Friends of the Bitterroot

February 16, 2023

West Fork Ranger District
6735 West Fork Road
Darby, MT 59829

Submitted to https://cara.fs2c.usda.gov/Public//ReadingRoom?Project=63393

Thank you for considering our comments on the Thunder Mountain Project. Friends of the Bitterroot is a local, grassroots organization dedicated to preserving wildlands and wildlife and to protect the forests and watersheds of our region.

The Thunder Mountain Project is adjacent to Alta, Montana and the Historic Alta Ranger Station. It extends about 1.5 miles southeast of the intersection of Hughes Creek Road 9630 and the West Fork Highway. It proposes to "reduce fuels and stand densities in 4 units on 466 acres bordering private property."

The area is considered a medium fire risk. Please explain why this area was chosen? Are there higher fire risk areas near homes in the West Fork? It would be beneficial to provide the public with a fire risk map along the forest boundary in the West Fork Ranger District that includes the locations of structures. Please also explain how was this fire risk assessed? The 2006 Wildfire Protection Plan was never finalized.

The area is located near the Historic Alta Ranger Station. There are many cultural and historical artifacts in the area including scratch trees. A thorough survey of cultural sites in the area and consultation with the CSKT is in order to prevent losing areas of cultural importance to a masticator or chainsaw.

Project documentation does not indicate which management areas are affected by each unit. Please disclose old growth percentages in these management areas and how they compare to old growth standards. The size of trees to be commercially harvested is not disclosed nor is a maximum dbh to be removed from natural stands and no definition of a natural stand is provided. "Unit 1 ponderosa pine plantation will allow for mechanical thinning in pine plantation with tree sizes larger that 10-14 (scoping 2)." Executive order 14072 asks forests to inventory and preserve mature and old growth forests. Please inventory these units, provide this information to the public, and retain mature, fire-resistant trees.

The project is using a categorical exclusion (CE). Scoping is the only time for the public to comment on the project before the Decision Notice and implementation. The project is using a hybrid conditions based analysis. The units are mapped, but no site specific analysis of project activities on wildlife, fisheries, or other resources has been conducted. The site specific analysis should have been completed

before the only pubic comment period with teeth. It is difficult for the public to provide substantive, meaningful comment when no analysis is provided.

The CE does not require a cumulative effects analysis, but the cumulative effects of all CE's must be analyzed for nearby projects with environmental assessments or environmental impact statement documentation. The Bitterroot National Forest (BNF) has recently released the final Record of Decision for the Mud Creek Project and older NEPA projects have been resurrected and are ongoing in the area. These projects must consider cumulative effects of adjacent projects like Thunder Mountain.

A CE requires that all forest plan standards are followed to the letter. Please demonstrate how coarse woody debris, snag retention, old growth, elk habitat, visual retention, and all other standards of the 1987 forest plan will be upheld for the life of this project.

The project purpose and need claims to both "increase resiliency to insects and disease" AND to "reduce the likelihood of crown fires (scoping p 1)." According to DeRose and Long 2014 these two objectives cannot be successfully achieved together:

> For example, to increase resistance to stand-replacing wildfire, one short-term strategy is to drastically reduce stand density….
>
> The wildfire example above could result in decreased species diversity and increased mean tree size, which would result in an increased percentage of large trees of a particular species, raising the likelihood of a pathogen outbreak. This relationship applies to many bark beetle species that potentially affect a wide range of forest types (e.g., Dendroctonus ponderosae, in lodgepole pine, ponderosa pine, and whitebark pine types) [pp 2010-2011].

Mastication is a new method. It is a mechanical treatment that disturbs soil and not enough studies have been done concerning its effects on soil productivity or on the resiliency of the forest. Please provide the science that proves this technique will support soil health and productivity.

Scoping claims that "treatments will build upon previous fuels reduction and prescribed burns." Please disclose the dates, locations, and methods used and explain how this project will build upon these previous projects.

Scoping does not disclose the targeted canopy reduction, it only provides this description: "thinned or masticated to 70 trees per acre (scoping 2)." Please be more specific about the planned commercial thinning.

Again, the project offers no site-specific analysis. How will this project effect the recovery of bull trout and bull trout critical habitat? What will be the effects to indicator species, wolverine, and grizzly bears? Please fully disclose all analysis of effects to wildlife, fisheries and habitat.

There are numerous eagles and migratory birds nesting in the area. How will this project affect them including the maintenance burning every 10-15 years? How will project activities comply with the Eagle Protection Act and the Migratory Bird Act? No surveys for flammulated owls, eagles, cavity nesting birds and ground nesting birds are mentioned or scheduled in project documentation. Chicks and Fledglings

might not be ready to move out of the smoke. A recent prescribed burn in Perth caused the death of wedge tailed eagle chicks.[1]

It is preferable to do burns in fall when birds are not nesting. But it must be done when there are no current or impending stagnant air alerts. Last year the models the DEQ used to allow burning above 4000 feet did not work. It created quite a few days of unhealthful air readings on monitors in Stevensville, Victor, and Hamilton. A study in Australia revealed that prescribed burning caused more health issues and healthcare costs than actual fires due to number of prescribed burning days. "Total estimated health costs were $188.8 million (95% CI, $68.1–311.1 million); $97.1 million (51%) was attributable to prescribed burns and $77.7 million (41%) to wildfires (Arriagada et al 2020)." Please consider all prescribed burns proposed and scheduled throughout the forest and analyze their effects to human health.

Please provide current conditions of the stored roads 74239, 74250, 74251, 74252, 74253 that will be used for access and then stored again. Are these roads currently being used illegally? Are they currently overgrown and impassible?

Please provide a report by a trained and experience forest ecologist on the effects of this project on the ecosystem as a whole.

We would suggest following the well-established science of Jack Cohen. The best way to protect structures is to focus on the area within 200 feet of structures. Consider shrinking this project to within 200 feet of the forest boundary. "The home and its surrounding 40 meters determine home ignitability, home ignitions depend on home ignitability, and fire losses depend on home ignitions (Cohen 2020 p. 2)."

Thank you for considering these comments. We hope that you answer our questions and disclose effects to resources, wildlife, humans, and fisheries and then offer a second official public comment period before the Decision Notice.

Sincerely,

Jim Miller
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[1] https://www.perthnow.com.au/community-news/hills-avon-valley-gazette/mundaring-prescribed-burn-causes-death-of-wedge-tailed-eagle-chicks-c-909195

References:

Arriagada, NB, Palmer, AJ, Bowman, D and Johnston, F, 2020. Exceedances of national air quality standards for particulate matter in Western Australia: sources and health-related impacts. Med J Aust 2020; 213 (6): 280-281. || doi: 10.5694/mja2.50547 Published online: 20 April 2020

Cohen, J.D, 2020. Preventing Disaster: Home ignitability in the Wildland-Urban Interface. Journal of Forestry 20.

DeRose, R.J., and Long, J.N, Resistance and Resilience: A Conceptual Framework for Silviculture, *Forest Science*, Volume 60, Issue 6, December 2014, Pages 1205 1212, https://doi.org/10.5849/forsci.13-507