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I am submitting our comments via email because the CARA portal was closed prematurely. In the future, please keep the portal open until midnight on the due date. Thank you.

See attached initial scoping comments and attachments A-C. Attachments D-K sent separately only to the Forest Service.

Sequoia ForestKeeper (SFK), the Kern-Kaweah Chapter of the Sierra Club (SC), and the Tule River Conservancy (TRC) provide the following comments on the subject proposal. SFK, SC, and TRC have been involved in the protection of the Sequoia National Forest and the Giant Sequoia National Monument for many decades. Moreover, they also have concerns about the protection of the forest ecosystems and protected areas in the adjacent Sierra National Forest.

This proposal is one of the first proposals subject to the requirements of the 2023 Sierra and Sequoia National Forest Land and Resources Management Plans (LRMPs). Accordingly, we urge particular scrutiny to ensure it is consistent with all enumerated management areas, desired conditions, objectives, standards, and guidelines of the new LRMPs.

#### Initial Scoping Comments to Be Supplemented

On November 13, 2023, Kevin Proescholdt of Wilderness Watch and I held a short meeting with Forest Service regional and forest staff to discuss the possibility of extending the scoping period. We were informed at the meeting that the Forest Supervisors had already denied our request, but we were told that the Forest Service would accept additional comments at a later time, which we intend to provide with greater detail before the end of January, 2024. As correctly pointed out in the attached e-mail message from Amber Sprinkle of the Region 5 Office (Attachment A), our concerns about this project and the short scoping period include the following:

\* The maps aren't sufficiently detailed and need to be improved in order for us to provide adequate comments, and it's difficult to determine where the initial areas for implementation area proposed.

\* The description of the proposed action for activities within or impacting wilderness needs to be improved. It is unclear what is being proposed within designated wilderness areas. (i.e., mechanical operations, ignition, etc.).

\* It is not clear how the Forest Plans are considered; design features do not seem to refer to Forest Plan standards.

\* Extending the scoping period was needed because the proposal is a:

\* Large and complex project.

\* First of its kind project being proposed under the newly minted Forest Plans for the Sierra and Sequoia National Forests.

As stated on the call, our primary interest is to provide substantive feedback to see if this is a project we can work together on rather than oppose.

While we acknowledge there can be resource benefits in certain area with narrowly-tailored manager-ignited fires, it is crucial that site-specific resources and conditions be considered and that preparing areas for fire is planned and implemented with the lightest possible touch. Prescribed fire can be a useful tool when there are special circumstances where fine-scale control over fire is needed. But in many areas, such as Wilderness, proposed Wilderness, Roadless Areas, and other special management areas the Forest Service should only authorize the use of managed wildfire and adopt the same stewardship approach as in the Giant Sequoia National Monument Plan and subsequent actions have adopted.

#### Background and Description of Proposal

The Forest Service has proposed forest wide fuels reduction prescribed burning projects for both the Sequoia and Sierra NFs. The Forest Service asserts that its proposed action "is needed to expand the beneficial role of prescribed fire and reduce the risk of large and severe wildfires, across both national forests."

The stated purpose of the projects "is to facilitate increased application of prescribed burning across the Sequoia and Sierra National Forests' landscapes that contribute to sustainable, resilient vegetation structure and protection of human communities and other highly valued resources and assets." The expressed needs for the projects are to:

[bull] Prioritize firefighter and public safety during implementation,

[bull] Reduce fuel buildup and the risk of large and severe wildfire,

[bull] Restore fire return intervals in areas where fuel profiles allow,

[bull] Restore and maintain desired ecological processes and habitat conditions, and

[bull] Create improvements in resilience to climate change and large-scale disturbances.

While the proposal suggests that it would implement and accomplish objectives from the 2023 revised Forest Plans for Sequoia and Sierra NFs, as well as the Giant Sequoia National Monument Plan, the scoping notice provides few details about those objectives or how management direction from those plans might apply to these projects.

The proposed action would include prescribed burning, but also includes substantial actions to cut, move, and remove vegetation without specifying enough detail for comment.

## COMMENTS

SFK, SC, and TRC urge the Forest Service to consider the following specific comments, as well as any supplemental scoping comments that we will provide before the end of January. At this time, since there is insufficient information to prepare adequate site-specific comments, we will provide only our initial thoughts.

