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PROTECTING NATURAL RESOURCES

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Subject: **Scoping Comments regarding the Eshom Ecological Restoration Project**

Sequoia ForestKeeper (SFK) and the Kern-Kaweah Chapter of the Sierra Club (SC) appreciate the opportunity to comment on the subject proposal.

Project Description

The Eshom Project proposes to improve forest health, wildlife habitat, and reduce the potential for fuels build-up from the extensive pockets of drought, and subsequently insect-killed trees in the Dry, Eshom, and Mill Creek drainages of Hume Lake Ranger District within the Giant Sequoia National Monument.

To achieve these outcomes, the district proposes to treat 5,240 acres within an 11,284 acre analysis area, using vegetation management focused on ridgetops, which would exclude treatments in riparian areas. Treatments include biomass removal, mastication, underburning, and some reforestation. The proposal also includes potential road decommissioning of segments identified in the 2012 Subpart A Travel Analysis Process, totaling roughly 9.75 miles in length.

SFK and SC urge you to consider the following specific comments, and because significant cumulative effects would affect rare species and because tree removal is proposed from the Giant Sequoia National Monument, additional NEPA scrutiny in at least an EA is required.

1. Potential Significant Adverse Cumulative Effects to Pacific Fishers

In essence, this proposal would add to the effects from several other large projects, treatments after the Rough Fire, the fire itself, and associated suppression activities, which overlap or are located directly adjacent to the Eshom Project area. These effects cover the vast majority of the Eshom area of the Giant Sequoia NM, directly adjacent to Sequoia-Kings-Canyon National Park to the west and south of the Grant Grove area. The proposed combined treatments now include most of the unburned area southwest of the Rough Fire within the Monument.

Together the Rough Fire and these various projects have the potential to significantly and adversely affect the northern portion of the Pacific fisher's Core 3 area, and have the potential of

severing habitat connectivity and reducing habitat quality in areas the fisher needs to forage, den, and interact with other individuals for breeding.

These cumulative effects have not be analyzed in detail, or in full, in any of the projects listed below. Moreover, this analysis should be informed by the Endangered Species Act (ESA) conference requirements with the U.S. Fish and Wildlife Service, since the Pacific fisher has been returned, by court order, to the list of species proposed as threatened under the ESA (see next section).

Specifically, these projects include:

- Big Stump-Redwood Mtn. Fuels Restoration Project (directly east of the project area),
- Eshom Fuel Break Maintenance (overlaps the project area),
- Rough Fire Hazard Tree Slash Clean-up (north of the project area),
- McKenzie Ranch Fuels Reduction Project (west and north of the project area),
- Tower/Park Ridge Prescribed Burns,
- Prescribed burning in the adjacent Sequoia & Kings Canyon NPs,
- Rough Fire suppression & BAER effects, and
- Impacts from the Rough Fire itself.

Many of these activities were listed in the BEs/BAs for these projects, but none of them include a detailed and full cumulative effects analysis on the fisher population in Core 3 or the overall SSNFP. *See* Exhibits A-D (BEs/BAs for some these projects, discussing the fisher and various other sensitive species, such as California spotted owls, northern goshawk, pallid bat, and fringed myotis). Moreover, a similar cumulative effects analysis should be done for all sensitive species.

Some of these various effects are described in the Eshom Fuel Break Maintenance BE at p. 28 and include:

- Loss of Important Habitat Elements (snags and down woody debris)
- Disturbance
- Habitat Connectivity

This cumulative effects analysis, especially with respect to habitat connectivity, is incomplete. While it already acknowledges an impact on up to 30% of the area prior to inclusion of this project, the inclusion of the Eshom Ecological Restoration Project would bring that figure up to well over 50%, or perhaps even over 70%.

The cumulative effects analysis with respect to all of these project must also consider the timing of implementing all of these project, based on Zielinski et al. (2013b) (Exhibit E), as well as the Fisher Conservation Strategy, as refined by the "Changed Circumstances and lmplementation of the Southern Sierra Nevada Fisher Conservation Strategy, Note from the Authors, March 2017":

> Design treatments to limit disturbance from mechanical treatments to <13% of each affected cell within a 5-year period (Zielinski et al. 2013b), providing resilience goals for remaining high value reproductive habitat are achievable….

Exhibit F, p. 3 (attached).

And since so much of the Core 3 area is being disturbed by the combination of all of these project, the analysis should strictly follow the recommendations in Section "3.3 Analysis Process" of the "Changed Circumstances…" document, and retroactively analyze it for all the various projects in the Eshom and surrounding area as a part of the environmental analysis.

