



Sequoia ForestKeeper

Notice of Appeal of the
Management Plan, Record of Decision, and
Final Environmental Impact Statement
for the Giant Sequoia National Monument

December 5, 2012

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December 5, 2012

By Electronic Mail and Two Copies by Certified Priority Mail

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Re: Sequoia ForestKeeper Notice of Appeal of the Management Plan, Record of Decision, and Final Environmental Impact Statement for the Giant Sequoia National Monument

Dear Chief Tidwell,

On behalf of Sequoia ForestKeeper (“SFK”), we submit the following administrative appeal of the Management Plan, Record of Decision (“ROD”), and Final Environmental Impact Statement (“FEIS”) that the United States Forest Service prepared for the Giant Sequoia National Monument (“GSNM”). SFK’s mission is to protect and restore the ecosystems of the Southern Sierra Nevada including, but not limited to, the Giant Sequoia National Monument, Sequoia National Forest and Mountain Home State Forest through monitoring, enforcement, education, and litigation.

I. NOTICE OF APPEAL

A. Appeal Provisions and Timely Submission

SFK submits this notice of appeal and associated statement of reasons in accordance with the appeal procedures “found at <http://www.fs.fed.us/emc/applit/includes/PlanAppealProceduresDuringTransition.pdf>” GSNM ROD at 24. Because this appeal has been filed within 90 days of the September 7, 2012, legal notices in the *Sacramento Bee* and *Porterville Recorder*, it is timely. *Id.*

B. This Appeal Meets the Minimum Appeal Content Requirements

This written notice of appeal filed has been filed with the Chief of the Forest, Tom Tidwell (the “reviewing officer”) because the ROD for the GSNM Management Plan and FEIS was signed by Southwest Regional Forester Randy Moore. Moreover,

- This document is a notice of appeal filed pursuant to 36 C.F.R. § 219.35, Appendix A;
- The appellant is Sequoia ForestKeeper, P.O. Box 2134, Kernville, CA 93238-2134; Telephone: (760) 376-4434 (Executive Director Ara Marderosian) and (415) 446-9027 (Attorney René Voss);
- The requester/appellant objects to the Record of Decision and the Management Plan for the Giant Sequoia National Monument and its associated Final Environmental Impact Statement;
- The decision is contained in the Record of Decision for the Giant Sequoia National Monument Management Plan, signed by Southwest Regional Forester Randy Moore (the “deciding officer”) on August 8, 2012;
- The requester/appellant provides details about those portions of the decision and associated documents to which it objects, as explained in the “Statement of Reasons” section below, which states the reasons for objecting, including issues of fact, law, regulation, or policy, and how the decision violates law, regulation, or policy;
- The requester/appellant has identified the specific changes in the decision and associated documents that the appellant seeks in its “Request for Relief” section below.

II. INCORPORATION OF PREVIOUS COMMENTS AND SCIENTIFIC STUDIES BY REFERENCE

SFK has previously submitted comments during scoping and in response to release of the Draft Environmental Impact Statement (“DEIS”) of the plan. We hereby incorporate all previous comments and exhibits in their entirety into this appeal by reference. As we noted in our DEIS Comments and again here, it is too difficult to submit (or provide individual internet links) for all of the scientific studies that the Forest Service should consider or should have considered in its analysis, but we have provided the most relevant studies referenced in our comments by posting them on the Forest Service’s Region 5 FTP site. The agency can download them from <ftp://ftp2.fs.fed.us/incoming/r5/Science>. Because these studies are on the Forest Service’s servers, they are in the Forest Service’s possession. So, they must be analyzed and included as a part of the administrative record for this appeal.

Moreover, SFK refers to Exhibits A through O in this appeal, which we will submit to the Forest Service by electronic mail but not in hard copy because those exhibits are the same as those, which have already been filed in hard copy by Sierra Club as a part of their December 5, 2012 appeal. As such, we incorporate those exhibits herein by reference.

