Data Submitted (UTC 11): 3/18/2021 11:00:00 AM
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Comments: OBJECTIONS

The Forest Service incorporated different aspects of the action alternatives from the 2020 EA to shape the selected alternative described in the draft DN, in part, as a response to comments. Draft DN at 1. One such change we strongly support is the decision to retain the non-motorized status of the Stateline Trail #738 in the project area. We recognize the need for management consistency with the adjacent Idaho Panhandle NF (IPNF), and would urge the Lolo NF to work with the Regional Office and IPNF to protect the entire Stateline Trail from motorized use. Regarding the concerns we raised in past comments, though the selected alternative does make other changes, such as dropping several treatment units within the Marble Point IRA, overall our concerns remain unaddressed.

I. Because the project has significant impact, the Forest Service should have prepared an environmental impact statement (EIS).

Our previous comments explained why the proposed Redd Bull Project may have a significant impact on the environment and thus the Forest Service must prepare an Environmental Impact Statement (EIS) for this project. The Council for Environmental Quality[rsquo]s (CEQ) regulations require agencies to prepare an EIS if a project may significantly affect the human environment. CEQ[rsquo]s regulations define significance in terms of context and intensity, which includes inter alia the scope of beneficial and adverse impacts, unique characteristics of the geographic area, degree of controversy, degree of uncertainty, and degree to which an action may affect species listed or critical habitat designated under the Endangered Species Act. 40 C.F.R. [sect] 1508.27 (defining [ldquo]significantly[rdquo]). This project may significantly affect the human environment because, inter alia, it:

? Will cause significant impacts, both beneficial and adverse. For example, under the selected alternative the Forest Service will clear cut old growth habitat, and in some instances create openings greater than 40 acres, which requires approval from Regional Forester Marten. See Table 1 below. In fact, several of these openings are part of larger harvest treatments that range from 42 to 973 acres. Draft DN at 2. Further, the selected alternative will amend the 1986 Lolo Land Management Plan to change 198 acres from MA 27 to MA 25, and 15 acres associated with the Little Joe campground will change from MA 14 (streams/riparian areas) to MA 7 (developed campgrounds). Another project specific plan amendment will allow timber harvest on 358 acres in MA 1. Each of these on their own rise to the level of significance that requires analysis in an EIS, but more so when considered collectively.

Table 1. Regeneration Timber Harvest in Old Growth Habitat & Part of 40 Acre Openings

* T20, T21 are in the same harvest area

? Involves a geographic area with unique characteristics, including ecologically critical areas such as areas of connectivity for grizzly bears dispersing from recovery areas, as well as in Inventoried Roadless Areas. [ldquo]Approximately 21,182 acres (26 percent) of NFS land in the Redd Bull project area overlaps 3 inventoried roadless areas (IRAs): Marble Point, Ward Eagle and Sheep Mountain-Stateline.[rdquo] EA at 128. Further, [ldquo][t]he Ward Eagle IRA contains locally identified unique characteristics, primarily the mountain peaks and lakes along the Montana/Idaho border.[rdquo] Id. at 147. In addition, the Forest Service recognizes that the Marble Pt. IRA provides unique forage conditions for elk alongside open hillside above Dry Creek. Id. And the IRAs provide suitable habitat for Canada lynx and grizzly bears. Id. at 150.

? Involves effects on the human environment that are likely to be highly controversial, including the use of regeneration harvests (i.e. clearcuts) to mimic natural disturbance patterns.

o Our previous comments explained the scientific uncertainties regarding the agency[rsquo]s reliance on historic references to inform desired conditions and thus proposed actions, especially in relation to the efficacy of treatments meant to mimic natural conditions. Ecosystems are highly complex and the current climate crisis requires the agency to ensure its desired conditions are appropriately informed by the future natural range of variation. In other words, we do not object to or question the use of historical references to inform how the current conditions have departed from those prior to European settlement, rather we object to the assertion that replicating those historic conditions will effectively reduce severe wildfires, or increase climate change resilience.

? In response, the Forest Service states [ldquo]The landscape-level desired conditions for the Redd Bull project area was derived from an analysis of historic reference condition, current landscape and stand conditions, and comparison to resilient stand and landscape characteristics described in scientific literature and best available science discussed in Appendix 4 [ndash] Scientific Basis for Restoration.[rdquo] Redd Bull Updated Vegetation Report at 11.

? Looking at Appendix 4, the literature and discussion still fails to demonstrate how the desired condition, even if achieved through vegetative treatments, will thrive under changing climate conditions or if such resistance strategies will ultimately fail due to increased drought and other climate crisis effects. For example, the agency states, [ldquo][r]estoration of patterns of burning and fuels and forest structure that reasonably emulate pre-fire exclusion historical conditions is consistent with reducing the susceptibility of these ecosystems to catastrophic loss. Priorities may include fire and thinning treatments of upper elevations to facilitate forest migration (Fule 2008).[rdquo] EA, Appendix D at 4. Yet, this fails to address or acknowledge the scientific controversy from Coop et al., 2020 that we provided in our comments: [ldquo]However, in a time of pervasive and intensifying change, the implicit assumption that the future will reflect the past is a

questionable basis for land management (Falk 2017).[rdquo] Coop et al., 2020.

? Involves effects that are highly uncertain or involve unique or unknown risks, which is certainly the case in the context of climate change which makes reliance on the historic references to unduly inform desired conditions highly uncertain.

? May adversely affect species listed or critical habitat designated under the Endangered Species Act, including grizzly bear, Canada lynx, and bull trout. For example, the Forest Service acknowledges that [ldquo]sediment delivery in the short term may adversely affect bull trout and designated critical habitat.[rdquo] Draft DN at 27.

? Threatens to violate the Roadless Area Conservation Rule as we discuss below.

For these reasons, which we detail throughout our comments, the Forest Service should prepare an EIS.

Suggested Resolution: The Lolo National Forest should prepare an EIS because the Redd Bull Project may have a significant impact on the environment to ensure the Forest Service takes the required [ldquo]hard look[rdquo] at the impacts of its actions.

II. Flawed support for the claimed needs, and failure to articulate the statement of purpose and need to include the Forest Service[rsquo]s duty to identify the minimum road system.

The Forest Service states there is a need to: (1) restore native fish habitat: (2) restore vegetative conditions that are resistant to undesirable effects of fires, insects, disease, and drought; (3) reduce forest fuels; (4) improve big game habitat; (5) upgrade existing recreation facilities; and (6) support the economic structure of local communities and provide wood products. EA at 2-3.

A. Flawed Support for Claimed Needs

As we stated above and in our past comments, the Forest Service support for its claimed needs and justification for logging to achieve those claimed needs demonstrates significant scientific controversy requiring analysis in an EIS. We explained, this is especially true given that the agency cannot assume historic conditions are representative of future potential natural ranges of variability, including assumptions that vegetative treatments will result in desired conditions or that those desired conditions, if achieved, will thrive under future climate conditions. The Forest Service provides an updated vegetation report and a scientific basis for restoration project files, but they still fail to address the uncertainties inherent in the agency[rsquo]s reliance on resistance strategies explained by Coop et al., 2020.

Given the fallacies of using historic conditions as a reference for supposed restoration treatments and desired future conditions, coupled with the uncertainty of those treatments to maintain or restore ecological integrity in the context of climate change and likely forest conversion scenarios, the Forest Service[rsquo]s rationale for massive clearcuts falls short. The Forest Service claims that regeneration harvest across 9,194 acres with openings ranging between 42-973 acres (the latter more than 1.5 square miles) as identified in the selected alternative, will restore vegetative conditions not achieved through other treatments. Draft DN at 2. Yet, significant controversy exists as to the need for such treatments given the improper use and reliance on historic conditions. In fact, there is a high likelihood based on the aforementioned studies that clearcut areas will not regenerate and will instead result in conversion to a

different vegetative group. This is especially concerning in regards to the 735 acres of old growth habitat identified for regeneration harvest.

The proposed regeneration harvests - many over a half a square mile in size, and one more than 1.5 square miles - require further analysis and discussion in an EIS, but more broadly are wholly inappropriate as they undermine one of the main purposes for NFMA[rsquo]s passage, that is to stop the practice of large-scale clearcuts. Regional Forester Marten should not authorize such a broad use of NFMA[rsquo]s exemption provision as it is unsupported by the best available science and violates the spirit of the law.

B. Failure to Incorporate the Duty to Identify the Minimum Road System

Applicable statutory and regulatory requirements should shape a project[rsquo]s statement of purpose and need. When the agency takes an action [ldquo]pursuant to a specific statute, the statutory objectives of the project serve as a guide by which to determine the reasonableness of objectives outlined in an EIS.[rdquo] Westlands Water Dist. v. U.S. Dept. of Interior, 376 F.3d 853, 866 (9th Cir. 2004). Under subpart A of its travel rule, the Forest Service has a substantive duty to address its over-sized road system. See 36 C.F.R. [sect] 212.5.

Identifying a resilient future road system is one of the most important endeavors the Forest Service can undertake to restore aquatic systems and wildlife habitat, facilitate adaptation to climate change, ensure reliable recreational access, and operate within budgetary constraints. This underlying substantive duty must inform the scope of, and be included in, the agency[rsquo]s NEPA analysis. After more than 15 years since finalizing the subpart A rules, the Forest Service can no longer delay in addressing this duty. Yet, the Forest Service fails to incorporate this duty within the Redd Bull project[rsquo]s purpose and need.

In response to these comments, the Forest Service asserts that it completed a Forest-wide travel analysis process in 2015 that [ldquo]identifies the minimum road system and the roads that are no longer needed to meet forest resource management objectives, consistent with the above cited regulations [36 C.F.R 212.5(b)]. Draft DN at E-25. Our scoping comments clarified that identifying the minimum road system under the cited regulation requires a NEPA level decision. While the agency must summarize findings from its travel analysis process and discuss them in an EA or EIS, the Forest Service cannot simply tier to a

non-NEPA document and claim compliance with the Travel Management Rule (TMR) under Subpart A. Had the agency clearly stated in the Redd Bull Draft DN that it identified the minimum road system and unneeded roads per the cited regulation, that would have satisfied the regulation and past agency direction. Should the Forest Service include such a statement in its final project decision, the issue of TMR compliance would turn to the supporting analysis. Here the Forest Service failed to adequately address our past comments regarding flaws in the Lolo Travel Analysis Process, and the Redd Bull EA fails to address those flaws or provide an analysis of the findings from the Redd Bull TAP report in that EA, thereby precluding the agency from claiming compliance with the TMR under Subpart A.

Suggested Resolution: The Lolo National Forest should prepare an EIS that uses reference conditions as we

proposed, and that includes meeting TMR subpart A direction as a purpose and need.

III. Failure to adequately assess and disclose direct, indirect, and cumulative impacts, including detailed, site-specific information.

NEPA requires the Forest Service to [ldquo][e]ncourage and facilitate public involvement in decisions which affect the quality of the human environment.[rdquo] 40 C.F.R. [sect] 1500.2(d). A critical part of this obligation is presenting data and analysis in a manner that will enable the public to thoroughly review and understand the analysis of environmental consequences. NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most importantly, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail. 40 C.F.R. [sect] 1500.1(b). The Data Quality Act expands on this obligation, requiring that influential scientific information use [ldquo]best available science and supporting studies conducted in accordance with sound and objective scientific practices.[rdquo] Treasury and General Government Appropriations Act for

Fiscal Year 2001, Pub.L. No. 106-554, [sect] 515. Our previous comments detail numerous flaws with the Forest Service[rsquo]s analysis of the direct, indirect and cumulative impacts of the Redd Bull Project 2020 Environmental Assessment. The EA failed to adequately address these flaws or our past comments. As such the Forest Service failed to take a hard look at the environmental consequences of the selected alternative in violation of NEPA. In addition to the analysis failures already mentioned, the following sections provide specific examples and demonstrate the need for the Forest Service to prepare an EIS.

A. Failure to utilize an appropriate baseline

We previously explained the need for the Forest Service to utilize the appropriate baseline for the EA explaining how it can differ from the no-action alternative. In particular, we urged the agency to differentiate between the 240 miles of unauthorized roads and system roads. The baseline should only include the latter and be separate from the no action that retains the existing condition. Such an approach is necessary in order to fully disclose the environmental consequences of the no action alternative. In response, the Forest Service states:

The existing environmental effects of both types of roads were considered in the analysis as appropriate for the various resources. For example, the sediment analysis considered all roads in both the existing condition and alternative analyses[hellip]. As described in the EA (page 13), adding existing road prisms to the National Forest System is an administrative action that assigns roads to a database; there are generally no immediate on-the-ground actions or direct effects.

Draft DN at E-42. The response fails to address our comments and demonstrates the EA continues to utilize an inaccurate baseline. Specifically, in the agency[rsquo]s example of the sediment analysis, the EA should have disclosed the potential sedimentation resulting from the presence of unauthorized roads it labels as

[ldquo]undetermined[rdquo] (242 miles). In such a scenario Table 3.5-2 titled, [ldquo]GRAIP-Lite modeled

road-related sediment delivered to streams by watershed[rdquo] would have displayed a column for the baseline condition to the left of the existing condition where the former includes sedimentation estimates for only system roads (300 miles). Another column could specify sedimentation for just unauthorized roads, and then together they could be characterized as the No Action Alt. This approach is just one method of analysis and we stand ready to work with the Lolo NF to discuss others, but the bottom line is that even though adding unauthorized roads to the system may not result in immediate on-the-ground actions or direct effects, the fact remains that the Forest Service must account for their potential environmental

consequences. Describing the addition of unauthorized roads as simply an administrative action does not absolve the agency from disclosing the indirect and cumulative effects from adding them to the system, in particular the agency[rsquo]s ability to maintain them. Without fully accounting for unauthorized roads in its analysis, any finding of no significant impact will be arbitrary and capricious, and a violation of NEPA.

B. Inappropriate reliance on resource protection measures

Our comments explained that the Forest Service cannot rely on best management practices, design features or resource protection measures as a rationale for omitting proper analysis, or determining there would be no significant impacts from the selected alternatives. In response, the agency states that [ldquo]BMP effectiveness is discussed in the EA (pages 73 and 74) and in the

Hydrology report (pages 31-32 and Appendix H).[rdquo] Draft DN at E-12. The aforementioned Hydrology report was not available on the Redd Bull project webpage and therefore we were precluded from providing meaningful comment. The EA explains:

A research review by Seyedbagheri (1996) showed that these techniques can reduce sediment from entering streams by 32 percent on the low end for straw mulch up to 99 percent on the high end for slash filter windrows. A more recent research review by Edwards and others (2016) found that silt fences can retain between 16-95 percent of sediment on roads. They also found that other barriers such as straw bales, fiber logs, wattles, and rock check dams can retain between 20 and 95 percent of road sediment.

The Montana Department of Natural Resources and Conservation has been conducting field reviews to determine the application and effectiveness of forestry best management practices. This monitoring program covers forest management activities on all ownerships within Montana. The most recent report shows that on monitored sites across all ownerships, BMPs were properly applied over 97 percent of the time, with an effectiveness rating of 97 percent (MT DNRC 2018).

EA at 73. Edwards (2016) also explains that while several studies have concluded that some road BMPs are

effective at reducing delivery of sediment to streams, the degree of each treatment has not been rigorously evaluated. Few road BMPs have been evaluated under a variety of conditions, and much more research is needed to determine the site-specific suitability of different BMPs (Edwards et al. 2016, also see Anderson et al. 2011). The Forest Service had the opportunity to demonstrate how the MT DNRC field reviews applied specific to the Redd Bull planning area, and in particular if the BMPs to reduce road-related sedimentation were effective. The Redd Bull EA lacks such discussion, and given the huge variability Edwards 2016 found in the effectiveness of silt fences (16-95 percent) and other barriers

(20-95 percent), the Forest Service cannot assume BMPs and RPMs meant to address sedimentation from log-hauling would not be significant. At best, there is sufficient scientific controversy that must be resolved in an EIS. Further, it[rsquo]s unclear if the GRAIP-Lite model incorporates sediment reductions from BMPs. The Forest Service explains that [ldquo]In the assessment of the action alternatives, treatments applied to both system and non-system roads were also included in the sediment modeling.[rdquo] Draft DN at E-20. Yet, the agency also states that [ldquo][t]he sediment delivery figures in the table do not account for the implementation of all the BMP measures that would be applied in all alternatives. The during project figures are calculated from measurements of sediment delivery on active timber sales so there is some

accounting for BMP implementation in the model.[rdquo] EA at 72, Table 3.5-2 (footnote 1), emphasis added. This begs the question which BMPs were incorporated into the model and if they assumed a range of effectiveness the Forest Service cites in Edwards (2016), or if it assumed 100% proper implementation and effectiveness of those BMPs. The Forest Service does not clarify in the EA, and fails to acknowledge or respond to our comments regarding the findings from Carlson (2015) that concluded only about one third of the road BMPs were found to be [ldquo]fully implemented,[rdquo] and when treated roads were evaluated for effectiveness, almost half of the road BMPs were scored as either [ldquo]marginally effective[rdquo] or [ldquo]not effective.[rdquo]

Further, we explained in our comments that climate change will further put into question the effectiveness of many road BMPs (Edwards et al. 2016). While the impacts of climate will vary from region to region (Furniss et al. 2010), more extreme weather is expected across the country which will increase the frequency of flooding, soil erosion, stream channel erosion, and variability of streamflow (Furniss et al.

