Lolo National Forest
C/O Martin Jacob
24 Fort Missoula Road
Missoula, MT 59804

February 14, 2025

RE: Lolo Prescribed Fire Project Scoping Document

Submitted via CARA: *https://cara.fs2c.usda.gov/Public//CommentInput?Project=67482*

Dear Acting Forest Supervisor Casterson,

On behalf of WildEarth Guardians, Friends of the Clearwater and the Flathead-Lolo-Bitterroot Citizen Task Force please accept the following comments regarding the proposed actions described in the Jan. 15, 2025 Lolo National Forest Lolo Prescribed Fire Project Public Scoping Document (Scoping Doc). The Forest Service explains that the "LNF and partners would implement annual prescribed fire to approximately 10,000 acres and up to a maximum of 45,000 acres annually for the next 20 years." Scoping Doc at 3. In conducting these burns, the agency may remove vegetation through hand and mechanical treatments "with the primary focus of returning low to moderate severity fire to fire adapted ecosystems in warm-dry forests to restore a frequent fire return interval." *Id.* The agency discloses that 1,664,112 acres would be included in the project area including acres that are wholly within the Lolo National Forest (LNF), and "portions of adjacent BLM and TNC lands in the Blackfoot Corridor." *Id.* at 4. Included within the project area is an undisclosed amount of Inventoried Roadless Areas.

Our organizations support protecting people and homes from wildfires, and recognize the best approach to establishing fire resistant communities is to reduce the risk of ignitions within the first 100 feet around structures. Cohen, 2000. Given the majority of wildfires are human-caused, and facilitated by access to areas during the most extreme wildfire conditions, we encourage the Forest Service to consider strategies to reduce ignition risks, such as restricting road access during the most dangerous times rather than manipulate vegetation conditions.

We also support the return of wildfire as a natural ecological process, and mechanical vegetation removal followed by repeated intentional burning does replace ecosystem functions or processes, or mimic natural conditions. In other words, we urge the Forest Service to explain how its burning projects will provide for the return of wildfire to the landscape rather than pursue an ecologically damaging cycle of perpetual active management. Moreso, if the project's purpose is to establish more resistant and resilient ecosystems, then it should consider that natural adaptation to the climate crisis without widespread fire suppression would be the best management approach, and only consider actions that would maximize retention of soil and fuel moisture such as creating condition for cooler microclimates and maximizing water storage both of which could include road decommissioning and constructing beaver analogues where appropriate.

We are particularly concerned with the project's length, which extends beyond what is appropriate for one decision, especially when the agency acknowledges it lacks the resources to implement the proposed action without increased funding and capacity. Specifically, the Forest Service explains:

> The Proposed Action would increase the amount of prescribed fire annually over the next 15 to 20 years as funding and resources allow. Current annual prescribed fire averages below 10,000 acres per year, demonstrating a substantial need for increased prescribed fire on the LNF beyond the current level. Therefore, it is anticipated it would take 5 to 10 years to develop the capacity to increase the scale of prescribed fire on the LNF.

Id. at 3. At a time when the agency is experiencing unprecedented reductions in workforce capacity, the Forest Service should focus its resources on projects it can reasonably complete with existing capacity. Further, the Forest Service suggests that it need not disclose the site-specific impacts under a robust environmental analysis, explaining:

> To increase flexibility and effectiveness for the unique conditions present throughout the forest, the LNF proposes to use condition-based management. Condition-based management is the practice of implementing specific design features from a broader Proposed Action, then allowing design features to vary according to the range of current on-the-ground conditions present in real time. *Id.* at 1.

We wholly reject the agency's reliance on Conditions Based Management (CBM), especially when it is used to comply with NEPA's mandate to take a hard look at site specific conditions before issuing a final decision. In fact, draft internal guidance supports this fact:

> CBM projects must meet the site-specificity and public involvement requirements of NEPA. There is no get-out-of-NEPA-free card with CBM. CBM is both front-loaded (NEPA) and back-loaded (validation). The courts ultimately decided that NEPA is a procedural statute with twin aims requiring agencies to (1) consider the environmental impacts of their proposed actions and (2) inform the public that they (the agencies) considered environmental concerns in their decision-making process.[1]

The Forest Service also explains that "All land managers within the greater LNF planning area could utilize the effects analysis that will be completed as part of this analysis to issue separate, ownership specific NEPA decisions to facilitate cross-boundary fuels management." *Id.* at 4. Certainly the Forest Service should produce an Environmental Impact Statement for such a sweeping proposed action, and if the agency made that a Programmatic EIS that would be a better approach than relying on CBM. In other words, a programmatic EIS would not only be appropriate for cross-boundary project decisions, but also for the Lolo NF to utilize in supporting future, separate analyses and decision notices.