Further, the Statement of Reasons herein refers to DEIS Comments submitted by Sierra Club. Those comments apply equally to SFK, who submitted identical comments for the record for the GSNM DEIS. As such, any references to Sierra Club DEIS comments should be taken as referring to SFK DEIS Comments.

Finally, SFK has also submitted a second appeal in coordination with Western Watersheds Project. As such, we incorporate that appeal herein by reference.

III. LEGAL FRAMEWORK

A. The Giant Sequoia National Monument Proclamation

On April 15, 2000, President Clinton established the Giant Sequoia National Monument by Proclamation, citing the “towering giant sequoias, the world’s largest trees . . . interspersed within a great belt of coniferous forest,” rare old forest wildlife such as the Pacific fisher and California spotted owl, and significant cultural and archaeological resources. Proclamation No. 7295, 65 Fed. Reg. 24095, 24097 (April 25, 2000). Recognizing the need for forest restoration after a century of logging and fire suppression, the Proclamation ordered that “[n]o portion of the Monument shall be considered to be suited for timber production” and accordingly limited the “[r]emoval of trees” to personal fuel use or “if clearly needed for ecological restoration and maintenance or public safety.” *Id.* at 24,097. The Forest Service was directed to prepare a management plan for the Monument in consultation with a Scientific Advisory Board appointed to provide scientific guidance regarding the unique ecology of the area. *Id.* at 24,098. This management plan was required to protect the objects of interest and “provides for visitor enjoyment and understanding about the scientific and historic objects in the monument, consistent with their protection.” *Id.*

The objects of interest specifically called out in the proclamation include:

- towering giant sequoias, the world’s largest trees (also the greatest concentration of giant sequoia groves in the world);
- a great belt of coniferous forest, jeweled with mountain meadows;
- bold granitic domes, spires, and plunging gorges texture the landscape;
- an exemplary number of habitats within a relatively small area;
- a diverse array of plants and animals, many of which are rare or endemic to the southern Sierra Nevada (including 200 rare plant species);

- limestone caverns and unique paleontological resources tens of thousands of years old, including many Native American traditional sites;
- plant communities ranging from low-elevation oak woodlands and chaparral to high-elevation subalpine forest;
- numerous meadows and streams that provide an interconnected web of habitat for moisture-loving species;
- mid-elevation forests dominated by massive conifers arrayed in a complex landscape mosaic;
- one of the last refugia for Pacific fisher in California; and
- habitat for great grey owl, American marten, northern goshawk, peregrine falcon, spotted owl, and a number of rare amphibians.

More specifically, the GSNM Proclamation includes certain mandates, which must predominate in the management plan over other more general uses:

General Mandates:

- [T]hat there are hereby set apart and reserved as the Giant Sequoia National Monument, for the purpose of protecting the objects identified in the above preceding paragraphs, all lands and interests in lands owned or controlled by the United States within the boundaries of the area described on the map entitled “Proposed Giant Sequoia National Monument.”
- Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national monument shall be the dominant reservation.

Scientific Guidance Mandate:

- The Secretary, in consultation with the National Academy of Sciences, shall appoint a Scientific Advisory Board to provide scientific guidance during the development of the initial management plan.

Commercial Logging and Tree Removal Prohibition Mandates:

- No portion of the monument shall be considered to be suited for timber production, and no part of the monument shall be used in a calculation or provision of a sustained yield of timber from the Sequoia National Forest.
- Removal of trees, except for personal use fuel wood, from within the monument area may take place only if clearly needed for ecological restoration and maintenance or public safety.

Restoration Mandates:

- These forests need restoration to counteract the effects of a century of fire suppression and logging.
- Outstanding opportunities exist for studying the consequences of different approaches to mitigating these conditions and restoring natural forest resilience.