2010). BMPs designed to limit erosion and stream sediment for current weather conditions may not be effective in the future. Edwards et al. (2016) states, [ldquo]More-intense events, more frequent events, and longer duration events that accompany climate change may demonstrate that BMPs perform even more poorly in these situations. Research is urgently needed to identify BMP weaknesses under extreme events so that refinements, modifications, and development of BMPs do not lag behind the need.[rdquo] The Forest Service failed to adequately respond to these comments.

C. Failure to demonstrate motorized designations comply with Travel Management Rule

Our comments explained that changes to the designated system of motorized roads and trails requires the Forest Service to demonstrate in the EA that new and existing off-road vehicle designations adhere to the general and specific criteria under the Travel Management Rule (TMR). 36 C.F.R. 212.55. This is especially important for the

Lolo NF since it has yet to demonstrate how its current system of motorized trail designations complies with the TMR under Subpart B. We recognize that the Lolo NF utilized a provision of the TMR that allowed it to publish a Motor Vehicle Use Map (MVUM) without completing comprehensive travel management planning: [ldquo]36 CFR 212.50(b) says that the responsible official may incorporate previous administrative decisions regarding travel management made under other authorities, including designations and prohibitions of motor vehicle use, in designating National Forest System roads, National Forest System trails, and areas on National Forest System lands for motor vehicle use under this subpart.[rdquo] Draft DN at E-48. For this reason, the Forest Service response to our comment that the agency must adhere to the TMR[rsquo]s minimization criteria under Subpart B explained that [ldquo][t]he Lolo National Forest already achieved this with its Forest Travel Plan (1987) that accompanied the establishment of the Forest Plan (1986), which underwent public involvement and NEPA analysis.[rdquo] We object to this assertion. While the Lolo NF was able to publish a MVUM based on the 1987 Forest Plan, the supporting NEPA analysis can not demonstrate compliance with the 2005 Travel Management Rule because the rule was not in effect. In other words, simply publishing an MVUM based on a Forest Plan cannot be conflated with demonstrating TMR compliance. In fact, the Lolo NF has yet to demonstrate how its current designated system of motorized trails complies with the specific motorized trail designation criteria under 36 C.F.R. 212.55(b). For this reason, when the Lolo NF proposes changes to its designated system of motorized trails, ideally it will take a hard look at all motorized trail designation in

the planning area to ensure they comply with the minimization criteria. For the Redd Bull project analysis, the Forest Service did not do so.

Further, when considering specific changes to the current motorized trail designations, the agency must adhere to 36 C.F.R. 212.54: [ldquo]Revisions of designations shall be made in accordance with the requirements for public involvement in [sect] 212.52, the requirements for coordination with governmental entities in [sect]212.53, and the criteria in [sect] 212.55, and shall be reflected on a motor vehicle use map pursuant to [sect]212.56.[rdquo]

Those criterion direct motorized trail designations must minimize

(1) Damage to soil, watershed, vegetation, and other forest resources;

(2) Harassment of wildlife and significant disruption of wildlife habitats;

(3) Conflicts between motor vehicle use and existing or proposed recreational uses of National Forest System lands or neighboring Federal lands; and

(4) Conflicts among different classes of motor vehicle uses of National Forest System lands or neighboring Federal lands.

36 C.F.R. 212.55(b). When making changes to the off-road vehicle designations, as the selected alternative does for a three mile segment of Tr. #203, the Forest Service must provide analysis demonstrating compliance with the minimization criteria. The Redd Bull EA lacks such analysis, or any mention of the minimization criteria. Rather, the Forest Service asserts such compliance in its draft decision by making conclusory statements without

any supporting evidence, discussion or analysis. As such, the agency[rsquo]s claim that opening the three mile segment of Tr. #203 to seasonal motorcycle use is arbitrary and capricious, a violation of NEPA and a violation of the TMR.

D. Failure to properly disclose hydrological impacts & harmful effects to fisheries

Our comments urged the Forest Service to demonstrate how the project will improve watershed conditions through a detailed analysis in an EIS, the need for which is further exemplified in the agency[rsquo]s response to our comments. For example, we asked the Forest Service to show how its proposed actions would meet the TMDL sedimentation budgets for the Little Joe and North Fork Little Joe watersheds. The agency explains those budgets are in the Redd Bull Hydrology Report that does not appear on the project webpage, but that [ldquo][t]he document estimates that currently 43.7 tons/year of sediment is delivered from the road system in the Little Joe watershed. The recommendation is to reduce this amount by 48 percent, down to 21 tons/year. The TMDL estimates that forest roads in the North Fork Little Joe watershed are currently contributing 24.9 tons/year of sediment delivery. The TMDL calls for a 48 percent reduction, down to 12.9 tons/year. Montana DEQ says that these reductions can be achieved by applying BMPs on roads (MT DEQ 2008).[rdquo] The Forest Service should have demonstrated in its analysis how well each alternative meets these TMDLs. Instead, the agency explains that the TMDLs were derived from the WEPP model, not the GRAIP-Lite model used in the Redd Bull analysis. [ldquo]Although each modeling technique displays results in tons/year, the numbers they produce are not the same and are not necessarily comparable to each other (EA, page 71).[rdquo] Draft DN at E-22. As such, the Redd Bull EA does not answer the question of whether or not the alternatives will meet sediment reductions in the TMDLs. We acknowledge that to do so the Forest Service would have to conduct WEPP modeling for all roads within

each of the two impaired watersheds, which the agency did for one road, NFSR 282. EA 72. Conducting WEPP modeling for all other roads in these watersheds would be appropriate for an EIS and necessary to show compliance with the Clean Water Act. While the Montana DEQ and the Forest Service may rely on BMPs, a detailed analysis demonstrating the efficacy of those BMPs is necessary, especially given our comments and objections to the agency[rsquo]s over-reliance on those BMPs. Moreso, the need for such analysis is crucial given the following disclosure:

GRAIP-Lite sediment modelling estimates an approximate 140% increase in the amount of sediment that would be delivered to streams during project implementation for Alternatives 2 and 4, and 84% increase for Alternative 3 (GRAIP-Lite results unpublished data). Most of this increase is due to the increased use of the road network and sediment production from blading open roads, building temporary roads, and increasing traffic volume on 42.5 miles of haul route.

Redd Bull Fisheries Report at 13. We also commented that the Forest Service must demonstrate how each alternative affects overall watershed conditions for each subwatershed in the project area. The agency[rsquo]s response clarified that according to the Watershed Condition Framework (WCF), all project area watersheds are functioning at risk, except the Twomile watershed which is identified as fully functional. Draft DN at E-21. Our

comments mistakenly stated the WCF categorized these watersheds as functioning at unacceptable risk when it is the [ldquo]integrated bull trout condition class ratings (USDI 1998) for Redd Bull watersheds where color denotes the level of risk to aquatic indicators; all project watersheds are rated at [lsquo]Unacceptable Risk[rsquo]. Ratings are derived from GIS values that are largely based on road density and location.[rdquo] Redd Bull Fisheries Report at 9. Further, the Forest Service explains that [ldquo][t]he analysis summarized in the EA discloses that the Selected Action will substantially improve watershed conditions and aquatic habitat by reducing road-related sediment delivery below existing levels and remedying barriers to aquatic organism passage.[rdquo] Draft DN at 12. We do not dispute that the actions to improve AOPs and reduce road densities will improve watershed conditions, and we support such actions. Rather our objection is to the analysis and its lack of specificity regarding the road densities resulting from the action alternatives, and if they will be sufficient to move the aquatic indicators to a better functioning rating. The need for such analysis is evident given the Forest Service[rsquo]s reliance on BMPs to reduce sedimentation from log-hauling and in the acknowledgement that [ldquo]Road BMPs are generally expected to be effective for 3-5 years such that some sediment reduction benefits would likely continue beyond log haul if BMPs are maintained into the last year of the project as proposed.[rdquo] Redd Bull Fisheries Report at

10. The agency does not disclose its ability to maintain those BMPs through project completion or beyond. Rather, what little information the agency does provide suggests that it will not be able to maintain those BMPs based on available road maintenance funding, which we discuss further below. The issue of BMP maintenance is crucial given that the Forest Service relies on them to reduce the intensity of sedimentation:

However, project actions expected to be long duration would be mitigated to be low intensity, and project actions expected to be high intensity would be mitigated to be short duration. For example, sediment from log haul would likely be delivered from roads after rain/snowmelt events for the duration of the project (~ 10 years) but road BMPs such as gravel surfacing, drainage dips, and slash filter windrows would limit the intensity.

Id. at 24. Without demonstrating both the efficacy of those BMPs and the agency[rsquo]s ability to maintain that effectiveness, conclusions that the sedimentation intensity would not be significant are arbitrary and capricious, and a violation of NEPA. Further, it becomes even more important for the Forest Service to disclose if the road densities post-project completion for each subwatershed will improve classification scores for both the WCF ratings and the integrated bull trout condition class ratings. Regarding the former, the Forest Service should have disclosed the road and trail indicator ratings for each subwatershed and their attributes (road density, road/trail maintenance, proximity to streams, and mass wasting).

Given these uncertainties and the lack of analysis, assertions that short term impacts will not threaten WCT viability or hinder bull trout recovery are arbitrary and a violation of NEPA. As such the Forest Service must prepare an EIS, and then consult with USFWS concerning potential impacts to bull trout as required by the ESA. Finally, the agency explains that [ldquo][c]onsistent with Section 7 of the Endangered Species Act, formal consultation with U.S. Fish and Wildlife Service will be completed.[rdquo] EA at 82. We urged the Forest Service to provide the public an opportunity to review and comment on the results of the consultation process. It does not appear the Forest Service intends to provide such an opportunity before issuing its final decision. Draft DN at E-27. This precludes our ability to provide meaningful input.

E. Failure to identify the minimum road system and fully analyze the environmental consequences of roads in the project area.

Our comments urged the Forest Service to identify a resilient future road system as part of the project, especially in light of the objective to increase forest resilience to disturbance and improve wildlife species habitat and security, and the fact that road actions are a major part of this proposal. We also asked the Forest Service to produce and utilize a project level travel analysis report (TAR) to identify the minimum road system (MRS), based on the factors defining a minimum road system as set forth in subpart A of the Forest Service[rsquo]s travel rules. The need for a project level TAR was glaringly apparent given the 2015 forest-wide TAR only identified a paltry 113 miles as likely not needed out of 6,080 miles (1.86% of all roads). We commented on the inadequacies of the 2015 TAR, urging they be addressed in a project specific TAR. As such, we acknowledge and thank the Forest Service for producing the Redd Bull project TAR, though as we explained above, the 2015 forest-wide TAR and the Redd Bull TAR do not actually identify the minimum road system. Rather, the Forest Service must actually disclose and discuss the findings from the Redd Bull TAR in the analysis. Yet, the EA fails to do so. In fact, the transportation analysis was less than three pages long, and while explaining that a project-level TAR was completed, the EA lacks any summary or discussion of the Redd Bull TAR such as the number of high risk roads the agency will add to the system under the selected alternative, or the overall cost to maintain the expanded road system that the selected alternative will increase by 26 miles. Draft DN at E-49.

The Redd Bull TAR also lacks sufficient detail, such as how the analysis considered specific resource risks. The report states only that [ldquo][r]esources at risk generally include aquatics, wildlife, visuals, heritage, and roadless character.[rdquo] Redd Bull TAR at 23. It failed to disclose how those risks were evaluated and, moreso, how the scoring system assigned low, moderate or high risk ratings. For example, did the Forest Service use a numbered scoring system where roads with a 1-3 score were assigned low risks? When all risk scores were combined, how did the agency determine overall risk ratings if some resource risks scored high and others low? For example, if a road had high aquatic risks, but low for all others, did it

receive a high, moderate or low risk rating? Further, in looking at the Redd Bull TAR Appendix C, it is unclear how the Forest Service made its recommendations to add, keep or decommission roads based on the overall scores. In some instances, there were recommendations to add [ldquo]undetermined[rdquo] roads with moderate or even high risk ratings, even when the benefits were low or moderate. The lack of transparency must be addressed in an EIS that, ideally, identifies the minimum road system.

To be clear, the amount of information necessary is that which supports a NEPA-level decision with sufficient detail to demonstrate the minimum road system complies with the four factors provided in the TMR subpart A requirements:

The minimum road system is the road system necessary: (1) to meet [ldquo]resource and other management objectives[rdquo] consistent with the forest plan; (2) to meet applicable statutory and regulatory requirements[rdquo]; (3) to reflect [ldquo]long term funding expectations[rdquo]; and (4) to ensure the road system [ldquo]minimizes adverse environmental impacts associated with road[s.][rdquo] 36 C.F.R. [sect]

212.5(b)(1).

Friends of Bitterroot v. Marten, No. 9:20-cv-00019-DLC, 2020 WL 5804251 (D. Mont. Sept. 29, 2020). Having established that both the forest wide and project level TARs cannot replace actual NEPA-level analysis and that the agency cannot tier to non-NEPA documents to meets its analysis requirements, and moreso, that the Redd Bull TAR and EA fail to demonstrate compliance with the TMR subpart A direction, the question turns to whether or not the EA and Draft DN results in a transportation system that adequately accounts for resource concerns. The latter is necessary to comply with forest plan direction: [ldquo][t]he Lolo Forest Plan directs that roads be kept to the minimum number and size needed to meet user and resource needs. Forest Plan, pages II-2 and II-17. Flaws in the Redd Bull TAR coupled with the lack of analysis in the EA preclude any determination of forest plan compliance, which also results in a failure to meet the project[rsquo]s purpose as stated above.

Further, the Forest Service[rsquo]s proposal to add forest roads to the official road system without demonstrating it can maintain those roads or ensure they do not hinder the agency[rsquo]s ability to protect NFS lands runs contrary to Forest Service policy. See, e.g., 66 Fed. Reg. 3206 (Jan. 12, 2001). The agency does disclose that [ldquo][i]n total approximately $423,000 is available per year for road-related maintenance.[rdquo] Redd Bull TAR at 6, Table 4, footnote 19. It is unclear if that is for the project area, the Superior District or the entire Lolo NF. The lack of clarification is crucial to understand the agency[rsquo]s ability to properly maintain the expanded road system under the selected alternative. If the amount represents what is available forest wide, and then the cost to maintain the existing road system in the project area represents nearly 42% of the entire annual maintenance cost, not 1.3% the agency asserts in the Redd Bull TAR. Id. Further, the table provided in the Redd Bull TAR indicates the maintenance intervals for ML1 roads is once every 25 years and for ML 2 roads once every 11 years, with the rationale for such long intervals being that [ldquo][i]n general, annual maintenance needs (roadside brushing, surface blading, minor drainage structure maintenance, weed spraying) are low because NFS roads are designed and constructed to be [ldquo]self-maintaining[rdquo] using design features.[rdquo] Id. We object to the assertion that roads are self-maintained as evidenced by the fact they currently contribute to water quality impairment for the St. Regis, Little Joe and North Fork Little Joe watersheds, and that [ldquo][d]irectly, indirectly, and cumulatively, the existing road system would continue to impose chronic impacts to streams, including fine sediment contribution.

Undersized culverts would continue to pose risks to stream stability (e.g., road fill scour, channel aggradation, and risk of failure).[rdquo] EA at 70. Certainly intervals of 25 and 11 years cannot be deemed ongoing or regular maintenance, especially when the agency prioritizes maintenance for arterial and collector roads, not local roads closed to the public. Redd Bull TAR at 5.

1. Unauthorized roads

Under the selected alternative, the Forest Service would add 25 miles of unauthorized roads to the transportation system, of which 21.3 miles would be closed yearlong or placed in storage. The analysis fails to sufficiently disclose, discuss or provide evidence demonstrating the need for these roads, or that the agency has sufficient resources to ensure their basic custodial maintenance. Further, the agency failed to sufficiently demonstrate how these unauthorized roads will affect the agency[rsquo]s ability to maintain or restore watershed conditions, or ensure the viability of at risk species, or the recovery of threatened and endangered species. Since the Forest

Service failed to distinguish the legal baseline condition from the existing condition (containing unauthorized roads), or provide the specific resource risks from each unauthorized road proposed to be added to the system, the analysis fails to take the requisite hard look required under NEPA. The Forest Service failed to adequately respond to these comments and the issue remains as a point of objection to this project.

1. Untreated Roads

Under the selected alternative, the Forest Service would decommission 225 miles of road, of which only 4 miles of system roads and 60 miles of unauthorized roads would be physically treated. Looking more closely at the decision, of those 64 miles, only 42 miles would be fully recontoured, with 22 miles partially treated and another 161 miles would be decommissioned with no physical treatments, meaning 183 miles of decommissioned roads would retain some portion or all of its existing road prism. Draft DN at 24, Table 2-4. In addition, 17 miles of existing system roads would be placed into storage as would another 11 miles of unauthorized roads that would be added to the system under the selected alternative. Finally, for the 15 miles new road construction, 4.2 miles would be placed in storage with the remaining number closed with a gate. EA at 22-25. In sum, there would be 43 miles of stored or closed roads, in addition to the 183 miles of untreated or partially treated decommissioned roads.