2. ESA Conference Requirement with US Fish and Wildlife Service regarding Fishers

On September 21, 2018, United States District Court Judge William Alsup vacated the U.S. Fish and Wildlife Service's (USFWS') "Listing Withdrawal" of the Pacific fisher, which effectively returned the fisher's status to a species proposed for listing as threatened under the ESA. *See* Exhibit G (Order in *Center for Biological Diversity v. U.S. Fish and Wildlife Service*).

The legal consequence means that the Forest Service "shall confer with the [USFWS] on any action which is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat." 40 C.F.R. § 402.10(a). The Forest Service "shall initiate the conference" with the USFWS. 40 C.F.R. § 402.10(b). The conference "shall consist of informal discussions concerning an action that is likely to jeopardize the continued existence of the proposed species or result in the destruction or adverse modification of the proposed critical habitat at issue…. During the conference, the Service will make advisory recommendations, if any, on ways to minimize or avoid adverse effects." 40 C.F.R. § 402.10(c).

Prior to the USFWS' April, 2016, Listing Withdrawal of the fisher, this type of conference occurred as recently as late-2015 with Sequoia NF, with respect to a much smaller project with significantly fewer impacts to the fisher: the Trail of 100 Giants Hazard Tree Removal Project in the Giant Sequoia National Monument. There, Sequoia NF asked for and conferred with USFWS about the potential adverse effects on the fisher, and on December 9, 2015, USFWS issued a response, outlining mitigation measures agreed to both agencies to reduce impacts on fishers and their habitat. *See generally*, Exhibit H (USFWS Fisher Conference Letter).

Here, the impact from the Eshom Ecological Restoration Project alone requires conference with USFWS, but cumulatively, the effects from this project and those mention in the previous section are an order of magnitude greater than the Trail of 100 Giants project for which the agencies conferred.

Thus, since the status of the fisher has returned to that of a species proposed to be listed as threatened, the Forest Service must confer with USFWS regarding the direct, indirect, and cumulative impacts to the fisher before this and the other projects can proceed.

3. Prepare an Environmental Assessment (EA) and Consider Alternatives

The size and large volume of wood proposed to be removed from the Eshom Ecological Restoration Project area is as large as any timber sale operation the Forest Service has implemented in the Monument or the adjacent Sequoia National Forest. Thus, the project's impacts could be significant, and in combination with the other projects mentioned above, are

likely to be significant with regard to fishers and other sensitive species. Therefore, the project constitutes a major federal action that could require analysis in an Environmental Impact Statement (EIS). Because an EIS may be necessary, the Forest Service must prepare an EA and consider alternatives to determine if the effects from the project itself and in combination with the various other projects in the area may be significant and require an analysis in an EIS.

A detailed environmental effects analysis from the damage to soils, hydrologic function of the soil, mycorrhiza fungi-vegetation-root system, watersheds, and wildlife habitat, the loss of stored forest carbon and the impacts to climate disruption from felling and removing biomass, mastication, and subsequent burning on the scale described in the proposal and in combination with other project must now be considered in a comprehensive EA with full public involvement and a reasonable range of alternatives, in particular a hand thinning alternative, before proceeding with further implementation.

4. Proposed Alternatives

Alternatives should include a no-action alternative, the proposed action and additional alternatives that remove less biomass by mechanical means, such as by felling and prescribed fire alone, as envisioned by the Monument Management Plan. These alternatives may meet the purpose and need of the proposal, as outlined in Appendix A of the scoping notice.

a. No action;
b. Proposed action;
c. Hand treatment of the area by a combination of tree felling and burning without mechanical removal, similar to the Tule River Reservation Protection Project.

5. Disclose the Impact from Mechanical Thinning/Masticator Use in Project Area on Soils, Streams, and Watersheds

Mechanized fuel treatments incur ecological costs by damaging soils, vegetation, and hydrologic processes, as proponents of fuel reduction treatments have acknowledged (e.g., Allen et al., 2002; Graham et al., 1999; 2004; Agee and Skinner, 2005). Mechanical fuel reduction treatments typically involve the same suite of activities as logging, with the same set of impacts to soils, runoff, erosion, sedimentation, water quality, and stream structure and function. These effects, their mechanisms, and their aquatic impacts have been extensively and repeatedly documented across the West (e.g., Geppert et al., 1984; Meehan, 1991; USFS et al., 1993; Rhodes et al., 1994; CWWR, 1996, USFS and USBLM, 1997a; c; Beschta et al., 2004). Watershed damage ultimately translates into aquatic damage.