Roads, Trails, and Transportation Mandates:

- Prior to issuance of the management plan, existing roads and trails may be closed or altered to protect the objects of interest in the monument, and motorized vehicle use will be permitted on trails until but not after December 31, 2000.
- No new roads or trails will be authorized within the monument except to further the purposes of the monument.
- For the purposes of protecting the objects included in the monument, motorized vehicle use will be permitted only on designated roads, and non-motorized mechanized vehicle use will be permitted only on designated roads and trails, except for emergency or authorized administrative purposes or to provide access for persons with disabilities.
- The management plan shall contain a transportation plan for the monument that provides for visitor enjoyment and understanding about the scientific and historic objects in the monument, consistent with their protection.

Withdrawal from Mineral Leasing, Acquisition, and Water Rights Mandates:

- All Federal lands and interests in lands within the boundaries of this monument are hereby appropriated and withdrawn from entry, location, selection, sale, leasing, or other disposition under the public land laws including, but not limited to, withdrawal from locating, entry, and patent under the mining laws and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument.
- Lands and interests in lands within the boundaries of the monument not owned by the United States shall be reserved as a part of the monument upon acquisition of title thereto by the United States.
- There is hereby reserved, as of the date of this proclamation and subject to valid existing rights, a quantity of water sufficient to fulfill the purposes for which this monument is established.

Courts may review agency compliance with Presidential Proclamation directives that rely on specific statutory authority. *Western Watersheds Project v. Bureau of Land Management*, 629 F. Supp. 2d 951, 967-968 (D. Az. 2009).

B. The National Environmental Policy Act

The National Environmental Policy Act (“NEPA”) is our “basic national charter for the protection of the environment.” 40 C.F.R. § 1500.1. Congress enacted NEPA “[t]o declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; [and] to enrich the understanding of the ecological systems and natural resources important to the Nation.” 42 U.S.C. § 4321.

To accomplish these purposes, NEPA requires all agencies of the federal government to prepare a “detailed statement” that discusses the environmental impacts of, and reasonable alternatives to, all “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). This statement is commonly known as an environmental impact statement (“EIS”). *See* 40 C.F.R. Part 1502.

The EIS must “provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1. This discussion must include an analysis of “direct effects,” which are “caused by the action and occur at the same time and place,” as well as “indirect effects which . . . are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8. An EIS must also consider the cumulative impacts of the proposed federal agency action together with past, present and reasonably foreseeable future actions, including all federal and non-federal activities. 40 C.F.R. § 1508.7. Furthermore, an EIS must “rigorously explore and objectively evaluate all reasonable alternatives” to the proposed project. 40 C.F.R. § 1502.14(a).

The regulations implementing NEPA also require that “[w]hen an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an [EIS] and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.” 40 C.F.R. § 1502.22. “If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the [EIS].” 40 C.F.R. § 1502.22(a). Where complete information cannot be reasonably obtained, the EIS must at least include “[a] statement that such information is incomplete or unavailable; [and] . . . a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment” 40 C.F.R. § 1502.22(b)(1), (2).

In addition, the agency must “deal with uncertainties by including within the EIS ‘a summary of existing credible scientific evidence which is relevant to evaluating the reasonable foreseeable significant adverse impacts on the human environment, and . . . the agency’s evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.’ 40 C.F.R. §§ 1502.22(b)(3), (4).” *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1033 (9th Cir. 2006).

NEPA requires the Forest Service to assess all impacts of the proposed Monument Plan. 40 C.F.R. §§ 1502.14 & 1502.16. Specifically, the EIS must

“present the environmental impacts of the proposal and the alternatives in a comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public.” 40 C.F.R. § 1502.14. In order to adequately assess the environmental impacts of the proposed action and of reasonable alternatives to the proposed action (including, but not limited to, the proposed action plus additional mitigation measures), the Forest Service must assess the direct, indirect, and cumulative impacts that the proposed action and each alternative would have. 40 C.F.R. § 1502.16.