Our comments raised concerns about leaving roads prisms fully or partially intact in a post-wildfire scenario, especially where they pose sedimentation risks and where their exposure could further increase wildlife habitat fragmentation. The Forest Service responded to these concerns stating:

The Forest Service does not have unlimited funding to physically treat all roads identified for storage and decommissioning. Therefore, physical storage and decommissioning treatments are prioritized for roads that have the most resource concerns.

Draft DN at E-47. Further, the Forest Service asserts that [ldquo] [i]f future high severity wildfire occurs, untreated roads would be addressed as needed under the Burned Area Emergency Response (BAER). EA at 76.

We acknowledge that the Forest Service has limited resources and cannot physically recontour every decommissioned road, and physically store or close proposed for such actions. Yet, both responses fail to address our comments, which asked the agency to analyze the potential post-burn effects of untreated or partially treated stored, closed and decommissioned roads. The agency[rsquo]s response that the BAER program would address those post-burn effects remains unsupported in the analysis and does not comport with the serious limitation of the BAER program. To be clear, BAER is a preventative mitigation program where a team of National Forest specialists go into a burned area one to two weeks after containment, which is often after the first snow event, identify threats to critical values and submit an initial report with a request to utilize dedicated BAER funding to mitigate those threats. Oftentimes, the full funding is not available, so priorities are often given to arterial and collector roads open to the public, not local roads in closed or stored status, and certainly not untreated decommissioned roads. In other words, the BAER is not a

post-burn rehabilitation program that will address the concerns we raised in our comments, but one that mitigates immediate threats to critical values due to wildfire damage. In fact, agency directives provide guidance for ranking threats to critical values where a major determination as to the severity of those threats rests upon the probability of damage or loss to those critical values. FSM 2523.1 at 11-12, Exhibits 01 and 02. A logical conclusion from reviewing the directive is that closed, stored and decommissioned roads would score low on the threat evaluation. For example, the 2017 Rice Ridge fire burned over 517 miles of road on the Lolo NF[rsquo]s Seeley District and road drainage maintenance treatments focused on ML 2 & ML 3 roads located within or directly downslope from areas that burned with a moderate or high severity. Rice Ridge Burned Area Report, 2017 at 15, 18. Further, treatments funded through the BAER program must be completed within the first year, meaning contractors typically have just one field season, which simply is not enough time to address all the threats to critical values.

In sum, it is arbitrary and capricious for the Forest Service to claim that the BAER program will address post-fire effects to untreated or partially treated closed, stored and decommissioned roads, and as such the agency should have produced an EIS that identified those roads most at risk from post-fire impacts to both watersheds and wildlife.

1. Do Not Add New Miles to the Road System

Our comments raised the concern that instead of working to reduce the miles of system roads on the landscape, consistent with the agency[rsquo]s overarching policy, the Forest Service proposed to increase the road system. The selected alternative would add 25 miles of unauthorized roads and 15 miles of newly constructed roads to the system, totaling 40 miles. Draft DN at 4, Table 3. The Forest Service should not add roads to its system, but instead should focus on establishing a right-sized, affordable road network. Our comments and this objection note that the EA lacks information about the risks and benefits of roads. Forest Service policy directs the agency to carefully consider and document the road management objectives, environmental impacts, and social and economic benefits associated with any proposed addition before adding roads to its system. See Forest Service Handbook 7703.26(1). It also directs the agency to consider long-term road funding opportunities and obligations as part of any decision to add road miles to the system. Id. 7703.26(2). See also FSM 7715.03(7) (noting that [ldquo]Ranger Districts should avoid adding routes to the Forest transportation system unless there is adequate provision for their maintenance[rdquo]). The Forest Service fails to analyze these factors in its analysis, and as we note above, the transportation section of the EA is woefully inadequate.

1. Temporary Roads

Our comments raised concerns with the tracking and removal of temporary roads, and that the 2020 EA failed to include sufficient analysis regarding wildlife and temporary roads, increases in road densities and habitat fragmentation, or measures to ensure temporary roads do not become unauthorized roads. The EA and response to comments fails to adequately address these concerns, and as such they remain as part of this objection. We recognize that the selected alternative includes resource protection measures that direct treatments to decommission temporary roads must occur within one year following the completion of a particular

unit. However, this fails to specify how long temporary roads may remain on the ground from the time of their construction until they are decommissioned. During this time, such roads are available for unauthorized use, and the agency failed to demonstrate its ability to enforce road closures of any type in its analysis. Further, we asked that temporary roads be tracked in some manner during project implementation and after their removal to ensure they do not become [ldquo]undetermined[rdquo] roads at some point in the future. As it stands, the resource protection measures in the Draft DN still allow for remnants of temporary roads to remain:

Level of temporary road and excaline trail decommissioning would depend on existing condition of the site prior to road or trail construction and would be decommissioned following

site-appropriate combinations of the following:

* Top soil and slash would be stored along the temporary road to the greatest extent possible and pulled back over the road surface during decommissioning.
* The temporary road surface would have site preparation to a depth of at least 6 inches. Site preparation may include recontouring, de-compaction, and/or scarification.
* Site would be seeded using appropriate Lolo NF native grass mix, with seeding occurring prior to slash placement.
* By purchaser agreement, in lieu of waterbars, slash of mixed sizes (at least 50% less than 6 inches diameter) would be placed over temporary roads and excaline trails to prevent erosion in units. Slash would cover approximately 65[minus]70% of the road or trail to a depth of approximately 2[minus]3 inches where available (approximately 10-15 tons/acre).

Draft DN, Appendix C at C-7.

Ideally any temporary roads utilizing established road templates will be treated in such a fashion as to leave the site in better condition than the existing condition. Resource protection measures should require full recontouring of all temporary roads to maximize recovery given the length of time it takes to restore soil function acknowledged in the EA.

Suggested Resolution: The Lolo National Forest should prepare an EIS that fully addresses the issues we raise above, and include actions necessary to improve watershed function to the degree necessary that they achieve a functioning appropriately classification, specifically for the road density/location and sediment measures. The agency should also revise the Redd Bull TAR to address the aforementioned deficiencies, making sure to summarize in the EIS the risk/benefit rankings for roads in each subwatershed.

IV. Failure to Disclose the Project[rsquo]s Impacts on Climate Pollution

1. Climate Crisis

The climate crisis is the overriding environmental issue of our time, threatening to drastically modify ecosystems,

alter coastlines, worsen extreme weather events, degrade public health, and cause massive human displacement and suffering. Its impacts are already being felt in the United States, and recent studies confirm that time is running out to forestall the catastrophic damage that will result from 1.5 degrees Celsius of warming. See IPCC, Summary for Policymakers, Global Warming of 1.5[deg]C. An IPCC Special Report on the impacts of global warming of 1.5[deg]C above pre-industrial levels and related global greenhouse gas emission pathways (2018), attached as Attachment A. More recent studies have confirmed that climate change is accelerating, making the need to protect carbon stores even more urgent than it was just a few years ago. See, e.g., H. Fountain, Climate Change Is Accelerating, Bringing World ?Dangerously Close' to Irreversible Change, The New York Times (Dec. 4, 2019), attached as Attachment

1. Climate change is impacting Montana. A 2017 assessment found that temperatures in Montana had risen between 2.0-3.0[deg]F (1.1-1.7[deg]C), and concluded that:

Montana is projected to continue to warm in all geographic locations, seasons, and under all emission scenarios throughout the 21st century. By mid-century, Montana temperatures are projected to increase by approximately 4.5-6.0[deg]F (2.5-3.3[deg]C) depending on the emission scenario. By the end-of-century, Montana temperatures are projected to increase 5.6-9.8[deg]F (3.1-5.4[deg]C) depending on the emission scenario. These state-level changes are larger than the average changes projected globally and nationally.

Whitlock C., Cross W., Maxwell B., Silverman N., Wade A.A. 2017. Executive Summary. Montana Climate Assessment. Bozeman and Missoula MT: Montana State University and University of Montana, Montana Institute on Ecosystems. doi:10.15788/m2ww8w. At pp. 8-9. Available at http://montanaclimate.org/sites/default/files/thumbnails/image/2017-Montana-Climate-Assessment-Execu tive-Summary-lr.pdf, and attached as Attachment C.

Objectors raised the issue of the EA[rsquo]s climate change analysis in our letter on scoping, and on the draft environmental assessment. See A. Rissien, WildEarth Guardians, letter re: Redd Bull Project Scoping Comments (Sep. 6, 2019) at 11-12; A. Rissien, WildEarth Guardians, letter re: Redd Bull Project Environmental Assessment (July 29, 2020) at 9; M. Garrity, Alliance for the Wild Rockies, letter re: Redd Bull EA (July 22, 2020) at 9, 51. Further, new information concerning climate change, especially guidance and new administration policy from the last two months, has arisen since the close of the EA comment period.

1.
1. President Biden requires prompt action to assess and reduce climate pollution.

On the day he was inaugurated, President Biden committed to overturning the prior administration[rsquo]s failure to address, and its outright denial of, the climate emergency.

It is, therefore, the policy of my Administration to listen to the science; to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides;

to hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; to reduce greenhouse gas emissions; to bolster resilience to the impacts of climate change; to restore and expand our national treasures and monuments; and to prioritize both environmental justice and the creation of the well-paying union jobs necessary to deliver on these goals.

To that end, this order directs all executive departments and agencies (agencies) to immediately review and, as appropriate and consistent with applicable law, take action to address the promulgation of Federal regulations and other actions during the last 4 years that conflict with these important national objectives, and to immediately commence work to confront the climate crisis.

Executive Order 13,990, 86 Fed. Reg. 7037 (Jan. 20, 2021) at Sec. 1 (emphasis added), see Attachment D.

Days later, President Biden further committed to taking swift action to address the climate crisis. Per Executive Order 14,008, he has recognized that [ldquo][t]he United States and the world face a profound climate crisis. We have a narrow moment to pursue action at home and abroad in order to avoid the most catastrophic impacts of that crisis and to seize the opportunity that tackling climate change presents.[rdquo] Executive Order 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021), attached as Attachment E. Pres. Biden announced that under his administration,

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.

Id. at 7622 (Sec. 201).

Addressing the need for the accurate assessment of climate costs, Pres. Biden announced on day one that [ldquo][i]t is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account.[rdquo] Executive Order 13,990 (Attachment D), 86 Fed. Reg. at 7040, Sec. 5(a) (emphasis added). He noted that an effective way to undertake this essential task was to use the social cost of carbon to quantify and disclose the effects of additional climate pollution:

The [ldquo]social cost of carbon[rdquo] (SCC), [ldquo]social cost of nitrous oxide[rdquo] (SCN), and [ldquo]social cost of methane[rdquo] (SCM) are estimates of the monetized damages associated with incremental increases in greenhouse gas emissions. They are intended to include changes in net agricultural productivity, human health, property damage from increased flood risk, and the value of ecosystem services. An accurate social cost is essential for agencies to accurately determine the social benefits of reducing greenhouse gas emissions when

conducting cost-benefit analyses of regulatory and other actions.

Id. (emphasis added). The President also re-established Interagency Working Group on the Social Cost of Greenhouse Gases, on which the Secretary of Agriculture will serve. Id., Sec. 5(b). The President directed the Working Group to publish interim values for the social cost of carbon by February 19, 2021. Id., Sec. 5(b)(ii)(A). The Working Group that month set that price at $51/ton at a 3% discount rate. Interagency Working Group on Social Cost of Greenhouse Gases, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990 (Feb. 2021), available at

https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf(last viewed Mar. 12, 2021) and attached as Attachment F. We note that the

U.S. Department of Agriculture, the Forest Service[rsquo]s parent agency, is part of the Interagency Working Group and participated in and endorsed the update to the social cost of carbon. Id. at cover page, 14.

1.
1. NEPA requires the Forest Service to disclose the climate impacts of proposed actions.

The Forest Service must analyze the direct, indirect, and cumulative impacts of a proposed action. Colo. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1176 (10th Cir. 1999); see also 40 C.F.R. [sect] 1508.25(c) (1978) (when determining the scope of an EIS, agencies [ldquo]shall consider[rdquo] direct, indirect, and cumulative impacts). NEPA and NFMA require the Forest Service to use high quality, accurate, scientific information to assess the effects of a proposed action on the environment. See 40 C.F.R. [sect] 1500.1(b); 36 C.F.R. [sect] 219.3.

Meaningful consideration of greenhouse gas emissions (GHGs) and carbon sequestration (carbon storage) lies within the scope of required NEPA review. Ctr. for Biological Diversity v. Nat[rsquo]l Highway Traffic Safety Admin., 538 F.3d 1172, 1217 (9th Cir. 2008). As the Ninth Circuit has held, in the context of fuel economy standard rules:

The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct. Any given rule setting a CAFE standard might have an [ldquo]individually minor[rdquo] effect on the environment, but these rules are [ldquo]collectively significant actions taking place over a period of time.[rdquo]

Id., 538 F.3d at 1216 (quoting 40 C.F.R. [sect] 1508.7 (1978)). See also WildEarth Guardians v. BLM, 870 F.3d 1222, 1237 (10th Cir. 2017) (failure to disclose climate impacts of various alternatives [ldquo]defeated NEPA[rsquo]s purpose[rdquo]). Courts have held that a [ldquo]general discussion of the effects of global climate

change[rdquo] does not satisfy NEPA[rsquo]s hard-look requirement. High Country Conservation Advocates v. U.S. Forest Serv., 52 F. Supp. 3d 1174, 1189-90 (D. Colo. 2014).

Further, courts have ruled that federal agencies must consider indirect GHG emissions resulting from agency policy, regulatory, and fossil fuel leasing decisions. For example, agencies cannot ignore the indirect air quality and climate change impact of decisions that would open up access to coal reserves. See Mid States Coal. For Progress v. Surface Transp. Bd., 345 F.3d 520, 532, 550 (8th Cir. 2003); High Country Conservation Advocates, 52 F. Supp. 3d at 1197-98; Montana Environmental Information Center

v. U.S. Office of Surface Mining, 274 F. Supp. 3d 1074 (D. Mont. 2017), amended in part, adhered to in part, 2017 WL 5047901 (D. Mont. 2017). A NEPA analysis that does not adequately consider the indirect effects of a proposed action, including climate emissions, violates NEPA. Ctr. for Biological Diversity v. Bernhardt, 982 F.3d 723, 2020 U.S. App. LEXIS 38033, *20 (9th Cir. 2020).

NEPA requires [ldquo]reasonable forecasting,[rdquo] which includes the consideration of [ldquo]reasonably foreseeable future actions [hellip] even if they are not specific proposals.[rdquo] N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1079 (9th Cir. 2011) (citation omitted). That an agency cannot [ldquo]accurately[rdquo] calculate the total emissions expected from full development is not a rational basis for cutting off its analysis. [ldquo]Because speculation is ... implicit in NEPA,[rdquo] agencies may not [ldquo]shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as crystal ball inquiry.[rdquo] Id. (citations omitted). The D.C. Circuit has echoed this sentiment, rejecting the argument that it is [ldquo]impossible to know exactly what quantity of greenhouse gases will be emitted[rdquo] and concluding that [ldquo]agencies may sometimes need to make educated assumptions about an uncertain future[rdquo] in order to comply with NEPA[rsquo]s reasonable forecasting requirement. Sierra Club v. Federal Energy Regulatory Commission, 863 F.3d 1357, 1373-74 (D.C. Cir. 2017).

The 2016 final CEQ Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Review provides useful direction on the issue of federal agency review of greenhouse gas emissions as foreseeable direct and indirect effects of a proposed action. Notice available at 81 Fed. Reg. 51,866 (Aug. 5, 2016); full guidance attached as Attachment G, and available at https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf (last viewed Mar.

18, 2021). The CEQ guidance provides clear direction for agencies to conduct a lifecycle greenhouse gas analysis that quantifies GHG emissions and storage because the modeling and tools to conduct this type of analysis are available:

If the direct and indirect GHG emissions can be quantified based on available information, including reasonable projections and assumptions, agencies should consider and disclose the reasonably foreseeable direct and indirect emissions when analyzing the direct and indirect effects of the proposed action. Agencies should disclose the information and any assumptions used in the analysis and explain any uncertainties. To compare a project[rsquo]s estimated direct and indirect emissions with GHG emissions from the no-action alternative, agencies should draw on existing, timely, objective, and authoritative analyses, such as those by the Energy Information Administration, the Federal Energy Management Program, or Office of Fossil Energy of the

Department of Energy. In the absence of such analyses, agencies should use other available information.

Id. at 16 (citations omitted). The guidance further specifies that estimating GHG emissions is appropriate and necessary for actions such as federal logging projects.

In addressing biogenic GHG emissions, resource management agencies should include a comparison of estimated net GHG emissions and carbon stock changes that are projected to occur with and without implementation of proposed land or resource management actions. This analysis should take into account the GHG emissions, carbon sequestration potential, and the changes in carbon stocks that are relevant to decision making in light of the proposed actions and timeframes under consideration.

Id. at 26 (citations omitted).