Because the proposed actions have the potential to result in significant adverse effects on soils, wildlife, recreation, aesthetic resources, and proposes to cut vegetation and remove significant numbers of trees from the forests, as well as alter protected special areas, the Forest Service must prepare an Environmental Impact Statement (EIS) for these projects and consider a reasonable range of alternatives to explore options that provide the best outcome for our forest ecosystems and the wildlife that depends on these forests as essential habitat.

Despite ongoing intervention by the Forest Service, the forests in the Sierra Nevada have recovered on their own for millennia from the effects of fire, and unnecessary "ecological restoration" is being applied all too frequently, perhaps doing more harm than good.

### 1. Wilderness, Proposed Wilderness, Roadless Areas, and Special Management Areas Should be Excluded from Prescribed Manager-ignited Burning

Compiled in a list in section 4. below are areas that should not be subjected to manager-ignited prescribed fire, but should only be managed in response to wildland fires that were naturally-ignited by lightning. This technique is already being used in the Giant Sequoia National Monument (GSNM), and is the primary means of ecological restoration in these wild areas in the GSNM. All recent decisions in the GSNM, including the roadside hazard tree projects, as well as the Castle Fire, Windy Fire, and Hume Basin Ecological Restoration Projects have excluded manager-ignited fire from these protected and special areas and are relying on wildland fire use. Moreover, the Wilderness Act prohibits mechanical or mechanized fuel reduction and also prohibits actions that would degrade the natural and untrammeled Wilderness character of designated areas.

## 1. The Forest Service Should Exclude Intervention in Areas that Have Recently Burned in Wildfires

With particular emphasis on the Sequoia National Forest and the Giant Sequoia National Monument, areas that have burned extensively over the last decade or two have already created the many of the ecological benefits of fire, as well as reduced fuels, and will not need any new manager-ignited fire for the foreseeable future. Many of the areas in the northern part of the Sierra National Forest are in similar conditions and should be excluded from any initial actions.

To illustrate this, attached are a series of maps from CalTopo, which show an overlay of fires that have burned through Sequoia National Forest, the GSNM, and the Sierra National Forest. These fires demonstrate the benefits of these wildfires on the landscape as their boundaries fit together like puzzle pieces, where one fire encountered an older fire area and easily burned out or was effectively suppressed by fire-fighters. See Attachment B, Maps.

The best example of this effect can be seen in the following map, which provides the intersection of fire boundaries in the Western Divide Ranger District in the GSNM.

Figure 1. Western Divide RD Fires - 2003-2022

It is unclear why the maps provided by the Forest Service only show fires from 2018 to 2021, since many of the older fires continue to provide long-lasting benefits, and many of those areas do not need additional prescribed burning in the near future.

## 1. The Process for Approval of the Projects without Subsequent Public Involvement Would Violate the Letter and Intent of NEPA

We strongly object to the proposed process and approval mechanisms for these projects, which would exclude the public from all subsequent planning and decision-making after the first NEPA analyses have been completed. The way that the analysis and process is currently planned for amounts to a programmatic effort that will exclude enough site-specific information or detailed environmental analysis to be meaningless, especially when "implementation planning will occur in recurring 5-year cycles" and the Forest Service does "not plan to conduct subsequent National Environmental Policy Act analysis for actions covered within this environmental assessment" (Scoping Letter, p. 6). Given that the proposed process does not currently include subsequent NEPA analysis, we interpret this to mean that the Forest Service will not include the public in subsequent planning for site-specific actions that implement the larger plan. This is unacceptable and likely violates NEPA.

In effect, this is similar to large programs already proposed in other parts of the National Forest System that have been rejected by Federal Courts because they provide only general authorizations using prescriptions without necessary site-specific details or analyses as required by NEPA.

We urge the Forest Service to prepare a programmatic EIS for these proposed actions and then follow those up with site-specific EAs and/or CEs, and always include the public in the planning of those site-specific proposals. Otherwise, we expect that these actions will generate unneeded controversy and opposition and insufficient oversight. Moreover, public involvement always improves project analysis and makes for better decisions.

#### 1. The Forest Service Should Prepare an EIS Because its Proposal is a Major Federal Action with the Potential to Adversely Affect or Benefit Various Resources, Significantly.