NEPA requires that “an EIS must be organized and written so as to be readily understandable by governmental decisionmakers and by interested non-professional laypersons likely to be affected by actions taken under the EIS.” *Or. Env'tl. Council v. Kunzman*, 817 F.2d 484, 493 (9th Cir.1987); *see* 40 C.F.R. § 1502.8. In other words, it must be comprehensible.

NEPA requires that “[a]gencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.” 40 C.F.R. § 1502.24 (“Methodology and scientific accuracy”). “NEPA’s implementing regulations require agencies to ‘identify any methodologies used and [] make explicit reference by footnote to the scientific and other sources relied upon for conclusions’ used in any EIS statement.” *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150 (9th Cir. 1998) (quoting 40 C.F.R. § 1502.24). NEPA does not permit an agency to rely on its expert’s conclusions and opinions without providing both supporting analysis and data to the public. *Id.*

Moreover, if the Forest Service provides inaccurate or highly misleading scientific data or misrepresents the data provided, then it violates NEPA. *Earth Island Inst. v. U.S. Forest Serv.*, 442 F.3d 1147, 1166-1167 (9th Cir. 2006). If an agency has failed to make a reasoned decision based on an evaluation of the evidence, the Court may properly conclude that an agency had acted arbitrarily and capriciously. *Earth Island Inst. v. Morse*, No. 08-01897, 2009 WL 2423478 (E.D.Cal.2009) (holding that the Forest Service failed insure the professional integrity, including scientific integrity of the analysis when it misrepresented the findings and data in a scientific study); *see also Earth Island Institute*, 442 F.3d at 1167 (holding that either misunderstanding the data from a study or misrepresenting the data violated NEPA’s requirements).

“The procedures prescribed both in NEPA and the implementing regulations are to be strictly interpreted ‘to the fullest extent possible’ in accord with the policies embedded in the Act.” *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1166 (9th Cir.2003) (quoting 42 U.S.C. § 4332(1)). “[G]rudging, *pro forma* compliance will not do.” *Lathan v. Brinegar*, 506 F.2d 677, 693 (9th Cir. 1974).

C. Other Laws

1. The National Forest Management Act (NFMA)

The NFMA provides for a two-step process for forest planning. First, it requires the Forest Service to develop, maintain, and revise “land and resource management plans” (“Forest Plans”) for each National Forest. 16 U.S.C. § 1604(a). Forest Plans guide natural resource management activities forest-wide, setting standards, management area goals and objectives, and monitoring and evaluation requirements. Second, once a Forest Plan has been adopted, the Forest Service implements the Forest Plan through site-specific actions, including resource plans and permits, contracts, and other instruments for the use and occupancy of National Forest System lands, which must be consistent with the Forest Plan. 16 U.S.C. § 1604(i). These include, among others, activities such as fuels treatment, restoration, and other projects that will implement in the GSNM plan, which is an amendment of the 1988 Sequoia Forest Plan, as revised by the 2001 and 2004 Sierra Nevada Forest Plan Amendments (“2001 Framework” and “2004 Framework” amendments).

In addition, the NFMA requires the USFS to “provide for diversity of plant and animal communities.” 16 U.S.C. § 1604(g)(3)(B).

2. The Administrative Procedure Act (APA)

Under the APA, Courts “shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). An agency’s decision is arbitrary and capricious if the agency:

relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Vehicle Mfrs. Ass’n of United States, Inc. v. State Farm Mut. Automobile Ins. Co., 463 U.S. 29, 43 (1983).