Courts and guidance have also repeatedly concluded that disclosing the volume of GHG emissions increased (or decreased) by a specific alternative is not, by itself, sufficient to comply with NEPA because agencies must also disclose the effects of those emissions. Such effects can last centuries and occur

world-wide. The Interagency Social Cost of Carbon was developed specifically to provide agencies with a way to quantify and compare those impacts, and courts and agencies have regularly required this method to disclose the climate impacts of federal actions. High Country Conservation Advocates, 52 F. Supp. 3d at 1190-93 (finding Forest Service violated NEPA by failing to disclose the climate impacts via the social cost of carbon); Wildearth Guardians v. Bernhardt, 2021 U.S. Dist. LEXIS 20792, CV 17-80-BLG-SPW (D. Mont. Feb. 3, 2021) at *25-*31 (finding Office of Surface Mining violated NEPA by failing to disclose the climate impacts via the social cost of carbon). See also CEQ, 2016 NEPA Climate Guidance (Attachment G) at 32-33 (noting the appropriateness of monetizing climate impacts).

Although the Trump administration withdrew the 2016 CEQ guidance, President Biden on January 20, 2021 rescinded that Trump Executive Order, and directed CEQ to [ldquo]review, revise, and update[rdquo] its 2016 climate guidance. Executive Order 13,990 (Attachment D), Sec. 7(e), 86 Fed. Reg. at 7042. On February 19, 2021, CEQ effectively reinstated the 2016 GHG guidance:

CEQ will address in a separate notice its review of and any appropriate revisions and updates to the 2016 GHG Guidance. In the interim, agencies should consider all available tools and resources in assessing GHG emissions and climate change effects of their proposed actions, including, as appropriate and relevant, the 2016 GHG Guidance.

Council on Environmental Quality, National Environmental Policy Act, Guidance on Consideration of Greenhouse

Gas Emissions, 86 Fed. Reg. 10,252 (Feb. 19, 2021), attached as Attachment H, and available at https://www.govinfo.gov/content/pkg/FR-2021-02-19/pdf/2021-03355.pdf (last viewed Mar. 18, 2021).

Further, whatever the state of federal guidance, the underlying requirement from federal caselaw to consider climate change impacts under NEPA, including indirect and cumulative combustion impacts and loss of sequestration foreseeably resulting from commercial logging decisions, has not changed. See S. Fork Band Council of W. Shoshone v. United States Dept. of Interior, 588 F.3d 718, 725 (9th Cir. 2009); Ctr. for Biological Diversity, 538 F.3d at 1214-15; Mid States Coalition for Progress, 345 F.3d at 550; WildEarth Guardians v. United States Office of Surface Mining, Reclamation & Enf [rsquo]t, 104 F. Supp. 3d 1208, 1230 (D. Colo. 2015) (coal combustion was indirect effect of agency[rsquo]s approval of mining plan modifications that [ldquo]increased the area of federal land on which mining has occurred[rdquo] and [ldquo]led to increase in the amount of federal coal available for combustion.[rdquo]); Din[eacute] Citizens Against Ruining Our Env[rsquo]t v. United States Office of Surface Mining Reclamation & Enf [rsquo]t, 82 F. Supp. 3d 1201, 1213-1218 (D. Colo. 2015); High Country Conservation Advocates, 52 F. Supp. 3d at 1174.

1.

1. The Forest Service[rsquo]s failure to disclose and quantify the Redd Bull Project[rsquo]s climate damage violates NEPA

The Forest Service[rsquo]s analysis of the Redd Bull Project violates NEPA and is arbitrary and capricious because it focuses exclusively (and only qualitatively) on the alleged benefits of purporting to make the forest more [ldquo]resilient[rdquo] to climate change through logging and other means, while effectively denying and refusing to disclose or otherwise quantify the impacts on climate pollution and carbon storage of logging, burning, and trucking trees from the forest.

The EA asserts that one of the project[rsquo]s purposes and effects includes making treated areas more resilient to climate change. See, e.g., EA at 35 (primary vegetation treatment objectives include [ldquo]maintain[ing] or improv[ing] resilience to climate change[rdquo]); id. at 36-37 (Table 3.2-2, comparing action alternatives by the per centage of project area meeting [ldquo]Climate Change Resilience[rdquo] goals); id. at 37 (asserting that all of the action alternatives [ldquo]improve resilience to climate change[rdquo]); id. at 45 ([ldquo]Proposed harvest treatments would retain old growth characteristics [hellip] while [hellip] improving resilience to climate stresses[rdquo]).

Although addressing and adapting to climate change is a project purpose, the EA contains nothing on the project[rsquo]s impact on climate pollution or climate change, in violation of NEPA. The Redd Bull Project will have at least two types of climate impacts that the EA ignores.

1. The Forest Service fails to disclose and quantify the Redd Bull project[rsquo]s impact on carbon storage.

First, the Redd Bull project will have direct, indirect, and cumulative impacts on climate change because logging and burning forests will impact the ecosystem[rsquo]s ability to store carbon.

Science makes clear that the Redd Bull Project will likely worsen climate emissions by removing trees that are currently fixing carbon, turning them into wood products (which results in a significant loss of that carbon fixed in wood), and leaving a landscape with no trees and (eventually) seedlings that fix far less carbon than mature forests.

The EA itself fails to contain any analysis of the Redd Bull project[rsquo]s impact on climate stores and carbon pollution, despite the fact that each action alternative analyzed will remove over 180,000 ccf, or more than 80 million board feet, of timber. EA at 125. Further, the project will likely remove thousands of old trees. [ldquo]Commercial harvest would remove most of the trees in the 7-10 inch diameter range with some removal of the 10-15 inch diameter fire-intolerant trees to meet species/spacing treatment objectives.[rdquo] EA at 144. This will likely result in the removal of old trees because [ldquo]a large proportion of the forest in the 10 to 14.9-inch dbh size class can be considered old forest and greater than 140 years old. This is supported by field observations and age samples.[rdquo] Redd Bull Vegetation Report (undated) at 9. See also EA at 35 (defining trees over 140 years old as [ldquo]old forest[rdquo]).

Logging old forests in particular worsens climate change by releasing significant amounts of carbon and by preventing such forests from continuing to sequester carbon. As the Forest Service has admitted regarding mature forests in Alaska, such forests [ldquo]likely store considerably more carbon compared to younger forests in this area (within the individual trees themselves as well as within the organic soil layer found in mature forests).[rdquo] Forest Service, Tongass Land and Resource Management Plan, Final EIS (2016) at 3-14, excerpts attached as Attachment I. This is so because when a forest is cut down, the vast majority of the stored carbon in the forest is released over time as CO2, thereby converting forests from a sink to a [ldquo]source[rdquo] or [ldquo]emitter.[rdquo] See, e.g., D. DellaSala, The Tongass Rainforest as Alaska[rsquo]s First Line of Climate Change Defense and Importance to the Paris Climate Change Agreements (2016) at 5, attached as Attachment J. According to a 2019 IPCC report, deforestation causes climate pollution, and avoiding deforestation will reduce climate pollution. Intergovernmental Panel on Climate Change, Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems, Summary for Policymakers (Aug. 2019) at 7, 23, attached as Attachment K. See also B. Law et al., Land use strategies to mitigate climate change in carbon dense temperate forests, Proceedings of the Nat[rsquo]l Academy of Sciences, vol. 115, no. 14 (Apr. 3, 2018) at 3663 ([ldquo]Proven strategies immediately available to mitigate carbon emissions from forest activities include

... reducing emissions from deforestation and degradation.[rdquo]), attached as Attachment L.

A 2019 report found that protecting national forests in the American Northwest, including in Montana, would be an effective way to reduce the contribution of land management to climate pollution. The study concludes:

If we are to avert our current trajectory toward massive global change, we need to make land stewardship a higher societal priority. Preserving temperate forests in the western United States that have medium to high potential carbon sequestration and low future climate vulnerability could account for approximately 8 yr of regional fossil fuel emissions, or 27[ndash]32% of the global mitigation potential previously identified for temperate and boreal forests, while also promoting ecosystem resilience and the maintenance of biodiversity.

P. Buotte et al., Carbon sequestration and biodiversity co-benefits of preserving forests in the western United States, Ecological Applications, Article e02039 (Oct. 2019) at 8, available at https://esajournals.onlinelibrary.wiley.com/doi/pdf/10.1002/eap.2039 (last viewed Mar., 2021), and attached as Attachment M. This study was funded in part by the USDA. The coarse-scale map provided with the study indicates that there may be forest stands in the Redd Bull project area that are rated as [ldquo]medium[rdquo] or [ldquo]high[rdquo] priority for preservation to mitigate climate change. Id. at 4 (Figure 1).

Recent studies agree that maintaining forests rather than cutting them can help reduce the impacts of climate change. [ldquo]Stakeholders and policy makers need to recognize that the way to maximize carbon storage and sequestration is to grow intact forest ecosystems where possible.[rdquo] Moomaw, et al., Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good, Frontiers in Forests and Global Change (June 11, 2019) at 7), attached as Attachment N (emphasis added). One report concludes:

Allowing forests to reach their biological potential for growth and sequestration, maintaining large trees (Lutz et al 2018), reforesting recently cut lands, and afforestation of suitable areas will remove additional CO2 from the atmosphere. Global vegetation stores of carbon are 50% of their potential including western forests because of harvest activities (Erb et al 2017). Clearly, western forests could do more to address climate change through carbon sequestration if allowed to grow longer.

T. Hudiburg et al., Meeting GHG reduction targets requires accounting for all forest sector emissions, Environ. Res. Lett. 14 (2019) (emphasis added), attached as Attachment O.

Further, a June 2020 literature from leading experts on forest carbon storage reported:

There is absolutely no evidence that thinning forests increases biomass stored (Zhou et al. 2013). It takes decades to centuries for carbon to accumulate in forest vegetation and soils (Sun et al. 2004, Hudiburg et al. 2009, Schlesinger 2018), and it takes decades to centuries for dead wood to decompose. We must preserve medium to high biomass (carbon-dense) forest not only because of their carbon potential but also because they have the greatest biodiversity of forest species (Krankina et al. 2014, Buotte et al. 2019, 2020).

B. Law, et al., The Status of Science on Forest Carbon Management to Mitigate Climate Change (June 1, 2020),

attached as Attachment L.

Two experts in the field recently concluded:

Recent projections show that to prevent the worst impacts of climate change, governments will have to increase their pledges to reduce carbon emissions by as much as 80%. We see the next 10 to 20 years as a critical window for climate action, and believe that permanent protection for mature and old forests is the greatest opportunity for near-term climate benefits.

B. Law & W. Moomaw, Keeping trees in the ground where they are already growing is an effective low-tech way to slow climate change, The Conversation (Feb. 23, 2021) (emphasis added), attached as Attachment P, and available at

https://theconversation.com/keeping-trees-in-the-ground-where-they-are-already-growing-is-an-effective-low-tech-way-to-slow-climate-change-154618(last viewed Mar. 18, 2021).

Further, to address the climate crisis, agencies cannot rely on the re-growth of cleared forests to make up for the carbon removed when mature forest is logged. One prominent researcher explains: [ldquo]It takes at least 100 to 350+ years to restore carbon in forests degraded by logging (Law et al. 2018, Hudiburg et al. 2009). If we are to prevent the most serious consequences of climate change, we need to keep carbon in the forests because we don't have time to regain it once the forest is logged (IPCC, 2018).[rdquo] B. Law, et al., The Status of Science on Forest Carbon Management (Attachment L) (emphasis added). Studies also demonstrate that significant volumes [ndash] in some cases a majority [ndash] of carbon stored in trees are immediately lost when trees are logged and milled, and the rest is likely to be returned to the atmosphere sooner than would occur if the trees were left standing.

[H]arvesting carbon will increase the losses from the forest itself and to increase the overall forest sector carbon store, the lifespan of wood products carbon (including manufacturing losses) would have to exceed that of the forest. Under current practices this is unlikely to be the case. A substantial fraction (25%[ndash] 65%) of harvested carbon is lost to the atmosphere during manufacturing and construction depending on the product type and manufacturing method. The average lifespan of wood buildings is 80 years in the USA, which is determined as the time at which half the wood is no longer in use and either decomposes, burns or, to a lesser extent, is recycled. However, many forest trees have the potential to live hundreds of years [hellip].

B. Law & M.E. Harmon, Forest sector carbon management, measurement and verification, and discussion of policy related to mitigation and adaptation of forests to climate change. Carbon Management (2011) 2(1), attached as Attachment Q, and available at https://www.researchgate.net/publication/235591616_Forest_sector_carbon_management_measurement_and_verification_and_discussion_of_policy_related_to_climate_change(last viewed Mar. 18, 2021).Other studies

indicate that there is little substitution benefit of using wood compared to using other products (e.g., concrete for building), and that industry talking points to the contrary vastly overestimate the carbon benefits of using wood. See M. Harmon, Have product substitution carbon benefits been overestimated? A sensitivity analysis of key assumptions, Environmental Research Letters (2019), attached as Attachment R, and available at

https://iopscience.iop.org/article/10.1088/1748-9326/ab1e95/pdf (last viewed Mar. 18, 2021) ([ldquo]Substitution of wood for more fossil carbon intensive building materials has been projected to result in major climate mitigation benefits often exceeding those of the forests themselves. A reexamination of the fundamental assumptions underlying these projections indicates long-term mitigation benefits related to product substitution may have been overestimated 2- to 100-fold.[rdquo]).

The Forest Service failed to address this information and these studies in its EA. Although the EA does not point to it, the project file contains a [ldquo]Forest Carbon Cycling and Storage Report[rdquo] that purports to address the project[rsquo]s effects on climate change and carbon storage. See B. Erickson et al., Redd Bull Project, Forest Carbon Cycling and Storage Report (Jan. 21, 2020) (hereafter [ldquo]Carbon Report[rdquo]), attached as Attachment S.

The Forest Service cannot rely on the Carbon Report because it is inadequate, and tantamount to climate denial, for numerous reasons. The report acknowledges that the Lolo National Forest plays a role in capturing carbon, and thus mitigating climate pollution. Carbon Report Attachment S at 5, (stating that the Lolo National Forest stores about 135 teragrams of carbon, or about 135 million tons; or about 4 times as much as emitted by the State of Montana in a year). Despite the importance of mature and old trees to maintaining carbon stores, and the fact that timber removal proposed for this project will degrade those stores by logging trees as old as 140 years, the Forest Service concludes that [ldquo][t]he Red Bull Project would affect only a tiny percentage of the forest carbon stocks of the Lolo National Forest, and an infinitesimal amount of the total forest carbon stocks of the United States.[rdquo] Id. The Carbon Report specifically states that it will not attempt to quantify climate impacts but instead will provide only a [ldquo]qualitative analysis.[rdquo] Id. at 1. Such summary, qualitative conclusions do not constitute the hard look NEPA requires, nor do they assist the public or the decisionmaker in distinguishing between the alternatives.

In addition, the Carbon Report is like a time capsule from the past. It ignores all science concerning climate change and/or carbon sequestration that has been published in the last eight years. The most recent study the report relies on is dated 2013, and the vast majority of studies it cites predate 2010. See id. at 6-9. And little wonder, because the Carbon Report appears to be cut and pasted, with only minor alterations, from a report prepared nearly six years ago for an Idaho timber sale. Compare Carbon Report (Attachment S) with T. Little et al., Idaho Panhandle NF, Jasper Mountain Project Forest Carbon Cycling and Storage Report (Mar. 30, 2015), attached as Attachment T. For example, the vast majority of the text and the entirety of the [ldquo]References Cited[rdquo] section in the Redd Bull Carbon Report is verbatim identical to that prepared for the Jasper Mountain Project which was prepared five years earlier. And emphasizing just how outdated are the identical references in the Jasper Mountain and Redd Bull carbon reports, they each include internet links to five articles that no longer function. (This also indicates that Forest Service staff likely failed to check the references for the Redd Bull Carbon Report when cut-and-pasting the Jasper Mountain report.)

Recycling the old Idaho Panhandle report to take a [ldquo]hard look[rdquo] at the Redd Bull project[rsquo]s impacts violates NEPA[rsquo]s mandate that the agency use the best available science, particularly in light of the climate and forest sequestration science that has developed since 2013, and some of which the Objectors provide here.

The Carbon Report[rsquo]s outdated, cut-and-paste analysis also distorts the project[rsquo]s climate impacts, using metrics tailored to make the impacts of logging on carbon storage look small by comparison. Virtually any individual project impacting the climate, except perhaps those on a national scale, will look small when compared to climate emissions from all U.S. forests. CEQ[rsquo]s 2016 NEPA climate guidance specifically recommended against using the type of comparison employed by the Redd Bull Carbon Report:

a statement that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA. Moreover, these comparisons are also not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change challenge itself[hellip].

CEQ, 2016 NEPA Climate Guidance (Attachment G) at 11. The fundamental difficulty at the heart of climate change is that it is the product of thousands of different decisions, yet each one adds to and worsens a problem that threatens trillions of dollars in damage, will impair public health, and will disproportionately burden people of color and those with lower incomes, among other impacts. Carbon emitted or not stored today will warm the climate for centuries and have impacts far beyond those in Montana (or the U.S).

