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PROTECTING NATURAL RESOURCES

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Subject: Hume Basin Restoration Project Supplemental Scoping Comments for SFK & SC

Sequoia ForestKeeper (SFK) and the Kern-Kaweah Chapter of the Sierra Club (SC) thank you for the opportunity to provide supplemental comment on the subject proposal after our November 9, 2021, field trip with the Forest Service. After our field trip we are even more sure that due to the size, scope, and potential adverse effects, as well as the precedent that would be set in amending the Giant Sequoia National Monument (GSNM) Plan, that the Forest Service must prepare an Environmental Impact Statement under NEPA.

What we learned on the field trip and afterwards.

Our field trip was informative, but due to the large size of the project area and inclement weather, we were only able to make 3 stops and only visit a small fraction of the project area. During the field trip we learned more about the Forest Service's plan to propose GSNM Plan amendments in order to fell and remove live large trees greater than the 12- or 20-inch diameter limits set in the plan for sequoia groves and other areas, respectively. We also learned that the Forest Service wants to remove most of these large trees from the GSNM, likely in the form of a timber sale. While we share the goals of restoring aspen stands and protecting monarch giant sequoias from ladder fuels, we believe there was consensus that the Forest Service's proposal to fell and remove large trees to accomplish these goals is both highly controversial and includes a large degree of uncertainty as to whether the proposed activities could accomplish those goals.

The GSNM Plan sets diameter limits for the specific purpose of "Ecological Restoration" (p. 79, Table 46 "Management Direction for Ecological Restoration"). There, the diameter limits are clear for sequoia groves, setting the limits in all grove areas at 12 inches. Everywhere else, the limit is 20 inches, unless the area is within 1-2 acres of goshawk or spotted owl nest trees, in which case the limit is 6 inches. These limits were based on the best available scientific information from SNEP and the 2001 SNFPA and were explained in the various alternatives to the GSNM Plan in the Final EIS for the plan. See GSNM FEIS, starting at p. 70. For the Forest Service to now deviate from these well-thought-out limits is significant, since they are based on well-researched scientific analysis, public input, and substantial public scrutiny

It should be noted here that the 2004 SNFPA also includes a diameter limit of 30 inches for felling live trees, regardless of the tree's location. Based on the proposed actions described during the field trip, it appeared to us that the Forest Service is proposing to exceed even that limit in its grove and aspen restoration areas. But even Alternative E in the GSNM FEIS, which placed no diameter limit on tree felling in the general monument outside sequoia groves, also included a 36 inch diameter limit within groves (pp. 90-91). And Alternative F, which placed no diameter limit outside most sequoia grove areas, also included a 12 inch diameter limit within groves (pp. 95-96).

During the field trip the Forest Service made an assertion that the National Park Service (NPS) in the adjoining Sequoia-Kings Canyon National Park (SEKI) has proposed felling large ladder fuel trees near monarch giant sequoias, similar to what is being proposed here by the Forest Service. So we contacted the NPS about this. But according to NPS, it has not done this in the past and has no plans to do this in the future. Instead, its fuel reduction prescriptions only cut live trees approximately 8 inches dbh based on a tree height of no more than 40 feet in groves and other areas in SEKI (discussed further below). When asked, the NPS fuels specialist we spoke to shot down the idea that NPS has plans to cut down any large ladder fuels next to giant sequoias. The only larger trees that they generally cut down are both dead and also pose a hazard to visitors because they are leaning towards trails or roads. The fuels specialist also said that the most that NPS does with larger live trees is to cut limbs that may act as ladder fuels. A recent NPS prescription for fuels management in the Big Stump Grove is described and discussed below. This project is close to the Grant Grove Entrance Station to SEKI, which is not far from the Hume Basin Project area. The NPS fuel specialist stated that their treatments/prescriptions are effective in reducing the risk of wildfires that may threaten giant sequoias under most fire weather conditions.