The collateral impacts of fuel treatments are of considerable concern due to the existing aquatic context. Across the West, aquatic systems are significantly and pervasively degraded (Rieman et al., 2003; Beschta et al., 2004). As a result, many populations of aquatic species, including most native trout and salmonids, have undergone severe contractions in their range and number and remaining populations are now imperiled and highly fragmented (Frissell, 1993; USFS and USBLM, 1997a; Kessler et al., 2001; Behnke, 2002; Bradford, 2005). Additional damage to

watersheds and aquatic systems reduces the prospects for the protection and restoration of imperiled aquatic species (USFS and USBLM, 1997c; USFWS, 1998; Karr et al., 2004).

6. Effects from burning on greenhouse gas (GHG) emissions and climate change must be analyzed

The proposal would remove much of the materials by burning as biomass or on site, which would release tens or hundreds of thousands of tons of GHGs into the atmosphere over a very short period. Leaving the material in the forest to naturally decay would significantly reduce the pulse of GHGs in comparison to the proposal. Moreover, the Forest Service and other private and public entities are likely implementing similar large-scale biomass removal and other burning activities throughout the Southern Sierra Nevada mountains due to similar levels of tree mortalities from the drought; and in combination, these activities will likely release massive amounts of GHGs and harmful particulate matter into the atmosphere over a very short period of time, compared to natural decay, thus exacerbating contributions to climate change.

Consideration of climate change and GHG emissions should be conducted as outlined by the Forest Service's Washington Office at the following website. *See* https://www.fs.usda.gov/ccrc/topics/nepa.

Each alternative should discuss and analyze carbon emissions from implementation, and the no-action alternative should also provide information about the potential for carbon storage (or a reduced rate of GHG emissions from natural decay) from foregoing project implementation.

The environmental analysis must disclose the emissions from biomass and on-site burning for each action alternative for fuel reduction projects like this one:

- **The effect of a proposed project on climate change** (GHG emissions and carbon cycling). Examples include: short-term GHG emissions and alteration to the carbon cycle caused by hazardous fuels reduction projects, GHG emissions from oil and gas field development, and avoiding large GHG emissions pulses and effects to the carbon cycle by thinning overstocked stands to increase forest resilience and decrease the potential for large scale wildfire.

To assist in disclosing these effects, the Forest Service provides tools that can help managers determine the direct contributions of GHG emissions from project burning or treatments. (*FOFEM 5.5, Consume 3.0,* and the *Forest Vegetation Simulator*). Because the Forest Service has tools or models to effectively calculate emissions, it must disclose these emissions for each of the action alternatives. In addition, the guidance document suggests that the NEPA document include a qualitative effects analysis. *Id.* Such an analysis should include the cumulative effects, quantified in an "individual, regional, national, global" context.

The guidance also suggests that NEPA provides direction on how managers should respond to comments raised during project analysis regarding climate change:

- Modify alternatives including the proposed action.

- Develop and evaluate alternatives not previously given serious consideration by the Agency.
- Supplement, improve, or modify the analysis.
- Make factual corrections.
- Explain why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the Agency's position and, if appropriate, indicate those circumstances that would trigger agency reappraisal or further response.

At the very least, because this project includes ground disturbing fuel reduction treatments and burning that will contribute GHG emissions, the EA must include an acknowledgment of carbon emissions and must provide a response to this issue.

Moreover, the analysis should account for and quantify (as part of the cumulative effects analysis) not only the emission from prescribed burning on-site and the emissions from any biomass that is removed from the project area and later burned off-site, but also the contribution of emissions from transporting this material for off-site burning, and the contribution of emissions from planning and implementing the project by a contractor and by the Forest Service.

This holistic approach to account for GHG emission is necessary to provide managers and the public with the kind of information under NEPA to make informed choices between alternatives and to mitigate for climate change, and to consider and assess the larger picture of GHG contributions from all projects on the national forests that may contribute GHG emissions.

Finally, if the Southwest Regional Office has or is planning to conduct additional analysis on the effects from the cumulative treatments from similar projects in the Southern Sierras, the analysis should reference and disclose that information.