Any attempt by the agency to decline to address such impacts as [ldquo]infinitesimal[rdquo] in comparison to [ldquo]total forest carbon stocks of the United States[rdquo] is thus not only misleading, it would mask the fact that every additional bit of climate pollution, or elimination of carbon sequestration ability, makes the problem worse, and that every bit of sequestration is critical to the solution. WildEarth Guardians v. Zinke, 2019

U.S. Dist. LEXIS 30357 (D. Mont. Feb. 11, 2019) at *25 (proposed findings) ([ldquo]But by only comparing the estimated emissions to total U.S. emissions, OSM potentially diluted the adverse environmental effects of coal combustion at a local level. The Ninth Circuit has stated that when assessing the effects of an agency action, the appropriate analysis must include consideration of both broad scale and local impacts.[rdquo]); Pac. Coast Fed. of Fisherman[rsquo]s Ass[rsquo]ns v. Nat[rsquo]l Marine Fisheries Serv., 265 F.3d 1028,

1036-37 (9th Cir. 2001); Or. Nat. Res. Council Fund v. Brong, 492 F.3d 1120, 1129-30 (9th Cir. 2007) (noting that averaging environmental effects based on a broad scope can lead to misleading results). The Forest Service must provide the public and the decision-maker with a sense of the relevant scale of the climate harm of each alternative so that the impacts may be compared.

The Carbon Report[rsquo]s statements deriding the impacts as [ldquo]tiny[rdquo] and [ldquo]infinitesimal[rdquo] are thus tantamount to climate denial, something that conflicts with Biden administration policy.

Further, to address the climate crisis, agencies cannot rely on the re-growth of cleared forests to make up for the carbon removed when mature forest is logged. One prominent researcher explains: [ldquo]It takes at least 100 to 350+ years to restore carbon in forests degraded by logging (Law et al. 2018, Hudiburg et al. 2009). If we are to prevent the most serious consequences of climate change, we need to keep carbon in the forests because we don't have time to regain it once the forest is logged (IPCC, 2018).[rdquo] B. Law, et al., The Status of Science on Forest Carbon Management (Attachment U) (emphasis added).

Even if the logging permitted in the Redd Bull project[mdash]when viewed in isolation[mdash]may only result in a relatively minor climate impacts, NEPA expressly requires agencies to consider whether agency actions are [ldquo]related to other actions with individually insignificant but cumulatively significant impacts.[rdquo] 40

C.F.R. [sect] 1508.27(b)(7) (2019). Thus, the Forest Service may not blithely dismiss and deny the climate impacts of the Redd Bull project without considering the cumulative significance of the project when added to other past, present, and reasonably foreseeable logging projects and Forest Service timber sales in the state, region, and nation. 40 C.F.R. [sect] 1508.7; WildEarth Guardians v. Zinke, 368 F. Supp. 3d 41 (D.D.C. 2019) (holding that BLM erred by failing to consider the cumulative climate impacts of oil and gas leases together with [ldquo]GHG emissions generated by past, present, and reasonably foreseeable BLM lease sales in the region and nation[rdquo]). The Forest Service failed to address these cumulative effects, violating NEPA.

The Forest Service[rsquo]s approach also violates NEPA because the Forest Service did not use its best efforts or the best available information to address climate impacts, as required by NEPA. Methods exist that would have allowed the agency to quantify those impacts. For example, a 2018 study concludes that carbon storage impacts can be estimated, accounted for, and factored into a model that calculated the net amount of carbon lost due to forest logging in Oregon over two five-year periods. See Law et al., Land use strategies (Attachment L) at 3664 ([ldquo]Our LCA [life-cycle assessment] showed that in 2001[ndash]2005, Oregon[rsquo]s net wood product emissions were 32.61 million tCO2e [tons of carbon dioxide equivalent in net GHG emissions] (Table S3), and 3.7- fold wildfire emissions in the period that included the record fire year (15) (Fig. 2). In 2011[ndash]2015, net wood product emissions were 34.45 million tCO2e and almost

10-fold fire emissions, mostly due to lower fire emissions.[rdquo]). This is precisely the type of analysis the Forest Service should, and could, have undertaken for Redd Bull EA.

Similarly, Dr. DellaSala[rsquo]s 2016 report addressed carbon stores from wood products and concluded that logging Tongass old-growth forest under the 2016 Forest Plan would result in net annual CO2 emissions totaling between 4.2 million tons and 4.4 million tons, depending on the time horizon chosen. DellaSala (Attachment J) at 14. The Bureau of Land Management more than a decade ago completed an EIS for its Western Oregon Resource Management Plan in which that agency also predicted the net carbon emissions from its forest and other resource management programs. See Bureau of Land Management, Western Oregon Proposed RMP Final EIS (2009) at 165-181, excerpts attached as Attachment V. Because agencies and academics have quantified and compared the carbon emissions of alternative logging proposals, NEPA requires the Forest Service to do that here.

The Forest Service failure to address or acknowledge that there are peer-reviewed scientific approaches to estimating net climate damage caused by logging forests is another independent NEPA violation. NEPA requires agencies to explain opposing viewpoints and their rationale for choosing one viewpoint over the other. 40 C.F.R. [sect] 1502.9(b) (2019) (requiring agencies to disclose, discuss, and respond to [ldquo]any responsible opposing view[rdquo]). Courts will set aside a NEPA document where the agency fails to respond to scientific analysis that calls into question the agency[rsquo]s assumptions or conclusions. See Ctr. for Biological Diversity v. U.S. Forest Serv., 349 F.3d 1157, 1168 (9th Cir. 2003) (finding Forest Service[rsquo]s failure to disclose and respond to evidence and opinions challenging EIS[rsquo]s scientific assumptions violated NEPA); Seattle Audubon Soc[rsquo]y v. Moseley, 798 F. Supp. 1473, 1482 (W.D. Wash. 1992) ([ldquo]The agency[rsquo]s explanation is insufficient under NEPA [ndash] not because experts disagree, but because the FEIS lacks reasoned discussion of major scientific objections.[rdquo]), aff[rsquo]d sub nom. Seattle Audubon Soc[rsquo]y v. Espy, 998 F.2d 699, 704 (9th Cir. 1993) ([ldquo][i]t would not further NEPA[rsquo]s aims for environmental protection to allow the Forest Service to ignore reputable scientific criticisms that have surfaced[rdquo]).

Here, neither the EA nor the Carbon Report grapples with the most recent science on forests and carbon sequestration, including many of those studies attached here. The Carbon Report ignores the last 8 years of climate science that: underscores the desperate need for action on climate change; shows that forest logging like that proposed for the Redd Bull project will worsen climate pollution and the climate emergency; and demonstrates, contradictory to the Forest Service[rsquo]s assumptions, that the climate impacts of the project can be quantified.

The EA[rsquo]s (and Carbon Report[rsquo]s) studied ignorance on climate change, and the Forest Service[rsquo]s failure to provide a quantitative assessment to enable a comparison with the no action alternative also violates NEPA. The EA carefully quantifies economic benefits of logging [ndash] a complex task [ndash] while declining to calculate the climate costs. The EA tallies the [ldquo]Total Employment and Labor Income over the Life of the Project,[rdquo] and the project[rsquo]s present net value. EA at 126 (Table 3.9-2). Yet the Forest Service fails not only to estimate the volume of climate emissions, it fails to weigh the economic benefits of the project against the costs of climate change, which can be estimated using the Interagency Working Group[rsquo]s global estimate of the social cost of carbon, as recommended by President Biden[rsquo]s Executive Orders. See High Country Conservation Advocates, 52 F. Supp. 3d at 1190-93. Once an agency chooses to [ldquo]trumpet[rdquo] a set of benefits, it also has a duty to disclose the related costs. Sierra Club v. Sigler, 695 F.2d 957, 979 (5th Cir. 1983). [ldquo]There can be no hard look at costs and benefits unless all costs are disclosed.[rdquo] Id. The U.S. District Court for the District of Montana reinforced this requirement last month when it set aside a federal agency NEPA analysis for failing to quantify the social costs of agency action[rsquo]s climate pollution. WildEarth Guardians v. Bernhardt, 2021 U.S. Dist. LEXIS 20792 at *25-*32, 2021 WL 363955, CV

17-80-BLG-SPW (D. Mont. Feb. 3, 2021) (endorsing magistrate judge[rsquo]s determination that the Office of Surface Mining [ldquo]failed to take a [lsquo]hard look[rsquo] at the costs of greenhouse gas emissions and failed to reasonably justify its reasoning for not quantifying the costs of the mining plan when the Social Cost of Carbon Protocol ... was available to do just that[rdquo]).

As noted above, President Biden has already announced that his administration would reinstate the Interagency Working Groups[rsquo] Social Cost of Carbon using a metric that includes global damage from climate-forcing

pollution. Further, the EA repeatedly uses the impacts of climate change as one basis for undertaking more than 80 million board feet of logging, only to dismiss the project[rsquo]s contributions to climate change as [ldquo]infinitesimal[rdquo] and of [ldquo]no discernible impact,[rdquo] without making an attempt to quantify the impacts. It is arbitrary and capricious to base the project[rsquo]s purpose and need in part on responding to the climate crisis, and then to ignore (and effectively deny) the impacts the project will have on climate change.

Finally, we note that the Carbon Report states that [ldquo][t]here are no applicable legal or regulatory requirements or established thresholds concerning management of forest carbon or greenhouse gas emissions.[rdquo] See Carbon Report (Attachment S at 1). This is false. The CEQ 2016 climate guidance, which CEQ last month urged agencies to rely on, contains explicit guidance on carbon storage, and notes:

Quantification tools [to evaluate climate emissions or storage] are widely available, and are already in broad use in the Federal and private sectors, by state and local governments, and globally. Such quantification tools and methodologies have been developed to assist institutions, organizations, agencies, and companies with different levels of technical sophistication, data availability, and GHG source profiles. When data inputs are reasonably available to support calculations, agencies should conduct GHG analysis and disclose quantitative estimates of GHG emissions in their NEPA reviews. These tools can provide estimates of GHG emissions, including emissions from fossil fuel combustion and estimates of GHG emissions and carbon sequestration for many of the sources and sinks potentially affected by proposed resource management actions.

CEQ, 2016 NEPA Climate Guidance (Attachment G) at 12. As noted above, the guidance further specifies that estimating GHG emissions is appropriate and necessary for actions such as federal logging projects. Id. at 25.

Despite the applicability of the 2016 CEQ NEPA Guidance, and the Carbon Report[rsquo]s statement declaiming that any guidance exists concerning GHG emissions from management of forest carbon, the Carbon Report appears to rely in part on guidance entitled [ldquo]Climate Change Considerations in Project Level NEPA Analysis[rdquo] to avoid analyzing and disclosing the Redd Bull project[rsquo]s climate change impacts. See Carbon Report (Attachment S) at 2; citing Forest Service, Climate Change Considerations in Project Level NEPA Analysis (January 13, 2009), attached as Attachment W, and available at https://www.fs.fed.us/emc/nepa/climate_change/includes/cc_nepa_guidance.pdf (last viewed Mar. 18, 2021). The Climate Change Consideration report is a flawed document that was the product of the final week of the George W. Bush administration in January 2009, and it has long been overtaken by both federal case law and CEQ[rsquo]s 2016 guidance, now restored, requiring robust project level NEPA analysis. It has also been overtaken by improved modeling and scientific data. The Forest Service cannot continue to rely on this guidance document unless and until it can explain how the 2009 guidance comports with current CEQ guidance and caselaw.

The 2009 guidance is flawed and outdated in part because the Federal interagency social cost of carbon estimates were developed after the 2009 guidance, and contradict numerous statements that project-level impacts are too small to estimate, as has the case law setting aside agency (including Forest Service) decisions that failed to use that metric. Further, we understand that the Forest Service FVS tool now includes a

[ldquo]carbon extension[rdquo] that permits users to [ldquo]model the effects that management choices may have on carbon stocks.[rdquo] See https://www.fs.usda.gov/ccrc/tool/forest-vegetation-simulator-fvs (last viewed Mar. 18, 2021).

The Forest Service[rsquo]s dated, technically-superseded 2009 guidance is inconsistent with Presidential direction on its face, and cannot support the Forest Service[rsquo]s failure to utilize the USDA-endorsed social cost of carbon estimates, to provide the public and decision makers information on the project[rsquo]s global scale, long-lasting, irreversible climate-related impacts. The Forest Service[rsquo]s position is flatly inconsistent with the February 2021 policy to use [ldquo]all available tools[rdquo] before the CEQ guidance is updated. Further, failing to undertake a robust analysis based on outdated guidance borders on insubordination in light of the President[rsquo]s policy requiring a whole-government approach to tackling the climate crisis, including specific policy that [ldquo][t]he Federal Government must drive assessment, disclosure, and mitigation of climate pollution and climate-related risks in every sector of our economy.[rdquo] Executive Order 14,008 (emphasis added). The Forest Service has a critically important role to play in both disclosing climate risks and in taking pro-active measures to limit and mitigate those risks. It has failed to do either here.

1. The Forest Service fails to disclose and quantify the carbon pollution of implementing the Redd Bull Project.

Logging and burning treatments, and the scores of miles road construction, reconstruction, and maintenance necessary to access the cutting units, for the 15-year life of the project will require the use of heavy equipment, almost certainly exclusively powered by fossil-fueled engines. Draft DN at 19 ([ldquo]The project, in its entirety, will likely be implemented over a period of fifteen years[rdquo]); EA at 22-23 (Table 2-3) (project will involve up to 209 miles of road maintenance, and up to 28 miles of new road construction). So will transporting the logs to mills. This activity will result in greenhouse gas pollution that will worsen climate change for centuries, and that pollution will be over and above the pollution that would occur under the no action alternative. Neither the Carbon Report nor any other document in the record acknowledges or attempts to disclose such impacts.

This contrasts to the approach taken elsewhere by the Forest Service and by other agencies, such as the Office of Surface Mining, which have disclosed in NEPA documents the estimated pollution from internal combustion engines necessary to mine, process, and ship coal to market. See, e.g., Office of Surface Mining & Bureau of Land Management, Environmental Assessment, Colowyo Coal Mine Collom Permit Expansion Area Project (Jan. 2016) at 4-15 [ndash] 4-18 (including table assessing [ldquo]direct GHG emissions[rdquo] from [ldquo]drills,[rdquo] [ldquo]dozers,[rdquo] [ldquo]graders,[rdquo] [ldquo]haul trucks,[rdquo] etc., for the proposed action), excerpts attached as Attachment X; U.S. Forest Service, Supplemental Final Environmental Impact Statement, Federal Coal Lease Modifications COC-1362 & COC-67232 (Aug. 2017) at 102-113 (publishing tables estimating emissions of air pollutants, including greenhouse gases CO2 and Ch4 (methane) for activities including road and well pad construction, heavy equipment use, and commuter vehicle trips for the no action and proposed action alternatives), excerpts attached as Attachment Y.

We do not endorse as sufficient either the OSM or Federal Coal Lease Modifications analyses, but they demonstrate that agencies (including the Forest Service itself) can and do attempt to disclose direct climate emissions from construction and transport activities. The Forest Service provides no reasonable basis for failing to do the same for the Redd Bull project, and thus violates NEPA.

Suggested Resolution: The Lolo National Forest should prepare an EIS that quantifies and discloses the carbon emissions and carbon sequestration impacts of each of the alternatives for the Redd Bull project, including impacts due to: (1) removal of carbon stores through a life-cycle carbon analysis, and (2) from the construction, logging and log transport the project will involve. The Lolo National Forest should employ the social cost of carbon to disclose climate impacts, or explain in a non-arbitrary manner why it need not do so.

IV. Failure to comply with the Endangered Species Act and NEPA

The Forest Service has an independent duty to ensure this proposed action complies with the Endangered Species Act ([ldquo]ESA[rdquo]). The project area on the Lolo National Forest provides secure habitat and areas of connectivity for grizzly bears and Canada lynx, in addition to threatened bull trout and its designated critical habitat. We discuss the inadequacies of the hydrology and fisheries analysis above, and the resulting failure of the Forest Service to ensure bull trout recovery due to its over-reliance on BMPs and resource protection measures, in addition the agency[rsquo]s dismissal of increased sedimentation to bull trout critical habitat. Section 7 of the ESA imposes a substantive obligation on federal agencies to [ldquo]insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of[rdquo] habitat that has been designated as critical for the species. 16 U.S.C. [sect] 1536(a)(2). The Forest Service fails to demonstrate how the project will ensure the survival and recovery of bull trout and grizzly bears in the project area.

1.
1. Failure to take a hard look at impacts to grizzly bears, failure to consult.

The Redd Bull project area is nestled between the Northern Continental Divide, Cabinet-Yaak, and Bitterroot recovery areas, with a number of unroaded areas serving as islands of refugia that help connect isolated grizzly bears dispersing away from the recovery zones. Rather than improve and expand grizzly bear habitat security within the Redd Bull project area, the selected alternative will further reduce it and limit the ability of grizzly bear to fully recover since the agency selected road management actions from Alternative 4 that will [ldquo]result in a net decrease of secure habitat by about 2.6 percent (2611 acres total). Most of these changes would be primarily due to the changes in miles of motorized trails within the northeastern portion of the project area (see Table 3.7-2).[rdquo] EA at 92.