SUPPLEMENTAL COMMENTS

1. Project level plan amendments are highly controversial, the effects are uncertain or unknown, and they would set a precedent in the Monument, so an EIS is required.

The Forest Service, for the first time since it issued the ROD for its plan, has proposed amending the GSNM Plan in order to eliminate tree diameter limits for the purpose of aspen restoration and to remove ladder fuels near monarch giant sequoias in several sequoia groves. *See* Scoping Letter at 4. Because the Forest Service has expressed uncertainty about the effects of its aspen restoration project, because the removal of large trees in giant sequoia groves is highly controversial and will have uncertain or unknown effects, and because the action would set a precedent for future actions that are subject to the GSNM Plan, these intensity factors suggest that the effects are significant and the project and amendment analysis must be done with an Environmental Impact Statement (EIS).

The NFMA planning regulations require that a project-specific plan amendment (or any other amendment to a forest plan) use the 2012 NFMA Planning Rule. *See* 36 C.F.R 219.17(b)(2). Therefore, any amendment and subsequent actions based on that amendment must comply with the various provisions of the 2012 NFMA Planning Rule. *Id.* Here's one example of an application of the new planning regulations, which requires further analysis:

> For an amendment to a plan developed or revised under a prior planning regulation, if species of conservation concern (SCC) have not been identified for the plan area and if scoping or NEPA effects analysis for the proposed amendment reveals substantial adverse impacts to a specific species, or if the proposed amendment would substantially lessen protections for a specific species, the responsible official must determine whether such species is a potential SCC, and if so, apply section § 219.9(b) with respect to that species as if it were an SCC.

36 C.F.R 219.13(b)(6). Potential SCCs include numerous species identified during the current plan revision process, and it is likely that the proposed amendment will have substantial adverse impacts to some of those species. As another example, since the primary purpose of the project and amendment is for ecological restoration under the guidance of the GSNM Plan, the amendment must also demonstrate how it meets the "Ecological Sustainability" requirements "consistent with the inherent capability of the plan area …." 36 C.F.R. 219.8 & 219.8(a). Because these issues have not been considered or analyzed in the context of the GSNM Plan, the amendment is significant and requires an EIS.

The 2012 NFMA regulations state that "*The appropriate NEPA documentation for an amendment may be an environmental impact statement [EIS]*, an environmental assessment, or a categorical exclusion, depending upon the scope and scale of the amendment and its likely effects." *Id.* at 219.5(a)(2)(ii) (emphasis added). Here, in addition to the scale of project at over 6,700 acres, as noted in our first set of comments, an EIS is necessary due to the likely significant effects from the plan amendment due to its effects on listed species (and SCC), its uncertainty and highly controversial effects, and because it will set a precedent for future actions. *See* 40 C.F.R. 1508.27(b) (2020); 36 C.F.R 220.7(b)(3)(iii) (the analysis "[s]hall describe the impacts of the proposed action and any alternatives in terms of context and intensity as described in the definition of "significantly" at 40 CFR 1508.27 ….").

Anything less than an analysis using a full EIS for this project due to its size and the proposed project-specific amendment would, in our opinion, violate NEPA.

2. <u>The Forest Service's proposed amendment to the GSNM Plan to fell and remove large live trees up to 30 inches in diameter around monarch sequoias would be harmful, would violate other plan requirements, and is unnecessary.</u>

The current GSNM Plan limits the cutting and removal of 12 inch and larger trees in giant sequoia groves. GSNM Plan, p. 79, Table 46. But the scoping letter suggests a plan amendment may be considered "if stand exams show there is a need to remove live non-sequoia conifers larger than 20 inches dbh." p. 4. This 20-inch figure there is likely a mistake, given the 12 inch (v. 20 inch) limit in sequoia groves, but that also proposal does not set an upper diameter limit.