Because these are major federal actions that are far-reaching, with a potential to adversely affect or benefit resources significantly, the Forest Service must prepare a full EIS with a reasonable range of alternatives. The scope of the proposed actions would likely affect many threatened and endangered species, as well as species proposed for listing, including slender salamanders, Pacific fishers, gray wolves, Sierra Nevada red foxes, big horn sheep, Sierra Nevada and Mountain yellow-legged frogs, California condors, and California spotted owls, as well as critical habitat for these species.

The proposal has the potential to significantly and adversely affect over a million acres of protected areas, including Wildernesses, proposed Wildernesses, Inventoried and uninventoried Roadless Areas, Wild and Scenic Rivers, as well as other various special management areas, such as Research Natural Areas, Botanical Areas, and others. Specifically, these areas include the following named areas:

##### Wildernesses

- \* Ansel Adams Wilderness
- \* Kaiser Wilderness
- \* Dinkey Lakes Wilderness
- \* John Muir Wilderness
- \* Monarch Wilderness
- \* Jennie Lakes Wilderness
- \* South Sierra Wilderness
- \* Golden Trout Wilderness
- \* Dome Lands Wilderness
- \* Kiavah Wilderness

##### Proposed Wilderness (by the Forest Service)

- \* Monarch Wilderness Addition (Agnew IRA, Sequoia NF/GSNM)
- \* Moses Mountain Additions to the Golden Trout Wilderness (Sequoia NF/GSNM)

#### Inventoried Roadless Areas

- \* Sierra NF: Ferguson Ridge, Devil Gulch, Mt. Raymond, San Joaquin, Shuteye, Dinkey Lakes, Sycamore Springs, Kings River (shared with GSNM)
- \* Sequoia NF: Oat Mountain, Agnew (proposed as Wilderness), Jennie Lakes, Dennison Mountain, Moses (partially proposed as Wilderness), Black Mountain, Slate Mountain, Rincon, Lion Ridge, Chico, Channell, South Sierra, Woodpecker, Domeland Additions, Greenhorn Creek, Mill Creek, Woolstaff, and Scodies

#### Special Management Areas

- \* Sequoia NF: Bald Mountain Botanical Area, Ernest C. Twisselmann Botanical Area, Baker Point Botanical Area, Bodfish Piute Cypress Botanical Area, Inspiration Point Botanical Area, Packsaddle Cave Geological Area), Walker Pass National Historic Landmark, Teakettle Experimental Forest, Freeman Creek Botanical Area
- \* Sierra NF: Carpenteria Botanical Area, McKinley Grove Botanical Area, Devils Peak Botanical Area, Courtright Intrusive Contact Zone Geological Area, Dinkey Creek Roof Pendant Geological Area, Kings Cavern Geological Area, Proposed Crater Lake Meadow Geological Area, Potential Kaiser Wilderness Geological Area

#### Wild and Scenic Rivers & Designated, Recommended, and Eligible Rivers

- \* Too many to list here, but see those listed in the revised Sierra and Sequoia Forest Plans, including all Wild, Scenic, and Recreational Sections

#### Other Protected Areas

- \* Pacific Crest National Scenic Trail
- \* Giant Sequoia Groves

Moreover, because the scoping notice states that "implementation planning will occur in recurring 5-year cycles" and the Forest Service does "not plan to conduct subsequent National Environmental Policy Act analysis for actions covered within this environmental assessment" (p. 6), the proposal is really a programmatic rather than "project" action, which must be analyzed with an EIS rather than just an EA. Further, the long time-frame for implementation is not consistent with NEPA, considering "prescribed fire entries in a 15- to 20-year period" (p. 4), are even longer than the effective time-frame for Forest Plans of 10-15 years. This also suggests that an EIS is necessary. Finally, because the Forest Service plans to issue subsequent implementation plans or 5-year programs of work in each program operational delineation (POD) (Appendix B of scoping letter), the EIS must either have substantial and very specific environmental analyses; otherwise, if it is more programmatic, NEPA requires detailed site-specific analyses for each of these actions in subsequent EAs or CEs, if the actions fit within a CE.

#### 1. The EIS Must Analyze a Reasonable Range of Alternatives to its Proposed Actions

The EIS should consider alternatives in addition to the no-action and proposed action alternatives, which meet the purpose and need but would be less intensive, for the protection of wildlife habitat and to minimize effects to protected areas.