In reviewing agency actions, Courts are charged with conducting a “searching and careful” review of the challenged agency decision, to ensure that a rational connection between the facts found and the decision made has been articulated. *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 361 F.3d 1108, 1118 (9th Cir. 2004), amended by 402 F.3d 846 (9th Cir. 2005). In conducting this careful inquiry to

ensure the agency “engaged in reasoned decisionmaking,” the Ninth Circuit recognizes:

[a] disparity between the depth of our review and the ultimate scope of that review: Although the ultimate scope may be narrow, the depth must be sufficient for us to be able to comprehend the agency’s handling of the evidence cited or relied upon . . . [A]lthough data interpretation and analysis are functions that often lie within an agency’s realm of expertise, it is our duty to review those functions to ascertain whether the agency’s actions were complete, reasoned, and adequately explained. The mere fact that an agency is operating in a field of its expertise does not excuse us from our customary review responsibilities . . . [W]here the agency’s reasoning is irrational, unclear, or not supported by the data it purports to interpret, we must disapprove the agency’s action.

NW Coalition for Alternatives to Pesticides v. U.S. Env’tl. Prot. Agency, 544 F.3d 1043, 1052 n.7 (9th Cir. 2008).

Courts “judge the propriety of such action solely by the grounds invoked by the agency” at the time it made its decision. *SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947).

IV. STATEMENT OF REASONS

Failure to comply with a Monument Proclamation, NEPA, and NFMA are reviewed under the APA. Courts find APA violations when “agency action, findings, and conclusions [are] . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). An agency’s decision is arbitrary and capricious if the agency “entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicle Mfrs. Ass’n of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 43 (1983).

Moreover, “where the agency’s reasoning is irrational, unclear, or not supported by the data it purports to interpret, [courts] must disapprove the agency’s action.” *NW Coalition for Alternatives to Pesticides v. U.S. Env’tl. Prot. Agency*, 544 F.3d 1043, 1052 n.7 (9th Cir. 2008).

A. FAILURE TO COMPLY WITH THE GSNM PROCLAMATION

The GSNM Management Plan fails to meet many of the mandates listed in the GSNM Proclamation. *See Western Watersheds Project v. Bureau of Land*

Management, 629 F. Supp. 2d 951, 967-969 (D. Az. 2009) (courts may review agency compliance with Presidential Proclamation directives that rely on specific statutory authority).

1. Tree Removal Criteria Fail to Comply with GSNM Proclamation

The GSNM Proclamation states that “No portion of the monument shall be considered to be suited for timber production, and no part of the monument shall be used in a calculation or provision of a sustained yield of timber from the Sequoia National Forest.” Moreover, “Removal of trees, except for personal use fuel wood, from within the monument area may take place only if clearly needed for ecological restoration and maintenance or public safety.”

a. Criteria for tree removal are inadequate and incomplete to comply with “clearly needed” requirement.

The Proclamation’s “clearly needed” language suggests a strong presumption against removal, and the criteria for removal should state unambiguously that tree removal should be rare and the exception, and that most trees should be retained in the monument as much as possible. While we agree with the Forest Service’s interpretation that “tree removal” means to take out of the GSNM by burning or mechanical means (GSNM Plan, p. 78), criteria for tree removal have been written to be permissive when they should be restrictive.

More specifically, the tree removal criteria are too vague and amount to unenforceable standards, which would allow for their arbitrary application to projects. *See* DellaSala Report (Exhibit A), pp. 34-36. The vagueness of these criteria, rather than restrictive, make them permissive and subject to abuse, so that managers can easily remove trees by mechanical means from the monument when they should instead be either retained on site, relocated within the monument, or removed by burning to assist with ecological restoration. All of these latter options should be explored first before the Forest Service considers any mechanical removal.