Further down in the "clear need" rationale for felling and removal, the Forest Service hints at possibly limiting felling and removal to 30 inches in diameter, although that is also unclear:

> Cutting and removing non-sequoia conifers up to 30 inches dbh immediately surrounding sequoias would reduce ladder and dense surface fuels in Bearskin, Indian Basin and Landslide Giant Sequoia Groves.

Scoping letter, Appx. A, Table 2 (R1).

> Cutting and removing non-sequoia conifers up to 30 inches dbh immediately surrounding sequoias would reduce stress leading to unsuccessful insect attacks, and reducing ladder and dense surface fuels in Bearskin, Indian Basin and Landslide Giant Sequoia Groves.

Scoping Letter, Appx. A, Table 3 (F2).

In its scoping notice and during the field trip, the Forest Service has not been exactly clear about what it is proposing. And as with the scoping notice, during our field trip the Forest Service was not able specify how many, what species, or at what distance from the monarch sequoias the Forest Service would propose to fell or remove these larger ladder fuel trees. For that reason, the original notice for a plan amendment was insufficient and a new public notice is required. *See* 36 C.F.R. 219.16(d) ("***Content of public notices.*** Public notices required by this section … must clearly describe the action subject to notice and the nature and scope of the decisions to be made; [and] identify the responsible official …."). We suggest that once the Forest Service has determined a specific action that is subject to the amendment is, that it send out a new scoping notice and seek additional public input. The notice must specify any criteria for tree felling around giant sequoias, such as distance from tree, exact size limit, whether crown entanglement with the sequoia is necessary, and the species of any trees that may be cut or should be left.

For example, during the field trip we observed a large sugar pine that was within 50 feet of a monarch sequoia. During a discussion that ensued, it appeared from the consensus of those present, including the Forest Service, that because large sugar pines are becoming rare in the forest they should not be cut even if they were close to a monarch sequoia.

We should also note here that the proposal to remove larger trees is clearly inconsistent with the GSNM Plan at p. 45, which states:

> As part of the fuel load reduction plan for each giant sequoia grove, emphasize the protection of: *Large giant sequoia trees *Large trees of other species, including pines, red firs, incense cedars, and black oaks.

The plan's requirement, which "emphasizes the protection of … large trees of other species…" strongly suggests that the Forest Service's removal of any large ladder fuels next to giant sequoias is inconsistent with the GSNM Plan. We read this requirement to mean that trees larger than those for which the Plan has set diameter limits, or 12 inches DBH for sequoia groves, should be protected and not removed. As discussed below, this retention of larger trees is what the National Parks Service (NPS) does just to the west and south of the Hume Basin Project.

During the field trip, the Forest Service asserted that the NPS in Sequoia and Kings Canyon National Park (SEKI) is already cutting or has plans to cut larger live ladder fuel trees around monarchs, and therefore there is a precedent and the Forest Service can justify doing this.

So we contacted a fuels specialist at SEKI who informed us that they do not cut large live trees, nor did they have plans to do so in the future. The only exception is for large dead trees that also pose a hazard to visitors on a nearby trail or road, if it leaned toward that trail or road (pers. communication with Andrew Cremers, NPS, Andrew_Cremers@nps.gov, 559-565-3739).

The NPS fuels specialist provided information and the attached documents for the Big Stump Grove Project and told us that their DBH limit parameter in the prescription is approximately 8 inches as stated in their resource objectives and statement of work. NPS limits tree cutting to "less than 40 feet in height (approximately 8 inches diameter at breast height)." Exhibit 1 – Big Stump Mechanical Plan, p. 5 (attached). They also leave 25 trees/acre less than 40 feet in height. *Id.* These diameter and height limits are even smaller but consistent with the 12 inch DBH limit in the GSNM Plan for sequoia grove treatments. These NPS limits are based on the SEKI Fire and Fuels Management Plan, 2021 Annual Update (Exhibit 2, attached) as well as its Appendix E – Fuel Management Prescriptions (Exhibit 3, attached). For larger trees with limbs closer to the ground that could act as fuel ladders, the NPS fuels specialist told us that they usually limb up trees to shoulder height, although Appendix E, page 2, states that "All live trees over 40 feet tall will remain uncut. All larger trees remaining will be limbed up to at least 6 to 8 feet above the ground."