- \* Alternative with Only Managed Wildfire in Protected Areas (from list in 4. above)
- \* Alternative without Mechanical Equipment in All Zones (hand tools only)
- \* Alternative with Prescribed Fire Only in the Wildfire Protection and WUI Defense Zones (Monument) and Managed Wildfire Everywhere Else
- \* Alternative with a different combination of the above

The Forest Service should rigorously explore such alternatives, which should meet the purpose and need for these projects. If these and other proposed alternatives do not meet a contrived purpose and need that is too narrowly-drawn, rather than reject them, the Forest Service should adjust the purpose and need so these alternatives can be analyzed in detail.

#### 1. Management Direction that Should Be Included in All Alternatives

- \* All alternatives should include a diameter limit of 10 inches for any tree cutting.
- \* Any larger trees should be limbed rather than cut to prepare areas for prescribed fires.
- \* There should be no mechanical equipment beyond 100 feet from roads to protect soils.
- \* Tree removal should only be allowed from the first 100 feet from roads.

#### 1. The Myths of Prescribed Fire

Enclosed as Attachment 3 is a fact sheet, prepared as a summary of scientific studies, which provides information about the myths of prescribed fires in our California forest. In summary, Prescribed fire increases fire and smoke. Prescribed fire is inefficient for public safety compared to home retrofits. Prescribed fire is inefficient for ecological restoration compared to managed wildfire. Prescribed fire can be harmful. And prescribed fire and cultural burning are not the same.

1. The EIS must analyze the greenhouse gas (GHG) emissions generated by the proposal and their effects on climate change.

The proposal would likely remove thousands of trees and by burning on site and as biomass, which would release thousands of tons of GHGs into the atmosphere over a very short period of time. Leaving the material in the forest to naturally decay would significantly reduce the pulse of GHGs and store much of the carbon in the soil in comparison to the proposal to fell and remove trees. Moreover, the Forest Service, other public agencies, and private entities continue to implement similar large-scale biomass and other burning activities throughout the mountains of the Sierra Nevada and other national forests as a result of similar proposals. In combination, these activities will likely release cumulatively more GHGs into the atmosphere over a very short period of time thus exacerbating effects on climate change. These cumulative additions of GHG emissions and their effects on climate change must be considered and analyzed.

Consideration of climate change and GHG emissions are required by the Forest Service's Washington Office. See <https://www.fs.usda.gov/ccrc/topics/introduction-incorporating-climate-change-nepa-process>.

Each alternative should discuss and analyze carbon and methane emissions from implementation of the proposed action and the equipment used to implement the proposed action, and the no-action alternative should also provide information about the potential for carbon sequestration in area soils (and the reduced rate of GHG emissions from natural decay) from foregoing project implementation that would remove or burn trees.

The environmental analysis must disclose the emissions from biomass and on-site burning, as well as the GHG emissions caused by equipment and transportation, for each action alternative.

#### 11. The Analysis Should Incorporate New Scientific Findings Regarding Climate Change Impacts from Fires and Tree Planting

We recently shared some of the more-recent scientific findings related to climate change, wildfires, and forest management with managers on the Sequoia National Forest. Many of these recent scientific findings contradict long-held positions by foresters and land managers about wildfire releases of carbon, carbon sequestration, thinning, fuel reduction, and tree planting as they relate to the carbon cycle. The analysis should consider these newer findings, which come from some of the nation's leading scientists on the subject.

A good place to start is a relatively short 6-page compilation, with citations, of the most recent science, titled "Status of Science Forest Carbon Management to Mitigate Climate Change and Protect Water and Biodiversity, March 9, 2022" (Attachment D), which was issued by some of the most prominent forest carbon researchers in the U.S. Here are a couple of snippets from the compilation that relate to these issues:

While moderate to high severity fire can kill trees, most of the carbon remains in the forest as dead wood and it will take decades to centuries to decompose that wood. Less than 10% of the total ecosystem carbon in live and



dead trees, litter, and soils combined has been found to enter the atmosphere as carbon dioxide in Pacific Northwest forest fires (Campbell et al. 2011, Law & Waring 2015). Recent field studies of combustion rates in California's large megafires show that carbon emissions were very low overall at the stand- (0.1-3.2%) and landscape-level (0.6-1.8%) because larger trees with low combustion rates comprise the majority of biomass and high severity fire patches are less than half of the area burned (Stenzel et al. 2019, Harmon et al. 2022).