[1] See Exhibit 1 - "Ecosystem Management Coordination | February 2023. Condition-Based Management Frequently Asked Questions.

As a rationale for the proposed actions, the Forest Service cites a departure from historic conditions based on modeling natural ranges of variation. *Id.* at 2. But at the same time the relevance of the NRV needs further explanation given that the agency acknowledges that "In 1985, the combined effects of fire exclusion and accelerated climate change fueled a shift in fire regimes of various forest types, with an increase in the area burned through 2022 (Survey, 2024)." *Id.* at 2. In fact, recent science calls into question findings that some forested landscapes historically experienced low-severity wildfire as depicted in the LANDFIRE modeling, and current trends toward higher severities are substantially departed from historic ranges of variability. Specifically, researchers explained,

> The structure and fire regime of pre-industrial (historical) dry forests over ~26 million ha of the western USA is of growing importance because wildfires are increasing and spilling over into communities. Management is guided by current conditions relative to the historical range of variability (HRV). Two models of HRV, with different implications, have been debated since the 1990s in a complex series of papers, replies, and rebuttals. The "low-severity" model is that dry forests were relatively uniform, low in tree density, and dominated by low- to moderate-severity fires; the "mixed-severity" model is that dry forests were heterogeneous, with both low and high tree densities and a mixture of fire severities. Here, we simply rebut evidence in the low-severity model's latest review, including its 37 critiques of the mixed-severity model. A central finding of high-severity fire recently exceeding its historical rates was not supported by evidence in the review itself. A large body of published evidence supporting the mixed-severity model was omitted. These included numerous direct observations by early scientists, early forest atlases, early newspaper accounts, early oblique and aerial photographs, seven paleo-charcoal reconstructions, >18 tree-ring reconstructions, 15 land survey reconstructions, and analysis of forest inventory data. Our rebuttal shows that evidence omitted in the review left a falsification of the scientific record, with significant land management implications. The low-severity model is rejected and mixed-severity model is supported by the corrected body of scientific evidence.

Baker et al., 2023. In other words, the Forest Service cannot rely on one interpretation of historic reference conditions to formulate its vegetation treatments. Rather, the agency must look beyond NRV/HRV and inform restoration objectives based on reference sites that reflect current ecological conditions of the project area. Such sites would have experienced broadscale disturbances in areas that have a passive management emphasis. In addition, the Forest Service should analyze how those reference conditions may change over the next 50 -100 years based on the best available climate models. It is likely that such analysis will indicate the best management approach is to allow for natural adaptation as a recent study suggests:

> Forests are critical to the planetary operational system and evolved without human management for millions of years in North America. Actively managing forests to help them adapt to a changing climate and disturbance regime has become a major focus in the United States. Aside from a subset of forests wherein wood production, human safety, and experimental research are primary goals, we argue that expensive management interventions

> are often unnecessary, have uncertain benefits, or are detrimental to many forest attributes such as resilience, carbon accumulation, structural complexity, and genetic and biological diversity. Natural forests (i.e., those protected and largely free from human management) tend to develop greater complexity, carbon storage, and tree diversity over time than forests that are actively managed; and natural forests often become less susceptible to future insect attacks and fire following these disturbances. Natural forest stewardship is therefore a critical and cost effective strategy in forest climate adaptation.

Faison et al. 2023. In fact, Forest Service actions that seek to resist natural adaptation need careful evaluation to determine if such resistance will in fact meet restoration goals, especially given that "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)." Coop et al., 2020. While it is useful to understand how vegetative conditions have departed from those in the past, the Forest Service cannot rely on those departures to define management actions, or reasonably expect the action alternatives will result in restoring ecological processes. This is especially true in regards to the agency's reliance on LANDFIRE and Fire Regime Condition Classifications that identify NRV departures. The Forest Service discloses that the project activities will occur within Fire Regime Groups (FRG) I-A, I-B, II-A, II-B and III-A. Scoping Doc at 8, Figure 1. Even assuming the FRGs accurately depict fire return intervals, which Baker, 2023 brings into question, the Forest Service must disclose how many acres actually have not experienced a stand replacement fire, and how the proposed action will allow high-severity fires to burn in sufficient quantities to meet the FRG definitions displayed in Table 1 below. In other words, the agency seems to focus on preventing high-severity, stand-replacement wildfires without acknowledging the ecological role these fires serve and that are accepted under the LANDFIRE models. For example, in FRG III-A, a wildfire could result in a percent replacement fire less than 80%, or put another way, up to 80% of the area could experience a stand-replacement wildfire and be within the natural range of variation. In this case, how many acres does the Forest Service really need to reduce the risk of high-severity wildfire?