Therefore, the Forest Service's assertion that there is a precedent for cutting larger live trees in SEKI around monarch sequoias is not supported by statements or past actions of the NPS. Moreover, the NPS fuel specialist told us that these treatments, which have been in place for decades, are effective in reducing stand replacement wildfires that may threaten giant sequoias under most fire weather conditions. If these prescription work in the directly adjacent park, they will also work in the Monument's Indian Basin, Bearskin, and Landslide groves.

Felling and removing these large live trees as commercial timber is not necessary and creates a perverse economic incentive to pay for project implementation, it undermines the ecological restoration goals of the project, and it calls into question the Forest Services' motives in proposing such activities. For those reasons, the Forest Service should stick to its 12 inch diameter limit as its preferred action and should not amend the GSNM Plan for this project. If these limited treatments work effectively on the adjacent area in SEKI, they should also work in the Monument.

3. The Forest Service must consider and analyze a proposed alternative without amending the GSNM Plan.

Because the number of monarch sequoias in these smaller groves are limited, we believe that the Forest Service can address the issue of ladder fuels without plan amendment and without cutting trees greater than 12 inches in diameter. As we discussed in the field trip (and confirmed by SEKI's fuel management plan), it should be possible to limb up any larger trees that are close to

a monarch sequoia above the expected flame heights expected from ground fuels, or up to 6-8 feet, similar to what NPS now does in SEKI.

Moreover, during a wind-driven crown fire event, it is unlikely that the removal of large trees adjacent to monarch sequoias will prevent the ignition of the crowns of the monarch, and so planning for more moderate fire events precludes the need to do more than limbing up the adjacent larger trees.

The current proposal also suggests the removal of "large down material which would otherwise burn for long duration and damage sequoia (30 inch dbh or greater) roots during prescribed burning or a wildfire …." Scoping Letter at 5. But rather than removing this very important large woody material that serves as wildlife habitat and helps retain soil moisture, we suggest that the Forest Service simply move these large logs with "tracked skidders" "at least 5 feet outside the dripline of sequoias," similar to its proposal for burn piles, so they won't damage the sequoia's roots.

According to the NPS fuels specialist and the Big Stump Grove Project, SEKI only treats downed logs up to 18 inches in diameter, which should also guide the Hume Basin Project:

- Nearby dead and down logs and additional woody material up to 18 inches in diameter will be gathered, bucked, and piled.
- Logs larger than 18 inches (DBH) will be limbed. Limbs will be piled along with other woody material.

Exhibit 1, p. 6. That project moved burn piles and large logs to 30 feet from giant sequoias. *Id.*, p. 7. The Forest Service should adopt those same standards for projects in giant sequoia groves in the Monument.

Moreover, since removal of these large logs is not clearly needed to address the issue, and the removal of cull material is likely not feasible, such an alternative should be the preferred one.

4. <u>The Forest Service proposed amendment to the GSNM Plan to fell and remove large live trees over 20 inches in diameter in or near aspen groves without a diameter limit would be harmful and is unnecessary.</u>

In addition, the proposal suggests a plan amendment for aspen groves "if stand exams show there is a need to cut or remove live conifers larger than 20 inches dbh." p. 4.

During the field trip, the Forest Service described this proposal to remove trees near the aspen grove as a clearcut of essentially all non-aspen trees in the riparian area out to the point where there are or could be any remaining aspen sprouts. To accomplish this clearcut, the Forest Service would have to cut and remove trees without a diameter limit, including trees greater than 30 inches in diameter, which would likely be hundreds of years old, likely older than when logging first began in this area of the Sequoia National Forest.