The amount of carbon removed by thinning is much larger than the amount that might be saved from being burned in a fire, and far more area is harvested than would actually burn (Mitchell et al. 2009, Rhodes et al. 2009, Law & Harmon 2011, Campbell et al. 2011, Hudiburg et al. 2011, Hudiburg et al. 2013). Most analyses of mid- to long-term thinning impacts on forest structure and carbon storage show there is a multi-decadal biomass carbon deficit following moderate to heavy thinning (Zhou et al. 2013). A thinning study in a young ponderosa pine plantation vulnerable to drought in Idaho found that removal of 40% of the live biomass from the forest would subsequently release about 60% of that carbon over the next 30 years (Stenzel et al. 2021). Although thinning is commonly used to reduce fire severity and associated tree mortality, a comparison of thinned with adjacent unthinned stands in the burn area of a large California wildfire showed that thinning resulted in more tree mortality than unthinned stands, i.e. fire killed more trees than thinning prevented from being killed (Hanson 2022).

Attachment D, p. 4.

The Harmon et al. 2022 study (Attachment E) referenced in the first paragraph above provides the data and methodology used for determining the low (less than 1.8 and 3.2%) overall carbon emissions from wildfires.

The Mitchell et al. 2009 study (Attachment F) cautions that "reducing the fraction by which C is lost in a wildfire requires the removal of a much greater amount of C, since most of the C stored in forest biomass (stem wood, branches, coarse woody debris) remains unconsumed even by high-severity wildfires. For this reason, all of the fuel reduction treatments simulated for the west Cascades and Coast Range ecosystems as well as most of the treatments simulated for the east Cascades resulted in a reduced mean stand C storage." See Attachment F Abstract; see also Depro et al. (2008) (Attachment G) ("Our analysis found that a "no timber harvest" scenario eliminating harvests on public lands would result in an annual increase of 17-29 million metric tonnes of carbon (MMTC) per year between 2010 and 2050[mdash]as much as a 43% increase over current sequestration levels on public timberlands and would offset up to 1.5% of total U.S. GHG emissions. In contrast, moving to a more intense harvesting policy similar to that which prevailed in the 1980s may result in annual carbon losses of 27-35 MMTC per year between 2010 and 2050.").

The Campbell et al. 2011 analysis (Attachment H) also "reveals high C losses associated with fuel treatment, only modest differences in the combustive losses associated with high-severity fire and the low-severity fire that fuel treatment is meant to encourage, and a low likelihood that treated forests will be exposed to fire." There are also local Sierra Nevada forest analyses of cumulative carbon losses, comparing tree loss from thinning compared to loss from two fires. See Baker & Hanson 2022 & Hanson 2022 (Attachment I & J).

Finally, the recent study, Bartowitz et al. 2022 (Attachment K), also cautions policy-makers, finding "that forest fire carbon emissions are on average only 6% of anthropogenic FFE [fossil fuel emissions] over the past decade. While wildfire occurrence and area burned have increased over the last three decades, per area fire emissions for extreme fire events are relatively constant. In contrast, harvest of mature trees releases a higher density of carbon emissions (e.g., per unit area) relative to wildfire (150-800%) because harvest causes a higher rate of tree mortality than wildfire."

Again, these studies suggest that the Forest Service should consider an alternative that maximize retention of forest carbon by leaving the trees in project area.

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

Sincerely,

Ren[acute] Voss

Executive Director - Western Alliance for Nature ([wanconservancy.org](http://wanconservancy.org))

Wilderness Watch Board ([wildernesswatch.org](http://wildernesswatch.org))

Coho Salmon Land Trust Board ([cohosalmonlandtrust.org](http://cohosalmonlandtrust.org))

Attorney - Natural Resources Law

Attachments:

Attach. A - Scoping Comments Discussion RE Sequoia & Sierra National Forests Prescribed Fire Project.pdf

Attach. B - Fire History Maps.pdf

Attach. C - Myths of Prescribed Fire.pdf

SFK-SC-TRC Sequoia & Sierra NF Prescribed Burning Project Scoping Comments.docx