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Table 1. LANDFIRE Fire Regime Groups[2]

Table 1. **LANDFIRE Fire Regime Groups**
I-A Percent replacement fire less than 66.7%, fire return interval 0-5 years
I-B Percent replacement fire less than 66.7%, fire return interval 6-15 years
I-C Percent replacement fire less than 66.7%, fire return interval 16-35 years
II-A Percent replacement fire greater than 66.7%, fire return interval 0-5 years
II-B Percent replacement fire greater than 66.7%, fire return interval 6-15 years
II-C Percent replacement fire greater than 66.7%, fire return interval 16-35 years
III-A Percent replacement fire less than 80%, fire return interval 36-100 years
III-B Percent replacement fire less than 66.7%, fire return interval 101-200 years
IV-A Percent replacement fire greater than 80%, fire return interval 36-100 years
IV-B Percent replacement fire greater than 66.7%, fire return interval 101-200 years
V-A Any severity, fire return interval 201-500 years
V-B Any severity, fire return interval 501 or more years

Also, researchers raise several factors that the Forest Service must address in a detailed analysis. Specifically, Prichard et al, 2021 explains the following:

> In other forest types such as subalpine, subboreal, and boreal forests, low crown base heights, thin bark, and heavy duff and litter loads make trees vulnerable to fire at any intensity (Agee 1996, Stevens et al 2020). Fire regimes in these forests, along with lodgepole pine, are dominated by moderate- and high-severity fires, and applications of forest thinning and prescribed underburning are generally inappropriate.

Turning to the specific project activities, the Forest Service states the following:

> Proposed Action would include prescribed fire and thinning of small-diameter trees (less than 12 inches in diameter at breast height). Pruning, piling, mastication, and creation of fuel breaks or firelines would occur when needed to protect values and achieve prescribed fire objectives."

Scoping Doc at 3. Felling of small-diameter trees and broadcast burning may affect old-growth ecosystems and their future recruitment. We urge the Forest Service to conduct stand-level inventories of old-growth habitat to determine the potential impacts to these special ecosystems and the species they support. In particular fisher, marten, Canada lynx and wolverine could be harmed by the loss of multi-story habitat conditions. Disclosing this information is especially important for the areas where project activities are scheduled to occur in 2026, displayed in Table 2. Scoping Doc at 6.

Among our top concerns is in regards to the access requirements necessary to implement the proposed action, especially if the agency plans to utilize closed and/or stored Maintenance Level 1 roads that require reconstruction, or use any unauthorized roads or trails. Increases in motorized vehicle use and clearing of vegetated roadways have the potential to adversely affect a range of

[2] Table based on LANDFIRE Biophysical Settings Attribute Data Dictionary 2020, see Exhibit 2..

species, notably grizzly bears that are extending their home ranges, which is necessary to recover the species. We are also concerned with the utilization of roads within Riparian Habitat Conservation Areas. The Forest Service must disclose the miles of road by maintenance level required to implement the project activities, and also the location of any known unauthorized roads that may be used. Further, the creation of fuel breaks or firelines must not result in the establishment of unauthorized roads or trails. Often these create new linear features on the landscape that invite illegal, motorized use, and until they become revegetated, they fragment wildlife habitats. The agency must take a hard-look at this potential environmental consequence from the proposed action. In addition, the agency must disclose how many acres of Inventoried Roadless Areas would be affected by the proposed actions, and how the agency will ensure it maintains roadless characteristics. Any final project decision must clearly prohibit the establishment or retention of unauthorized roads and trails, or use of roads that have not received ongoing maintenance, including basic custodial maintenance.

Regardless of the claimed benefits resulting from the proposed action, a project of this size and scope represents a major federal action with significant impacts that cannot be adequately addressed by simply relying on CBM with a list of design features. At a minimum the Forest Service must prepare an Environmental Impact Statement that fully accounts for the scientific controversy and uncertainty of its proposed actions, especially given the agency's reliance on design features to effectively mitigate the project's environmental consequences, particularly as it relates to threatened species: whitebark pine, Canada lynx, wolverine, bull trout and grizzly bears.

Cordially,

Adam Rissien
ReWilding Manager
WildEarth Guardians
arissien@wildearthguardians.org

Patty Ames
President
Flathead-Lolo-Bitterroot Citizen Task Force
lunaswan415@gmail.com

Jeff Juel
Forest Policy Director
Friends of the Clearwater
jeffjuel@wildrockies.org

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