Despite the importance of the project area to grizzly bear connectivity, the Forest Service fails to take a hard look at the impacts from the proposed project to grizzly bears and grizzly bear recovery, as required by NEPA. Instead, the EA asserts that [ldquo][n]one of the project activities would preclude grizzly bear use or movement within the area.[rdquo] EA at 91. The Forest Service admits that displacement could occur during project implementation, but downplays this impact based on the assertion that there are other undisturbed areas where a bear could move. Id. NEPA requires agencies to fully analyze a project[rsquo]s impacts, not dismiss impacts because other areas will be undisturbed. For example, the Forest Service explains that [ldquo][t]he progression

of population expansion of females makes it likely that the earliest a female bear could establish a home range in the Redd Bull area would be in about 10-15 years and reproducing a few years later.[rdquo] Id. at 89. Yet, it is precisely during this time period that the agency proposes to implement the selected alternative: [ldquo]The project, in its entirety, will likely be implemented over a period of fifteen years with individual site treatments being of shorter duration (e.g. a few days or single season).[rdquo] Draft DN at

19. Together, the agency seems to assert that the selected alternative will have no effect on the ability of females to find secure habitat during the precise time period females are trying to establish a home range in the project area, even though [ldquo][c]umulatively, approximately 14-16 percent of the project area would have reduced hiding cover over the next 15 years.[rdquo] EA at 94.

Further, the methods which the Forest Service uses to measure habitat security are a serious concern since they rely on guidance from the U.S. Fish and Wildlife Service for the Northern Continental Divide conservation strategy that defines secure habitat as [ldquo]an area that is greater than 500 meters (0.31 miles) from a drivable motorized route (secure habitat does not include any gated roads but may contain roads that are impassible due to vegetation or constructed barriers).[rdquo] EA at 89. The strategy fails to account for the fact that all roads contribute to total motorized route densities and that simply because some may be impassable, those roads may be subject to unauthorized use should wildfires remove vegetation or if constructed barriers prove ineffective. The Forest Service fails to account for such eventualities. Thus, project impacts to grizzly bear occupancy, movement, and recovery may be more severe than the Forest Service admits. Impacts to grizzly bear connectivity and recovery are especially important because the project will likely damage connectivity to two important recovery zones[mdash]the Cabinet-Yaak Recovery Zone and the Bitterroot Recovery Zone. Grizzly recovery in the Cabinet-Yaak Recovery Zone has been slow, with an approximate population of just 45-44 bears currently using the area, representing about half of the recovery goal. 2020 EA at 82. The Bitterroot Recovery Zone is faring even worse, with no bears officially occupying the area. However, the EA does not adequately analyze how the project, by disturbing grizzly bear movement for up to 15 years, may negatively impact recovery in the Cabinet-Yaak and Bitterroot Recovery Zones.

For these reasons, the Forest Service still has not taken a hard look at the impacts to grizzly bears and grizzly bear recovery, as NEPA mandates. Because the Redd Bull project area sits between and near three grizzly bear recovery zones and adjacent to an identified demographic connectivity area, it is substantially likely that this area is necessary to connect grizzly bears in the Cabinet-Yaak, Bitterroot, and Northern Continental Divide recovery zones. This project will degrade grizzly bear use and movement, and the Forest Service fails to adequately analyze how this project is likely to impede grizzly bear recovery. As such the determination that the selected alternative will not adversely affect grizzly bears or grizzly bear recovery is arbitrary and capricious, and the Forest Service must still consult with the USFWS under Section 7 of the ESA.

1.
1. Failure to take a hard look at impact to Canada lynx.

Our comments explained that vegetation treatments and related actions will hinder connectivity and recovery of Canada lynx, especially since they prefer mature, moist multi-storied coniferous forest stands with high horizontal

cover. We urged the agency to fully analyze how logging and road building will affect Canada lynx. In response, the Forest Service asserts [ldquo][l]inkage and connectivity across the broader area were considered in the EA (section 3.7), Wildlife report (project file document L08-001), and biological assessment for grizzly bear and Canada lynx (project file document L08-018).[rdquo] Draft DN at

E-70. However, the referenced report and project files were not publicly available on the project webpage, and the agency failed to adequately summarize the methods and results from these reports, instead offering conclusory statements such as [ldquo][t]he project would not individually or cumulatively adversely affect lynx productivity, survival, movement, dispersal, or habitat.[rdquo] EA at 99.

1.
1. Failure to take a hard look at impacts to fisher.

Our comments explained fishers are negatively impacted by logging and other forest management practices that remove canopy cover or otherwise fragment mature forests. The selected alternative has the potential to negatively impact fishers and fisher habitat. Approximately 16 to 17 percent of fisher habitat within the project area is likely to be damaged by logging, which will reduce canopy cover that fishers require. And while the Forest Service notes that effects from harvest are not permanent, the agency also recognizes that in harvested areas, canopy cover will be reduced for several decades. EA at 105. Yet, the agency asserts the effects would be spread out over the life of the project and that [ldquo][d]espite the temporary reduction of habitat within the Redd Bull project area, habitat on the Lolo National Forest would remain more than sufficient to maintain fisher viability across the entire Northern Region as estimated by Samson (2006b).[rdquo] EA at 105-106. Asserting that fisher will remain viable across the rest of the entire Northern Region does not mean the Forest Service can continue to reduce fisher habitat in the project area. Further, the agency[rsquo]s analysis and response to our comments failed to address the body of scientific evidence we provided showing the importance of not only maintaining, but also improving fisher habitat in order to ensure the viability of the species within the project area. Failure to respond to comments, to address contrary science, and to use the best available science, all violate NEPA.

Suggested Resolution: The Lolo National Forest should prepare an EIS that includes actions to recover grizzly bears and Canada lynx, which includes increasing habitat security within areas of connectivity. Absent this action, the Forest Service must consult with the the USFWS per Section 7 of the ESA as the selected alternative will likely affect and adversely affect threatened grizzly bears.

V. The Project Does Not Comply with the Forest Plan[rsquo]s Mandate to Manage Federally Listed Species for Recovery.

As we explained in our comments, NFMA requires the Forest Service to ensure that site-specific management projects are consistent with the applicable forest plan. 16 U.S.C. [sect] 1604(i). The Lolo Forest Plan requires the Forest Service to manage all threatened and endangered species for recovery to

non-threatened status. Lolo Forest Plan at II-13 to II-14 (Standard 24). However, as explained, the project threatens to impede grizzly bear recovery by negatively impacting connectivity habitat necessary to allow grizzly

bear populations to connect and expand. Similarly, the project includes road construction, timber harvest, and prescribed burns in a critical connectivity corridor for Canada lynx. Thus, this project is likely to impede lynx recovery as well. Further, the selected alternative will result in significant sedimentation within bull trout critical habitat during project implementation and beyond once BMPs to mitigate log-haul related sedimentation are longer effective (between 3-5 years). Draft DN at E-12. In these ways, the Redd Bull project will prevent the Forest Service from managing for recovery of these species and thus fails to comply with NFMA. Similarly, the Lolo Forest Plan requires the Forest Service to manage for sensitive species such as the fisher to maintain population viability. Lolo National Forest Plan at II-14 (Standard 27). The Redd Bull project, by degrading habitat important for fisher viability, does not comply with this Forest Plan standard.

In response the agency asserts there are no plan violations because [ldquo][t]he Redd Bull project would not preclude grizzly bear use or movement within the area (EA, pages 91-94).[rdquo] Draft DN at E-71. The response conflates connectivity with narrowly (and outdated) linkage areas defined by Servheen, Waller, and Sandstrom (2003). Id. at E-72. Yet, these linkages do not include the broader project area that provides grizzly bear habitat security, or could provide such security had the Forest Service decommissioned more system roads. More recent scientific information, available from Dr. Dave Mattson, shows the potential distribution of grizzly bears if they occupy all suitable habitat (see Figure 1 below). See Attachment Z. The Forest Service cannot constrain its response to specific linkages, while at the same time acknowledging areas of habitat security that provide grizzly bear connectivity, to demonstrate forest plan compliance. Moreso, the agency[rsquo]s response fails to acknowledge the fact that [ldquo][g]rizzly bears die disproportionately more often in landscapes devoted to the industrial production of timber compared to landscapes without roads.[rdquo] Mattson (2021) at 53. In regards to fisher, we explain above how the analysis fails to address our comments or adequately demonstrate that the species will maintain viability within the project area.

Suggested Resolution: Produce an EIS that delineates areas of connectivity for grizzly bears and proposes actions that will increase habitat security necessary to ensure male and female bears can utilize them as areas of connectivity. Produce an EIS that ensures the recovery of Canada lynx and the viability of fisher by protecting suitable habitat from logging and related activities.

VI. The Forest Service Fails to Comply with NEPA or the Roadless Area Conservation Rule.

The U.S. Forest Service adopted the Roadless Area Conservation Rule (Roadless Rule) in 2001 [ldquo]to protect and conserve inventoried roadless areas on National Forest System lands.[rdquo] Forest Service, Special Areas, Roadless Area Conservation, Final Rule, 66 Fed. Reg. 3244 (Jan. 12, 2001). The rule observed:

Inventoried roadless areas provide clean drinking water and function as biological strongholds for populations of threatened and endangered species. They provide large, relatively undisturbed landscapes that are important to biological diversity and the long-term survival of many at risk species. Inventoried roadless areas provide

opportunities for dispersed outdoor recreation, opportunities that diminish as open space and natural settings are developed elsewhere. They also serve as bulwarks against the spread of non-native invasive plant species and provide reference areas for study and research.

66 Fed. Reg. at 3245. The Rule [ldquo]prohibits road construction, reconstruction, and timber harvest in inventoried roadless areas because they have the greatest likelihood of altering and fragmenting landscapes, resulting in immediate, long-term loss of roadless area values and characteristics.[rdquo] 66 Fed. Reg. at 3244.

Despite the institutional command that the Forest Service safeguard and conserve these areas, the Redd Bull Project[rsquo]s proposed decision would attempt to use the Roadless Rule[rsquo]s narrow exceptions to authorize 1,425 acres (more than two square miles) of timber harvest within the Marble Point inventoried roadless area (IRA). EA at 147, 149; see also Draft DN at 17, 18. IRA logging will include 682 acres of [ldquo]regeneration harvest,[rdquo] which is effectively a clearcut or near clearcut prescription. The Draft Decision Notice also proposes to approve 13 miles of road [ldquo]maintenance[rdquo] in the Marble Point IRA and 0.2 miles of road maintenance in the Ward Eagle IRA that may rise to the level of road reconstruction, in violation of the Roadless Rule. EA at 137 (Table 3.10-2); see also Draft DN at 29-30 (arguing that road [ldquo]maintenance[rdquo] in IRAs does not rise to the level of [ldquo]reconstruction[rdquo]). The Forest Service[rsquo]s proposal and analysis of roadless area logging thus violates the Roadless Rule and NEPA.

Objectors raised these concerns in comments on the EA. See M. Garrity, Alliance for the Wild Rockies, letter re: Redd Bull EA (July 22, 2020) at 9, 35-38, 57-58; A. Rissien, WildEarth Guardians, letter re: Redd Bull Project Environmental Assessment (July 29, 2020) at 34-45.

1. The Roadless Area Conservation Rule

The Roadless Area Conservation Rule (Roadless Rule) generally prohibits road construction and timber removal within IRAs. 36 C.F.R. [sect] 294.12(a) (generally prohibiting road construction); 36 C.F.R. [sect] 294.13(a) (generally prohibiting timber removal). The Roadless Rule contains narrowly tailored exceptions to the logging prohibition:

Notwithstanding the prohibition in paragraph (a) of this section, timber may be cut, sold, or removed in inventoried roadless areas if the Responsible Official determines that one of the following circumstances exists. The cutting, sale, or removal of timber in these areas is expected to be infrequent.

1. The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes and will maintain or improve one or more of the roadless area characteristics as defined in [sect] 294.11.

1.
1. To improve threatened, endangered, proposed, or sensitive species habitat; or
2.
To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of

uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period.

(4) Roadless characteristics have been substantially altered in a portion of an inventoried roadless area due to the construction of a classified road and subsequent timber harvest. Both the road construction and subsequent timber harvest must have occurred after the area was designated an inventoried roadless area and prior to January 12, 2001. Timber may be cut, sold, or removed only in the substantially altered portion of the inventoried roadless area.

36 C.F.R. [sect] 294.13(b)(1), (b)(4) (emphasis added).

The Roadless Rule defines [ldquo]roadless area characteristics[rdquo] as including:

1. High quality or undisturbed soil, water, and air;

1. Sources of public drinking water;

1. Diversity of plant and animal communities;

1. Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land;

1. Primitive, semi-primitive nonmotorized and semi-primitive motorized classes of dispersed recreation;

1. Reference landscapes;

1. Natural appearing landscapes with high scenic quality;

1. Traditional cultural properties and sacred sites; and

1. Other locally identified unique characteristics.

36 C.F.R. [sect] 294.11. The Roadless Rule anticipates that the Forest Service will engage in a highly

site-specific analysis before it can consider logging in IRAs, given the regulation[rsquo]s emphasis on [ldquo]locally identified unique characteristics.[rdquo] Id. (emphasis added).

1. The Forest Service[rsquo]s proposed action violates the Roadless Rule.

The EA alleges that the proposed decision[rsquo]s 1,425 acres of logging within the Marble Point IRA comply with the Roadless Rule because two exceptions apply: first, [ldquo][a]pproximately 67 percent of the authorized timber harvest acres [in IRAs] will also occur[rdquo] in [ldquo]substantially altered[rdquo] portions of the IRA; and second, the IRA treatments [ldquo]are an essential part of achieving the project[rsquo]s objectives to restore resilient vegetative conditions and reduce forest fuels,[rdquo] and thus that all of the proposed logging in IRAs falls under the exception for removing small diameter trees. Draft DN at 17. The Forest Service fails to demonstrate that its proposal meets either exception.

1. The Forest Service fails to delineate or justify any boundary for the allegedly [ldquo]substantially altered[rdquo] roadless area

The EA states that about 959 acres of logging in the selected Alternative 2 [ldquo]would occur adjacent to existing classified roads within the IRA and in between and/or adjacent to existing harvest units, many of which still appear as geometrically shaped openings on the hillside even though they have regenerated with young trees,[rdquo] EA at 147, and alleges that this logging would comply with the exception to the prohibition on logging in IRAs contained in 36 C.F.R. [sect] 294.13(b)(4). EA at 14 ([ldquo]the majority of the timber harvest within the IRA would occur where roadless characteristics are currently substantially altered from previous timber harvest and road construction that occurred in the late 1980s to early 1990s[rdquo]); id. at 133 (alleging that timber harvest and road construction in the 1980s and early 1990s [ldquo]substantially altered roadless characteristics[rdquo]); Draft DN at 30 (invoking 36 C.F.R. [sect] 294.13(b)(4)). The Forest Service, however, has failed to demonstrate that logging on these acres can occur pursuant to that exception.

The EA fails to specifically identify and delineate that part of the IRA that it alleges was [ldquo]substantially altered[rdquo] by logging before the early 1990s, or otherwise describe its extent or location. Yet, the preamble to the Roadless Rule explains that this key determination must be made at the site-specific, project level.

Decisions on whether or not an inventoried roadless area[rsquo]s characteristics have been substantially altered would occur during project planning and decisionmaking.

[hellip].

The [Roadless Rule] DEIS estimated that approximately 2.8 million of the 58.5 million acres of inventoried roadless areas had been roaded since the areas were designated as inventoried roadless areas. Some portion of these roaded areas had also been impacted by subsequent management activities facilitated by the road access. It is unknown exactly what portion of these 2.8 million acres has sustained sufficient road construction and timber harvest to substantially alter their roadless characteristics. The determination of whether roadless characteristics have been substantially altered is to be made following a site-specific evaluation. Before any project is authorized that allows the cutting, sale, or removal of timber in an inventoried roadless area, it will [be] subject to site-specific analysis following existing laws and regulations.

66 Fed. Reg. 3244, 3251, 3261 (emphasis added). The need for site-specific review is particularly important because Final EIS for the Roadless Area Conservation rule declined to identify the degree of impairment of the 2.8 million roaded acres. [ldquo]Because the Agency believes it would be difficult to identify the [lsquo]roaded portions[rsquo] in a manner that would be ecologically meaningful and administratively consistent, the term and concept have been deleted in this FEIS.[rdquo] Forest Service, Roadless Area Conservation Final EIS (Nov. 2000) at 2-23, excerpts attached as Attachment AA, available at https://www.fs.usda.gov/nfs/11558/www/nepa/109834_FSPLT3_5198878.pdf (last viewed Mar. 18, 2021).

The Roadless Rule preamble[rsquo]s discussion also implies that some level of logging and road construction may not render an area [ldquo]substantially developed,[rdquo] given that only those areas that have received [ldquo]sufficient road construction and timber harvest to substantially alter their roadless characteristics[rdquo] are considered [ldquo]substantially developed.[rdquo] 66 Fed. Reg. at 3261 (emphasis added).

The preamble elsewhere reinforces both points, stating that the [ldquo]exception recognizes that road construction and timber harvesting in inventoried roadless areas may have altered the roadless characteristics to the extent that the purpose of protecting those characteristics cannot be achieved.[rdquo] Id. at 3258 (emphasis added). This passage, with use of the word [ldquo]may,[rdquo] reinforces that not all road construction and timber harvest will [ldquo]substantially alter[rdquo] roadless areas. It also makes plain that the Forest Service must evaluate past logging proposals on a site-specific basis to determine their impact on individual roadless characteristics.