7. Support for Road Decommissioning

We applaud the proposal to decommission 9.75 miles of road segments identified in the 2012 Subpart A Travel Analysis Process. We also urge the district to include the following additional road segments in its decommissioning proposal, which were already identified in the Subpart A analysis as candidates for decommissioning (see Figure 1. Opportunities Map below):

- 14S38
- 14S46A
- 14S61

And while not technically within the project boundary, we urge you to also consider the following adjacent segments for decommissioning, which are accessible from the project area. Again, these have already been identified for potential decommissioning in the analysis below:

- 14S42, 14S45, 14S44, 14S44B, and 14S44C
- 14S43B, 14S85, and 14S43F
- 14S35, 14S46B, and 14S65

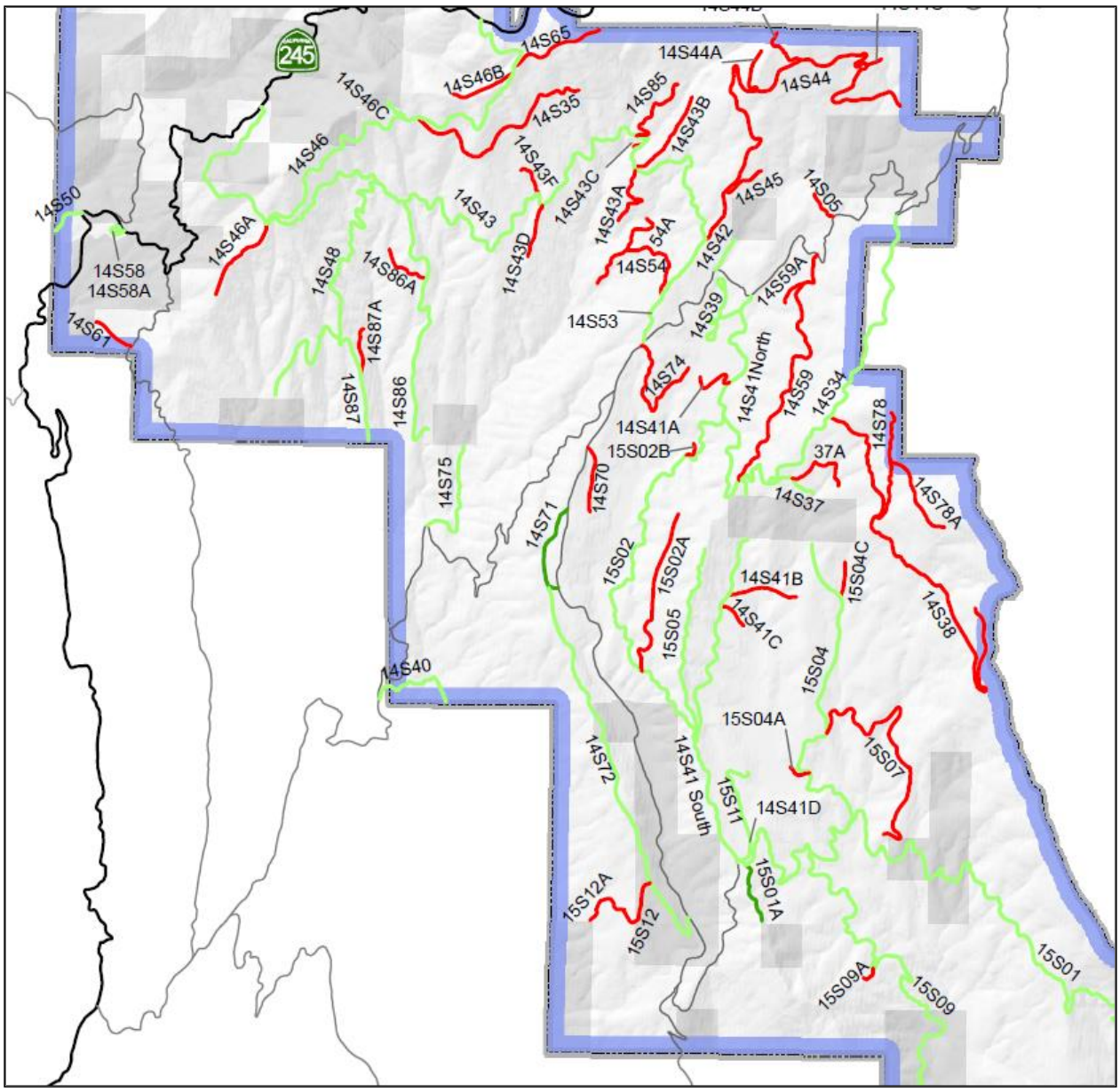

Figure 1. Subpart A 2012 Travel Management Analysis, Opportunities Map (red segments represent opportunities for change in maintenance level or decommissioning)

For Sequoia ForestKeeper and the Kern-Kaweah Chapter of the Sierra Club,

Sincerely,

René Voss – Attorney at Law

Attachments: Exhibits A-H