analyzed, in the EA, it is clear that the EA does not contain the necessary information to support a finding of no significance. As detailed above, much of the agency's analysis is incomplete, fails to include or acknowledge the available scientific evidence, and fails to include a meaningful analysis of effects. In short – the EA fails to take the requisite "hard look" required by the statute.

In addition, the cumulative effects of this project along with the numerous other similar projects proposed or approved in the Bitterroot National Forest indicates that significant effects are likely and must be analyzed and disclosed in a full EIS. Other projects are directly adjacent to the Mud Creek project or otherwise have significant cumulative impacts on all the issues and resources already noted, as well as others. These should be analyzed and disclosed in one EIS, and should additionally include consideration of the direct and cumulative impacts on Wilderness Study Areas, Recommended Wilderness, and other roadless areas or areas with wilderness characteristics.

Under NEPA, an EIS is required if "substantial questions" are raised as to whether a given project may significantly degrade some aspect of the human environment. It is not necessary to show that such degradation will occur. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998). Here, it is evident merely from the scope of the proposed action—with treatments anticipated to take place over much of the 48,000 acre project area over the 20-year life of the project, that the action poses a substantial risk of significant impact. Looking more closely at the individual areas of analyses detailed above and in other submitted comments, it is clear that such impacts are more likely than not across a broad range of environmental features. An EIS is therefore required.

V. The 2020 CEQ Regulations are Invalid.

NEPA established the Council on Environmental Quality (CEQ) in order to effect the implementation of the statutory provisions of NEPA. 42 U.S.C. § 4344. One of the chief tasks carried out by the CEQ is the promulgation and implementation of rules interpreting NEPA. When the CEQ noticed its comprehensive overhaul of the existing NEPA regulations on July 16, 2020, it marked a fundamental departure from the tenets of the governing statute. The new CEQ rules went into effect on September 14, 2020.

It is unclear from the EA and accompanying project documents whether the NEPA analysis done for the Mud Creek project was completed under the new regulations or the 1978 regulations in effect prior to September 14, 2020. The new regulations provide, "[T]he regulations in this subchapter apply to any NEPA process begun after September 14, 2020. An agency may apply the regulations in this subchapter to ongoing activities and environmental documents begun before September 14, 2020. 40 C.F.R. §1506.13. Nothing in the EA explicitly states which NEPA regulations were followed, although two things suggest that the Forest Service is nominally following the 1978 regulations: reference to 40 C.F.R. § 1508.8, which was part of the 1978 regulations, and extremely cursory discussions of direct, indirect, and cumulative impacts. EA at 47, 52-54.

Nonetheless, the lack of clarity as to this point justifies a brief statement as to the validity of the 2020 CEQ regulations. These regulations fundamentally mischaracterize and attempt to rewrite the purpose of the statute they are intended to effectuate. They seek to substantially reduce both the breadth and depth of NEPA analysis as well as eviscerate available remedies for inadequate compliance. The regulations reduce or eliminate the applicability of NEPA to a wide range of actions, and dismiss conflict of interest concerns along with the public's interest in being able to enforce the law. Instead of the public's interest in sound decision-making being central to the NEPA process, they elevate the profit-driven objectives of private corporations.

The fundamentally flawed nature of these regulations is reflected in at least two cases currently proceeding in federal district court challenging their validity. Most recently, Secretarial Order 3399, issued by Secretary of the Interior Haaland has called for a review of the 2020 regulations and, has instructed agencies under the interior department not to apply the 2020 CEQ regulations while a review of their legality and impacts is pending. Therefore, to the extent that the Forest Service incorporated the 2020 CEQ regulations, or any part of them, those aspects of analysis are by definition invalid.

VI. This action is not consistent with current federal directives.

Finally, for the reasons set forth in part I., above, this project is fundamentally inconsistent with recent executive orders issued by President Biden directing all facets of government to carry out their mandates with the urgency of the climate crisis in mind. On January 20, 2021, President Biden issued Executive Order 13990. EO 13990 provides, in pertinent part:

> It is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account. Doing so facilitates sound decision-making, recognizes the breadth of climate impacts, and supports the international leadership of the United States on climate issues.

On January 27, 2021, Executive Order 14008 built on the concept of government-wide responsiveness to the climate crisis with the following statement:

> The Federal Government must drive assessment, disclosure, and mitigation of climate pollution and climate-related risks in every sector of our economy, marshaling the creativity, courage, and capital necessary to make our Nation resilient in the face of this threat. Together, we must combat the climate crisis with bold, progressive action that combines the full capacity of the Federal Government with efforts from every corner of our Nation, every level of government, and every sector of our economy. EO 14008, Part II, Sec. 201.

In response, the Forest Service's parent department, the United States Department of Agriculture, is currently soliciting public comment on the implementation of these presidential directives. In particular, the USDA is requesting input necessary to carry out Section 216 of EO 14008, which provides, in pertinent part, that:

> The Secretary of the Interior, in consultation with the Secretary of Agriculture, the Secretary of Commerce, the Chair of the Council on Environmental Quality, and the heads of other relevant agencies, shall submit a report to the Task Force within 90 days of the date of this order recommending steps that the United States should take, working with State, local, Tribal, and territorial governments, agricultural and forest landowners, fishermen, and other key stakeholders, to achieve the goal of conserving at least 30 percent of our lands and waters by 2030.

In the face of the administration's clear directive to measure and articulate the full costs of each federal project in terms of carbon emissions, and to work towards a goal of conserving the country's existing terrestrial and aquatic resources, the failure of analysis described above with regard to carbon stocks and emissions is fundamentally inconsistent with both the spirit and the letter of these Executive Orders.

In light of all of the factors described above, it is clear that the only defensible course with regard to the Mud Creek Project is for the agency to conduct a comprehensive EIS, which takes into

account the points raised above as well as those submitted in other comments. Moreover, this comprehensive review must be conducted under the 1978 CEQ regulations, due to the fundamentally flawed nature of the 2020 Regulations.

Signed,

Summer Nelson, Chapter Director
Montana Chapter Sierra Club
P.O. Box 7201
Missoula, MT 59807

Lisa Young, Chapter Director
Idaho Chapter Sierra Club
503 W. Franklin St.
Boise, ID 83702