This heavy-handed approach would be extremely harmful, unnecessary, and its effectiveness is likely unproven or highly uncertain. During the field trip, the Forest Service could not identify any previous project in which it successfully used this approach to restore an aspen grove. Due to this unproven effectiveness anywhere else in the Sierras with regard to aspen restoration, this approach is highly uncertain with unknown risks, and it would also set a precedent for this type of action. These NEPA intensity factors suggest significant effects and would therefore also require the Forest Service to prepare an EIS.

The GSNM Plan's decision tree requires the Forest Service to use prescribed fire first before it resorts to mechanical treatments with or without removal. During the field trip, the Forest Service admitted that it could accomplish the aspen restoration without clearcutting and removing all the large riparian conifer trees, and therefore a fire-based alternative should be the preferred action. To accomplish this fire-based restoration, the Forest Service suggested that it only needs to provide sufficient ground fuel for the fire to produce enough fire severity for the treatment, which could be accomplished by felling smaller trees as fuel for the burn. Because the restoration area is close to a group camping area, most of the ground fuel has been gathered for firewood, and the Forest Service suggested this is why some small tree felling may be necessary for this approach.

The complication here is the location of the proposed aspen restoration area to the group camp, which would likely no longer be safe to operate near the prescribed burn. Therefore the Forest Service must make a difficult choice if it wants to follow the GSNM Plan, which requires the Forest Service to use burning to implement restoration activities of this type if it can be done and which it admits can be done. To follow the spirit and letter of the GSNM Plan, if the Forest Service prioritizes aspen restoration over recreation use in this area, it is likely that it can no longer operate the group camp in that location for the foreseeable future. That is likely the case, even if it continues to pursue the "clearcut" alternative, unless it chooses the no action alternative.

5. <u>The Forest Service must propose a burning alternative as its preferred method to restore the aspen groves</u>.

Because the GSNM Plan requires a tiered approach to restoration by considering prescribed fire before mechanical treatments, and because a fire-based alternative is likely to be effective in helping restore the aspen groves, the Forest Service must include that fire-based alternative as its preferred action and mechanical treatment as a less-preferred action. To do so, the Forest Service must consider temporarily closing (for a few years), permanently closing, or permanently relocating the group camp, as discussed above. These alternatives should be disclosed in a new scoping notice for the proposal, since these options need input from the public.

6. <u>The alternatives must account for climate impacts regarding carbon sequestration of aspen v. conifers.</u>

During our field trip, the Forest Service agreed that there could be effects from the action with regards to changes in carbon release and sequestration from removing large conifers and allowing aspens to recover in their place. It agreed to study the differences in these approaches

and whether aspens or conifers sequestered more or less carbon in the long-term. We look forward to this analysis, which should be used to inform a decision on whether or not to proceed with aspen restoration by removing large conifers.

7. The need for grove inventories and grove-specific fuel management plans for the Indian Basin, Bearskin, and Landslide Grove before proceeding with the Hume Basin Project.

One of our colleagues, representing the Sierra Club, has not received any information from the Forest Service regarding grove inventories or grove-specific fuel load reduction plans, so we must assume at this point that these inventories and plans do not exist for the Indian Basin, Bearskin, and Landslide Groves. Without these inventories and plans, the Forest Service cannot adequately restore or protect these groves in compliance with the GSNM Plan and the previous agreements reached with parties to the Mediated Settlement Agreement (MSA), which included Sierra Club as a party.

According to the GSNM Plan,

> The MSA required an approved fuel load reduction plan to use mechanical treatment methods in giant sequoia groves. The Black Mountain Giant Sequoia Grove Fuel Load Reduction Evaluation (2008) was developed to meet this requirement. This evaluation can be used as a template for future sequoia grove fuel reduction plans.
>
> Each fuel load reduction plan will include a description of existing conditions and the need for treatment within the groves as well as the area surrounding the groves. As displayed in the Black Mountain Giant Sequoia Grove Fuel Reduction Evaluation, the following condition information and data should be included in each sequoia grove plan.
>
> Fire history
> Fire return interval departure (FRID)
> Fire behavior
> Fuel loading (current grove inventories)
> Fuel treatment goals
>
> The most recent inventories of fuel load will be used to develop each grove's fuel load reduction plan.