Here, while the EA alleges that [ldquo]substantially altered portions[rdquo] of the Marble Point IRA exist, and puts

a number on the acreage so altered, it fails to provide the most critical pieces of information: the precise location of the [ldquo]substantially altered portion[rdquo] of the Marble Point Roadless Area and how the Lolo National Forest drew any boundaries delineating what constituted that [ldquo]substantially altered portion[rdquo] (to the extent that it did so). The Draft DN alleges:

The Forest Plan monitoring report completed prior to the transition to the new requirements identified that about 2500 acres (20 percent) of the Marble Point IRA had been developed by road construction, far less than that projected in the Forest Plan (USDA FS 2002, page 79). Areas around and in between classified roads were included.

Draft DN at E-52. The Forest Service includes numerous maps in the EA and in the project file[rsquo]s [ldquo]Roadless Report,[rdquo] but none delineates the location of these 2,500 acres, nor tries to establish a boundary line between what has been [ldquo]substantially altered[rdquo] and what has merely been [ldquo]altered,[rdquo] and on what basis any line has been drawn. See, e.g., P. Partyka, Roadless Report (updated Nov. 2020) at Appx. A (maps).

We also note that 2,500 acres is an oddly round number, and that it is more than three times larger than the 765 acres that the Forest Service states was modified by clearcutting in the IRA in the late 1980s and early 1990s. Draft DN, Appx. E, at E-51 (three prior timber sales and road projects [ldquo]constructed approximately 15 miles of classified road and harvested about 765 acres of timber within the [Marble Point] IRA[rdquo]). The Forest Service[rsquo]s failure to delineate and specifically identify the [ldquo]substantially altered[rdquo] area of the Marble Point IRA, and the reasons justifying any such delineation, violate both NEPA[rsquo]s disclosure mandate and the Roadless Area Conservation Rule. It is also arbitrary for the Forest Service to conclude that 765 acres of disturbance [ldquo]substantially alters[rdquo] an area so much larger than the actual footprint of logging.

The EA and updated Roadless Report provide maps depicting previously logged units in some portions of the Marble Point IRA, together with units proposed for cutting under the proposed action. EA, Appx. A, at Map 10; see also Roadless Report (updated Nov. 2020), Appx. A. But none of these maps nor any other part of the EA or updated Roadless Report identifies the precise location, boundaries, or parameters of the purported 2,500-acre [ldquo]substantially altered[rdquo] portion of the Marble Point IRA, or how this 2,500-acre figure was derived.

Further, the EA makes clear that the proposed decision would log on lands not previously altered by roads or logging, but on undisturbed areas near those altered areas. The EA states that [ldquo][h]arvest within these developed areas would occur in between and/or adjacent to existing [AKA, three-decade-old] harvest units, many of which still appear as geometrically shaped openings on the hillside even though they have regenerated with young trees (see Map 10 in Appendix A).[rdquo] EA at 147 (emphasis added); see also id. at 133 ([ldquo]Areas around and in between classified roads were included[rdquo] in lands considered [ldquo]developed,[rdquo] but not explaining how far [ldquo]around[rdquo] was, or how [ldquo]around[rdquo] was defined) (emphasis added). Thus, the proposed action would not target lands developed by prior action, but those lands left alone by prior Forest Service action. This raises the question of how and why the Forest Service determined that these undisturbed lands outside and some distance away from old clearcuts were properly identified (if they have been identified at all) as [ldquo]substantially altered.[rdquo] The maps provided show that some proposed logging will take place in areas at least one-third of a mile [ndash] more than 600 yards [ndash] from prior clearcuts or road

construction. See EA, Appx. A, Map 10 (showing parts of cutting units B02, B03, B04, B06, R03, R05, R06, and R08 more than 300 yards from previous clearcuts or road construction within the IRA).

See also Roadless Report (updated Nov. 2020) at Appx. A, Map, Marble Point IRA: Past and Proposed Timber Harvest (no date) (same). This raises the question of how and why the Forest Service determined that these undisturbed lands outside, but relatively far from, recovering clearcuts and seldom-used roads have been labelled as [ldquo]substantially altered.[rdquo] Roadless characteristics (including scenic integrity, naturalness, and undisturbed soil, water, and air) within these un-logged and un-roaded areas are likely high; roads and clearcuts are unlikely to be seen or experienced from inside dense forests, nor are nearly three-decade-old alterations likely to otherwise influence unaltered stands.

Nothing in the Roadless Rule or its preamble supports a conclusion that the Forest Service meant this exception to permit logging of undisturbed forest merely because it was located within hundreds yards of an area altered and damaged by Forest Service actions prior to the mid 1990s. In fact, the preamble to the Roadless Rule states, to the contrary, that: [ldquo]Timber harvest should not expand the area already substantially altered by past management.[rdquo] 66 Fed. Reg. at 3258 (emphasis added). As such, undisturbed lands targeted for logging in the Marble Point IRA are precisely the type of lands the Roadless Rule meant to protect.

Without delineating the boundary of the [ldquo]substantially altered[rdquo] areas, or providing a site-specific rationale for why each proposed cutting unit in the Marble Point IRA meets that definition, the Forest Service alleges that some undefined parts of the IRA are [ldquo]substantially altered[rdquo] because they do not necessarily provide certain values that the Roadless Rule recognizes that IRAs can protect. The agency states:

Consistent with this direction, as part of the Redd Bull project the Forest Service conducted a site-specific evaluation of the IRA and determined that past timber harvest and construction of classified roads have substantially altered roadless characteristics within and outside the footprint of this development. The extent and location of classified roads, particularly near the core of the IRA have compromised the Agency[rsquo]s ability to manage a large portion of the area for roadless values. Several roadless characteristics (e.g. [lsquo]habitat for threatened, endangered, proposed, candidate, and sensitive species[rsquo]; [lsquo]primitive, semi-primitive non-motorized, and semi-primitive motorized classes of dispersed recreation[rsquo]; [lsquo]reference landscapes[rsquo]; and [lsquo]naturally appearing landscapes with high scenic quality[rsquo]) have been substantially altered beyond the edge of the road prisms such that the purpose of protecting them cannot be achieved.

For example, the recreation opportunity spectrum (ROS) remoteness criteria uses [frac12] mile as a minimum distance from classified roads to delineate semi-primitive motorized and non-motorized dispersed recreation opportunities, one of the roadless characteristics. The criteria for delineating primitive dispersed recreation opportunities is a minimum of 3 miles from roads (USDA FS 1979; and displayed in USDA FS 2000 [Forest Service Roadless Area Conservation Rule FEIS]). The ROS also uses area size [ldquo]as an indicator of the opportunity to experience self-sufficiency as related to the sense of vastness of a relatively undeveloped area[rdquo] to determine primitive and semiprimitive dispersed recreation opportunities. Twenty-five hundred acres is identified as the minimum size to delineate semi-primitive dispersed recreation opportunities and 5000 acres is identified as the minimum size to delineate primitive dispersed recreation opportunities (USDA FS 1979). Using these criteria, the existing development within the IRA precludes the roadless characteristic of [lsquo]primitive, semi-primitive non-motorized, and semi-primitive motorized classes of dispersed

recreation[rsquo] from more than half (northwestern and southwestern portions) of the Marble Point IRA.

EA at 132; Draft DN, Appx. E, at E-52 (same). The EA[rsquo]s own analysis demonstrates why the criteria the Forest Service uses here regarding roadless characteristics are unreasonable and inapplicable. For example, while the [ldquo]recreation opportunity spectrum (ROS) remoteness criteria uses [frac12] mile as a minimum distance from classified roads to delineate semi-primitive motorized and non-motorized dispersed recreation opportunities,[rdquo] EA at 132, we are unaware that the Forest Service (or any other agency) has never used a half-mile setback from roads to determine either IRA or wilderness boundaries. Doing so would likely shrink every IRA on the Lolo NF by thousands of acres. The Forest Service certainly did not do so in RARE II, which set the boundaries for the vast majority of IRAs protected by the Roadless Rule. In an even more extreme example, the EA states that the [ldquo]criteria for delineating primitive dispersed recreation opportunities is a minimum of 3 miles from roads.[rdquo] Id. By this measure, huge chunks of virtually every IRA in Montana, and many entire IRAs, would lack this roadless characteristic.

The Forest Service cannot use a definition more restrictive than wilderness designation (or the original IRA definition) to declare an area so [ldquo]substantially altered[rdquo] such that the IRA cannot protect roadless characteristics. It is not reasonable for the Forest Service to determine an area excepted from Roadless Rule protection based on the loss of characteristics that were unnecessary for the area[rsquo]s designation as an IRA in the first place. Such an unreasonable interpretation would likely be overturned by a federal court as arbitrary and capricious under controlling Supreme Court precedent. Kisor v. Wilkie, 139 S. Ct. 2400 (2019) (court would not defer to agency interpretation of regulations where interpretation was unreasonable).

Unless and until the Forest Service properly identifies and maps the boundaries of lands it deems [ldquo]substantially altered,[rdquo] and provides a non-arbitrary explanation as to why currently undisturbed, roadless forest should be included within that designation, any attempt to justify logging these portions of the Marble Point IRA under the [ldquo]substantially altered[rdquo] exception to the Roadless Rule would violate that law because the agency fails to provide the site-specific justification the Forest Service instructed should be required.

Objectors are deeply concerned about the Forest Service[rsquo]s approach here because it would appear to be prone to significant abuse. To our knowledge, this, and the Lolo National Forest[rsquo]s similar Sawmill-Perry project, will set a precedent regarding the Forest Service[rsquo]s interpretation of the Roadless Rule by alleging that areas untouched by prior logging and road construction are [ldquo]substantially altered.[rdquo] Under this approach, logging before 1995 anywhere in an IRA would appear to justify logging and road construction everywhere within that IRA, until nothing of the IRA was left unaltered. Such an unlimited and ill-defined approach undermines the letter and purpose of the Roadless Rule, and betrays a cavalier attitude about protection of roadless values, one that we do not believe the new Biden administration shares.

1. The Forest Service fails to ensure that treatments in the Marble Point IRA are limited to [ldquo]generally small diameter trees.[rdquo]

The EA states that: [ldquo][a]ll harvest activities within the [Marble Point] IRA would remove generally small diameter trees, which would result in an increase in average tree diameter within treated area following harvest,[rdquo] invoking the Roadless Rule exception that permits [ldquo][t]he cutting, sale, or removal of generally small diameter timber[rdquo] where such removal [ldquo]will maintain or improve one or more of the roadless area characteristics as defined in [sect] 294.11[rdquo] and where such removal will [ldquo]maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period.[rdquo] 36 C.F.R. [sect] 294.13(b)(1)(ii); EA at 147. However, the Forest Service has failed to meet its burden to demonstrate that logging with the Marble Point IRA meets this exception.

The EA fails to demonstrate that the proposed logging will be limited to generally small diameter timber. In response to comments, the Forest Service cites the preamble to the Roadless Rule to assert that [ldquo]determinations of what constitutes [lsquo]generally small diameter[rsquo] are best made through project-specific analyses [hellip] as guided by ecological considerations.[rdquo] Draft DN, Appx. E, at E-53. But the Forest Service never defines what constitutes [ldquo]small diameter[rdquo] for any cutting unit, stand, or forest type, undermining any argument that it has complied with the Roadless Rule.

Further, the EA states that the project will log 466 acres of in the Marble Point IRA via [ldquo]Individual tree selection for fuels reduction[rdquo] treatments. EA at 148. The EA defines such treatments generally as [ldquo]involv[ing] the cutting and removal of generally small diameter commercial-sized trees and the felling of non-commercial-sized trees to reduce canopy density.[rdquo] EA, Appx. B, at B-9 (emphasis added).

Commercial-sized trees, by definition, are not the smallest diameter trees; rather, they are large enough to be processed into a valuable product, meaning that they are larger than non-commercial-sized trees. The Roadless Rule does not allow the logging of [ldquo]generally small diameter commercial-sized trees[rdquo] but simply [ldquo]generally small diameter trees.[rdquo] Thus, a statement that IRA logging would cut and remove [ldquo]generally small diameter commercial-sized trees[rdquo] does not comply with the Roadless Rule[rsquo]s exception. Further, the EA admits that the prescription may involve the creation of patch-cuts (AKA small clearcuts) up to 10 acres in size, with no limit on the number of such cuts, and with no explanation as to the extent to which the conditions that require such patch cuts (root diseased stands) exist within the Marble Point IRA cutting units. EA at 148 ([ldquo]Scattered small openings of less than 10 acres may be created where root disease is present, and regeneration is necessary to establish disease-tolerant species for the long-term health and resilience of the stands.[rdquo])

In describing treatments in the IRA, however, the EA refrains from using the term [ldquo]commercial-sized[rdquo] without explanation. EA at 148. It is therefore unclear whether the Forest Service intends to apply the individual tree selection prescription differently in the Marble Point IRA, or whether the Forest Service has removed problematic language while intending to undertake the same type of treatments in the IRA as it will elsewhere. In either event, the Forest Service fails to ensure that logging within individual tree selection units with the Marble Point IRA will be limited to generally small diameter trees.

The EA provides only one passage addressing the specific size of trees likely to be logged in the IRA, and that passage similarly fails to ensure that the agency will comply with the Roadless Rule. The EA asserts:

Nearly all the trees less than 7 inches DBH would be removed through slashing or burning. Commercial harvest would remove most of the trees in the 7-10 inch diameter range with some removal of the 10-15 inch diameter fire-intolerant trees to meet species/spacing treatment objectives. Although the exact size of trees to be removed would vary by unit, the principle displayed in this example (i.e. removal of the generally smaller diameter trees) would be the same.

EA at 156. The EA thus proposes that nearly all trees up to 10 inches in diameter (or more than 2 and a half feet in circumference) would be logged, and [ldquo]some[rdquo] unspecified number or percentage of trees as large as 4 feet in circumference would be cut down. While [ldquo]the exact size of trees to be removed would vary by unit,[rdquo] the EA does not disclose what the unit-specific size limits would be in roadless areas or why the specific size would vary, although the Roadless Rule requires precisely such analysis. But allowing [ldquo]most[rdquo] trees between 7[rdquo] and 10[rdquo] dbh to be cut and [ldquo]some[rdquo] undefined fraction of trees between 10[rdquo] and 15[rdquo] dbh to be cut down does not focus on [ldquo]generally small diameter timber.[rdquo] This is particularly so because the EA discloses that, at least in some IRA units, [ldquo]the existing tree sizes in the main canopy range from 7-18 inches diameter breast height (DBH) with some scattered older trees that range from

18-26 inches DBH,[rdquo] EA at 156, meaning that a 15[rdquo] dbh tree is a relatively large tree for the area.

Further, logging trees in the 10[rdquo]-15[rdquo] dbh range risks logging numerous mature and old-growth trees, precisely the opposite of those allowed to be cut down under the Roadless Rule (not to mention seemingly in conflict with the project[rsquo]s stated purposes and with the Biden administration[rsquo]s emphasis on carbon storage and addressing the climate crisis). The Vegetation Report notes that [ldquo]it is reasonable to assume that a large proportion of the forest in the 10 to 14.9-inch dbh size class can be considered old forest and greater than 140 years old,[rdquo] Redd Bull Vegetation Report (undated) at 9, yet in the Marble Point IRA [ldquo]some[rdquo] undisclosed number of these trees could apparently be logged. This is consistent with the EA[rsquo]s general statement that large trees would be logged for the project in certain circumstances: [ldquo]Large trees, as appropriate for the forest type, would be retained to the extent that the trees promote stands that are resilient to insects and disease.[rdquo] EA at 9. At a minimum, the EA fails to demonstrate how and why the Forest Service believes that it complies with the Roadless Rules [ldquo]generally small diameter timber[rdquo] exception, violating that rule.

The EA[rsquo]s statement that logging in roadless forest will [ldquo]reduce canopy density,[rdquo] EA at 148, also contradicts the Roadless Rule[rsquo]s requirement to remove generally small diameter trees. As noted, the Rule[rsquo]s preamble directs that any logging in IRAs [ldquo]would focus on removing generally small diameter trees while leaving the overstory trees intact.[rdquo] 66 Fed. Reg. at 3258 (emphasis added). Although Objectors raise this issue in comments on the Draft EA, the Forest Service failed to explain how proposed logging within the Marble Point IRA that [ldquo]reduces canopy density[rdquo] would [ldquo]leav[e] overstory trees intact.[rdquo] This failure to respond is an independent NEPA violation.

The EA also contains inconsistent and contradictory information about regeneration treatments, 682 acres of which will occur in the Marble Point IRA. EA at 148. The EA describes regeneration treatments as those that will target large diameter trees, and leave a greater proportion of small diameter trees:

Regeneration timber harvest would improve the proportion of tree size classes within the project area toward the scientific recommendation by reducing the percentage of large tree size classes and increasing the percentage of small tree classes.

EA at 113 (emphasis added). The EA also admits that regeneration treatments would leave only [ldquo]some[rdquo] overstory trees in place: [ldquo]Although some overstory trees would be retained, the regeneration treatments would reduce canopy cover for several decades until the treated areas regrow with trees and shrubs.[rdquo] EA at 105. The EA asserts that one of the treatment units (B06) will create a 60-acre opening (an effective clearcut); two additional units (C51, C57) there will create a 70-acre opening; two additional units (D22, D23) will create an 85-acre opening; two other units (B02, R08) in the IRA will combine to create a single 110-acre opening (an effective clearcut the size of more than 80 football fields); and four other IRA logging units (B03, B04, B05, and C50), three of them regeneration cuts, will create a single opening of 200 acres (nearly a third of a square mile). See EA, Appx. B, at B-10. These numerous, massive openings are antithetical to the purpose and letter of the Roadless Rule exception.

It would thus appear that regeneration harvests have exactly the opposite effect to that mandated by the Roadless Rule provision that restoration logging involve [ldquo]generally small diameter trees.[rdquo] It would seem difficult for logging [ldquo]generally small diameter trees[rdquo] to increase the proportion of small tree classes and reduce the proportion of large tree classes. The specific description of regeneration treatments in the Marble Point IRA makes no mention of this effect. See EA at 148-49. The Vegetation Report further discloses that regeneration treatments will result in a massive loss of canopy cover: [ldquo]Treatments reduce canopy cover from area-weighted pre-treatment average of 63% to 39% for intermediate harvest and 14% for regeneration harvest.[rdquo] Vegetation Report at 33. Reducing existing canopy cover by more than 3/4s would appear to conflict with the Roadless Rule as well. It is possible that [ldquo]regeneration harvests[rdquo] in the IRA will somehow be different from those elsewhere in the project area, but if so, the EA fails to explain how.

The proposed action will also involve 277 acres of [ldquo]Intermediate (thinning-type treatments).[rdquo] EA at 148. Again, the Forest Service[rsquo]s general description of this treatment type describes it as involving significant overstory removal, in seeming violation of the Roadless Rule. [ldquo]The intermediate commercial harvest also includes seed tree removal cuts (see harvest description elsewhere) that remove merchantable overstory trees and are designed to release existing, established understory trees.[rdquo] Vegetation Report at 41. [ldquo][I]ntermediate harvest would generally retain 40-60 percent of the existing tree canopy cover,[rdquo] meaning that it would remove 40-60 of the existing canopy, and thus likely involve overstory and large tree removal. EA at 106. The description of intermediate treatments in the Marble Point IRA does not mention the removal of [ldquo]merchantable overstory trees[rdquo] or a loss of a majority of the canopy cover, so it is unclear whether the particular treatments proposed there will be somehow different from the general description. See EA at 148 (alleging that intermediate treatment would involve [ldquo]thin[ning] from below[rdquo]). Thus, it appears

that intermediate treatments within the Marble Point IRA could also not comply with the Roadless Rule exception.

Further, it is unclear whether logging in this portion of the IRA will protect private lands from fire. The EA confirms that a goal of this IRA logging is to reduce fuels in the Marble Point IRA [ldquo]adjacent to private land in the wildland urban interface,[rdquo] EA at 152, and thus to benefit those living outside the forest. The EA further states that [ldquo]individual tree selection treatment (Units HF3, HF5, HF6, and a portion of HF9) would occur adjacent to private land in the wildland urban interface near Interstate 90.[rdquo] EA at 147. But each of the southern portions of these four units appears to be about a mile or more from any structure on private land.

To evaluate whether these treatments are needed or will be effective, the Forest Service must disclose a key cumulative impact: whether adjacent private land-owners have undertaken the work necessary to treat that part of the forest most critical to protecting their structures, namely vegetation within a 100 meters of the structure. If private land-owners have undertaken that work, then it is unclear that there is any need for Forest Service logging to protect that property because logging National Forest lands will provide little or no added protection. And if the private land-owners have failed to undertake that work, proposed logging far from the structures is unlikely to provide them with any additional fire protection. Thus, NEPA requires the Forest Service to disclose whether and how adjacent private landowners have attempted to mitigate fire risks on their property. Objectors raised this issue in comments on the Draft EA, but the Forest Service failed to respond, violating NEPA.

The Roadless Rule permits the use of the exception to log generally small diameter trees only if logging will [ldquo]maintain or improve one or more of the roadless area characteristics as defined in [sect]294.11.[rdquo] 36

C.F.R. [sect] 294.13(b)(1). The EA does not allege that logging will maintain or improve most of the nine roadless characteristics; only that logging will degrade them temporarily at most. However, the EA does assert that:

Harvest [logging] activities would have little overall effect on the existing quality of soil, water, and air within the Marble Point IRA. In the long-term, treated areas would be more resilient to wildfire, drought, and insect outbreaks, which would more likely maintain the quality of soil, water, and air in the event of future disturbance.

EA at 149. This analysis ignores the fact that it is difficult to predict where [ldquo]future disturbance[rdquo] will occur, and thus that the Forest Service is permitting certain degradation of roadless characteristics now by permitting logging, while assuming that uncertain benefits may accrue later. For example, one study found that agency treatments to reduce fire risks rarely treated areas where fires occurred post-treatment. Barnett, K., S.A. Parks, C. Miller, H.T. Naughton, Beyond Fuel Treatment Effectiveness: Characterizing Interactions between Fire and Treatments in the US, Forests 2016, 7, 237, attached as Attachment DD. Although Objectors raised this issue in comment on the draft EA, the Forest Service failed to cite, respond to, or acknowledge this study, in violation of NEPA[rsquo]s mandates that agencies respond to comments and to contrary science.

The Forest Service may only permit logging in IRAs will under this exception if it will [ldquo]maintain or restore

the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period.[rdquo] 36 C.F.R. [sect] 294.13(b)(1). As discussed above, the Forest Service has failed to demonstrate that the proposed logging will [ldquo]maintain or restore[rdquo] the type of ecosystem composition that likely to exist under natural disturbance regimes of the current - and changing - climatic period. The EA also contends that logging the IRA[rsquo]s unaltered portion [ldquo]would result in a relatively open, park-like stand of ponderosa pine and western larch, which would be consistent with historical stand conditions prior to the advent of fire suppression activities,[rdquo] EA at 149, although, as discussed above, there is little evidence to support the Forest Service[rsquo]s assumption that logging is necessary to [ldquo]restore[rdquo] ecosystem functions.

For all of these reasons, the Forest Service has failed to demonstrate that logging with the Marble Point IRA complies with the Roadless Rule.

1. The Forest Service fails to demonstrate that it may undertake road reconstruction under the guise of [ldquo]maintenance.[rdquo]

Our previous comments raised our concerns with the Forest Service[rsquo]s characterization of road actions within IRAs as maintenance. Under the Roadless Rule, [ldquo][a] road may not be constructed or reconstructed in inventoried roadless areas of the National Forest System[rdquo] unless a narrow set of exceptions apply. 36

C.F.R. [sect] 294.12(a). The Rule defines both road [ldquo]maintenance,[rdquo] which is generally permitted, and [ldquo]road reconstruction[rdquo] which is not:

Road maintenance. The ongoing upkeep of a road necessary to retain or restore the road to the approved road management objective.

Road reconstruction. Activity that results in improvement or realignment of an existing classified road defined as follows:

1. Road improvement. Activity that results in an increase of an existing road[rsquo]s traffic service level, expansion of its capacity, or a change in its original design function.

1. Road realignment. Activity that results in a new location of an existing road or portions of an existing road, and treatment of the old roadway.

36 C.F.R. [sect] 294.11.

The EA fails to demonstrate that the use and [ldquo]maintenance[rdquo] of roads to facilitate logging within the Marble Point IRA meets the definition of [ldquo]road maintenance[rdquo] permitted by the Roadless Rule, rather than [ldquo]road reconstruction[rdquo] or construction barred by the Rule.

Site-specific information, including current on-the-ground route condition, is required to ensure that any use or alteration of travel routes within the Redd Bull project area complies with the Roadless Rule. This is underscored by a 2020 U.S. District Court decision from Montana holding that the Helena-Lewis and Clark National Forest violated the Roadless Rule by failing to ensure that existing routes used for timber harvest in IRAs would not be effectively [ldquo]reconstructed[rdquo] under the guise of [ldquo]maintenance.[rdquo] Helena Hunters & Anglers Ass[rsquo]n v. Marten, 470 F. Supp. 3d 1151, 1169-72 (D. Mont. 2020). That decision requires the Forest Service to provide detailed, on-the-ground information concerning road use and [ldquo]maintenance[rdquo] to ensure compliance with the Roadless Rule, including but not limited to: which routes will be used, what condition each routes is in now, the precise nature of the equipment needed to perform the timber harvest, and what road clearance and width such equipment will require.

Here, it appears that the Forest Service will [ldquo]reconstruct,[rdquo] not just [ldquo]maintain,[rdquo] closed and little-used roads within IRAs, in violation of the Roadless Rule, by alleging that recontouring, removing rocks and down trees, and scraping or chainsawing trees growing in the middle of routes is merely [ldquo]maintenance[rdquo] that is exempt from the Rule[rsquo]s prohibition. The Forest Service[rsquo]s approach does not pass legal muster.

The EA described the proposed activities related to roads in IRAs as follows:

Alternatives 2 and 4 also include 13 and 5 miles, respectively, of road maintenance in the substantially altered portion of the Marble Point IRA prior to timber haul. Maintenance activities on classified roads would include brushing, blading, and drainage work.

Consistent with the definition of road [lsquo]maintenance[rsquo] in the Roadless Rule, these activities would contribute to the upkeep of the roads to retain or restore them to the approved road management objective. They would not result in road realignment or change the service level, capacity, or design function, which the Roadless Rule describes as [lsquo]reconstruction[rsquo]. These classified roads (including NFSRs 4258, 16576, 16581, 18578, 18617, 18622 and 18624) were designed for log truck traffic and their driving surface is 14 feet wide. Their service level is [lsquo]intermittent term service[rsquo] because they are gated yearlong to allow only administrative use. Their maintenance level is [lsquo]1- basic custodial care[rsquo] or [lsquo]2 [ndash] high clearance vehicles[rsquo] depending on road segment. The project would not change these attributes.

EA at 140-141. In describing the condition of these roads, the Forest Service is less clear, even though the Forest Service asserts that [ldquo]as part of the Redd Bull project the Forest Service conducted a site-specific evaluation of the IRA and determined that past timber harvest and construction of classified roads have

substantially altered roadless characteristics within and outside the footprint of this development.[rdquo] Redd Bull Updated Roadless Report at 9. The Forest Service fails to disclose the results of such evaluations specific to each road within the IRAs, as such their current condition is unclear, but it is more than likely that these road have received little use since their original construction as the agency explains for the Marble Point IRA:

Classified road construction and timber harvest occurred within the IRA during the late 1980s to mid-1990s (see Figures 1A, 1B, and 1C in Appendix A). There are generally two areas of concentrated development. One developed area is near the core of the IRA, centered around Brown Gulch. Classified roads were constructed in this area in 1987-1988 under the Cold Bear road construction project. Two subsequent timber sales, Brown Bear and Frosty, were sold in 1989 and 1990, respectively.

Id. at 8. In determining the amount of ongoing maintenance roads within the Marble Point IRA may have received since their initial use, one must look at their classifications and if these roads within the IRA are arterial, collector or local roads. Here the Forest Service provides the following:

The arterial and collector roads in the project area typically receive annual upkeep including brushing, blading, and drainage structure maintenance; and are open to motor vehicle travel yearlong.

Local roads (Forest Service jurisdiction) in the project area are mostly closed to the public and not drivable. These roads receive periodic inspection and custodial care.

Redd Bull TAR at 4-5. In addition, when describing the current road status the Forest Service states that [ldquo]classified roads within the IRA are closed yearlong by gates.[rdquo] Redd Bull Updated Roadless Report at 10. In other words, closed roads within the IRAs are local roads that only receive periodic custodial care, a crucial distinction when determining Roadless Rule compliance that qualifies road maintenance to mean [ldquo]ongoing upkeep.[rdquo] Rather that demonstrate that roads within the IRAs, in particular NFSRs #3803 and #18624 within the Marble Point IRA have had [ldquo]ongoing[rdquo] maintenance, and the agency demonstrates they have in fact revegetated and grown in: [ldquo]Many of these roads are brushed in with alder because their use has been infrequent since completion of the post-timber sale activities in the late 1990s.[rdquo] Draft DN at E-53.

Further, the Forest Service fails to disclose the Road Management Objectives for each of the roads proposed for [ldquo]maintenance[rdquo] in the IRA, which would include a maintenance schedule, the current operational ML and the objective ML. If the roads proposed for use have missed their scheduled maintenance, the agency cannot consider its road treatments as [ldquo]ongoing upkeep.[rdquo] In fact, Road #18624 is closed and in an ML 1 status, so not only has it likely not been maintained, the selected alternative will definitely change the existing road[rsquo]s traffic service level from closed to all traffic to open to high clearance vehicles. Further, NFSR #3803 is a closed, ML 2 road that by the agency[rsquo]s own description has not received ongoing maintenance. In fact, the Forest Service provides a maintenance schedule for all ML 1 and ML 2 roads that show

maintenance intervals occurring once every 25 years and 11 years respectively. Redd Bull TAR at 6, Table 4. It is beyond reason to assume that the Roadless Rule[rsquo]s definition of [ldquo]ongoing maintenance[rdquo] would include such long intervals.

The Forest Service asserts that opening roads within the IRA fits within the Roadless Rule[rsquo]s definition of maintenance:

Consistent with the definition of road maintenance in the Roadless Rule, these activities would contribute to the upkeep of the roads to retain or restore them to the approved road management objective. They would not result in road realignment or change the service level, capacity, or design function, which the Roadless Rule describes as [lsquo]reconstruction[rsquo].

Updated Roadless Report at 27. As noted, Rd. #18624 will not remain in ML 1 status and opening the road will change the operational travel service level. Further, Rd. #3803 within the Marble Point IRA is closed and brushed in, and therefore operates as a ML 1 road. Bringing each up to their objective maintenance level constitutes a change in traffic service level, an expansion of capacity and likely travel way width depending on the road conditions. Given the Forest Service analysis failed to fully disclose the current road conditions within the IRA, agency assertions that the selected alternative complies with the Roadless Rule are arbitrary and a violation of NEPA. Fundamentally [ldquo]roadless[rdquo] means no roads, and the narrow exemption in the rule is not an invitation for the agency to characterize road treatments as ongoing maintenance when in fact the roads in question may have been abandoned for years, as the District of Montana federal court has recognized. See Helena Hunters & Anglers Ass[rsquo]n v. Marten, 470 F. Supp. 3d at 1169-72.

In regards to the reduction in roadless character, the EA fails to account for the long term effects from the road treatments, and fails to adequately describe their current condition other than providing their objective maintenance level. As such, the agency fails to consider the long-term effects to naturalness from its road treatments that more appropriately qualify as reconstruction. The Forest Service also fails to recognize the unique value of the area as providing a crucial area of connectivity for grizzly bears. Rather, the agency cites the presence of closed, revegetated roads within the Marble Pt. IRA as evidence that that the area is substantially altered:

As another example, existing classified roads within the Marble Point IRA have markedly diminished the capability of the IRA to provide for grizzly bear secure habitat, which is described as being 500 meters (1640 feet or 0.3 miles) from an open motorized route or a road closed yearlong by a gate (see Redd Bull wildlife report and associated grizzly bear secure habitat maps). The classified roads within the IRA are closed yearlong by gates.

Updated Roadless Report at 10. Yet, at the same time, the Forest Service explains that the IRAs provide suitable habitat for Canada lynx and grizzly bears, and that Alternatives 2 and 4 would maintain the areas Roadless character as it relates to threatened and endangered species: [ldquo][t]hese areas would continue to provide essential habitat components (e.g. forage, cover, security) for wildlife species that currently use or could use the area in the future.[rdquo] EA at 150.

Clearly, the question of whether or not closed and revegetated roads within the Marble Point IRA currently provide secure grizzly bear habitat is a question that must be addressed in an EIS. Further, if the agency continues to assert the IRA does not provide sufficient habitat security, then it is unclear how the selected alternative would provide such security in the future after the agency clears and opens roads for log hauling. We agree that the Marble Point and other IRAs should provide essential habitat components to ensure not only grizzly bears use the area, but also, the Forest Service should improve the IRAs[rsquo] roadless character to aid grizzly bear recovery by physically decommissioning roads within the IRAs.

Such action would ensure compliance with the Roadless Rule, but also Forest Plan Standard 24.

Overall, the agency[rsquo]s attempt to characterize road treatments within the Marble Point IRA as ongoing maintenance is arbitrary and capricious, and a violation of the Roadless Rule. The failure to properly disclose current road conditions within the IRAs, and consistently analyze those roads, especially as they related to grizzly bears, is a violation of NEPA.

Suggested Resolution: The Lolo National Forest should drop all harvest units from the selected alternative within the IRAs, and only implement prescribed burning where it can access the areas on currently passable, open roads. The Lolo National Forest should decommission all roads in the IRAs.

CONCLUSION.

WildEarth Guardians, the Center, and Alliance for the Wild Rockies hereby request a meeting to discuss potential resolution of issues raised in this objection, pursuant to 36 C.F.R. [sect] 218.11(a).

We hope that the Forest Service will use the objection process and such a meeting as opportunities to engage with stakeholders, including objectors here, to develop a project that is legally and ecologically sound and enjoys broad support from all stakeholders.