GSNM Plan, p. 51. Moreover, the Plan's standards only allow mechanical entry of the groves if there is an approved fuel load reduction plan:

> Restrict mechanical entry and vegetation management within grove administrative boundaries. The following mechanical/motorized uses will be permitted within the grove boundary line:
> …
> b. Management in accordance with approved fuel load reduction plans, where clearly needed for ecological restoration and maintenance or public safety,

GSNM Plan, p. 85; *see id.*, p. 86 ("Use the most recent inventories of fuel load to develop a fuel load reduction plan for each giant sequoia grove (within its administrative boundaries.)."); *see also id.*, p. 45 ("As part of the fuel load reduction plan for each giant sequoia grove, emphasize the protection of: *Large giant sequoia trees *Large trees of other species, including pines, red firs, incense cedars, and black oaks.").

As we noted above the GSNM Plan requires that the fuel load reduction plan for each grove "emphasizes the protection of … large trees of other species…." which strongly suggests that the Forest Service's removal of large ladder fuels next to giant sequoias is inconsistent with this plan standard.

Also, the Plan states that, while "fieldwork for these [grove] inventories and data analysis have been completed, providing better site-specific information on fuel loading, giant sequoia regeneration, and large tree abundance" (GSNM Plan, p. 51), even if that statement were true, it has been 10 years since those inventories, and current grove inventories are necessary to ensure the fuel load reduction plans are sufficient and in compliance with NEPA's data requirements. It would be legally insufficient and unreasonable to rely on grove inventories that are at least 10 years old.

So, in order to comply with both the GSNM Plan and NEPA, the Forest Service must present current grove inventories and a grove-specific fuel reduction plan before it can proceed with the any activities in the Indian Basin, Bearskin, and Landslide Groves.

8. <u>Fisher issues related to critical habitat and disturbance, and preparation of an alternative that considers the entire Hume Basin as critical habitat.</u>

The U.S. Fish and Wildlife Service will be considering the designation of critical habitat for the endangered Southern Sierra Nevada Pacific fisher in the next few months, and a comment period for input regarding the designation is currently open. The Hume Basin project is considered core fisher denning habitat and constitutes much of the remaining unburned core habitat left in the Monument and adjoining SEKI (after the Rough and more recent KNP Complex Fires). Given that this unburned area is now likely more important as fisher denning habitat, we believe the entire Hume Basin should be designated as critical habitat for the fisher. For that reason, the Forest Service must consider the very likely possibility that the Hume Basin Project should not adversely modify the fisher's habitat in the Hume Basin, as required by the ESA. Therefore, the Forest Service must consider and analyze an alternative during its environmental analysis, which will not adversely modify the fisher's critical habitat.

9. <u>Published, peer-reviewed scientific findings suggest that thinning and fuel reduction logging are ineffective and can even increase fire severity.</u>

The study of the Creek Fire Area, which we discussed with regard to the ineffectiveness of thinning to reduce fire severity and evidence that thinning can actually increase fire severity under severe fire weather conditions, has now been peer-reviewed and published. That study "found that pre-fire snag density was not correlated with burn severity, but fuel-reduction logging was associated with higher fire severity." Hanson 2021, Summary (Exhibit 4, attached).

The project analysis must disclose this scientific finding and the scientific uncertainty and controversy surrounding thinning, fuel reduction, and fire behavior, and it must recognize that vegetation treatments, such as those proposed, could increase fire severity in the Hume Basin Project area. Based on these scientific findings, as we suggested in our previous comments, the Hume Basin Project's effects are highly uncertain and controversial, which suggests the need to prepare an EIS.

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

Sincerely,

René Voss – Attorney at Law