The first criterion, “R1 – Protection of Objects of Interest,” allows removal “if keeping one or more trees on site would cause unacceptable fuel accumulation and fire severity effects” GSNM Plan, p. 79. But the criterion does not specify what constitutes an unacceptable fuel accumulation or unacceptable fire severity effects necessary for removal of one or more trees and is therefore arbitrary. *See* DellaSala Report (Ex. A), p. 34. In fact, the entire plan is vague with respect to what constitutes unacceptable fuel levels, and the plan provides no numeric standard (such as tons per acre) of the amount of surface or ladder fuels that could result in unacceptable fire behavior if fire were reintroduced or if a wildfire were to burn through a forest stand. Moreover, the criterion does not specify the manner of

removal and under what conditions removal by broadcast or pile burning would be preferable to mechanical removal of trees as biomass or other byproduct, including commercial timber. *See* GSNM Plan, p. 79 (“removal may be in the form of ... products such as wood chips, lumber, or other wood products”). If removal is necessary, any project that considers tree removal to protect objects of interest should always be designed with a burning preference over mechanical removal, consistent with the “Decision Tree for Site-Specific Projects in the Monument,” which makes “removal” the last resort. *See* GSNM Plan, pp. 80-83 & Figure 4. For those reasons, this criterion is inadequate.

The second criterion, “R2 – Resiliency,” allows removal “if keeping one or more trees on site would create a vector for disease infestations at levels higher than currently known endemic outbreaks.” GSNM Plan, p. 79. This criterion has little, if any, legitimacy and should be discarded in its entirety. It is a remnant of management for timber commodities and cannot be considered sound ecological management. Initially, it is unclear how the agency will determine if the retention of a single tree would somehow trigger a pandemic, and there is no science to support such a criterion. *See* DellaSala Report (Ex. A), p. 35. Moreover, it is unclear how this criterion should be applied to a tree after it has been felled and lays on the ground. We know of no vectors of disease or insect infestation from downed woody material that would trigger a known endemic outbreak. *Id.* Rather down woody material is an essential component of a forest ecosystem that breaks down with the assistance of insects and fungi (aka. disease agents). Further, there is nothing in the GSNM Proclamation that can be inferred that may allow tree removal to create “resiliency” to endemic insect or disease infestations, which should always be considered as natural disturbance agents that are actually beneficial to the forest. In managing for biological diversity and ecological restoration, insects and fungi are necessary components of natural processes and should be encouraged rather than suppressed. As Dr. Ed Royce explains:

The words resilience or resiliency are never stated in the Proclamation as a management objective. The Forest Service introduces resilience as an objective by quoting a section of the Forest Service Manual and a Region 5 policy document dealing with restoration. As a general objective, the inclusion of resilience would appear to be reasonable -- perhaps even welcome -- but felling large trees to achieve it is not. Yet resilience is used to justify this felling.

The concept, explained in more detail in chapter 4 of the FEIS, is to make each tree in the forest able to withstand stresses such as drought, climate change, or insect attack. This is to be accomplished by removing neighboring tree(s) that might compete with the tree to be protected -- reducing competition for resources such as water or light.

Nature has an alternative solution to the problem of "excess" competition -- the trees compete until one of them dies. The end result for the natural process is similar to that for the managed process, except that it may take longer to get to the final result. Perpetuation of the forest does not require the perpetuation of all of its trees. The natural process may leave a few standing snags that would not be present under the managed process, but they will be welcomed by wildlife. This is what one should expect in a forest that emphasizes the restoration of natural processes.

Royce Report (Ex. B), p. 5.

Moreover, the only mention of “resilience” in the Proclamation relates to resilience from logging or to recover from conditions brought on from fire suppression and the potential for severe wildfires: “Outstanding opportunities exist for studying forest *resilience* to large-scale logging and the consequences of different approaches to forest restoration” and “Outstanding opportunities exist for studying the consequences of different approaches to mitigating these conditions and restoring natural forest resilience.” Resilience in this context does not mean resiliency to native insects and diseases, which are ecologically beneficial. Instead, the Forest Service turns this concept on its head, suggesting logging for the purpose of restoring resiliency, thereby enabling logging to restore resilience from logging.

Fungi and insects, the agents of endemic outbreaks of insects and disease infestations (aka. natural processes), are actually mentioned in the Proclamation as “objects of interest” representative of a “spectrum of interconnected vegetation types provid[ing] essential habitat for wildlife, ranging from large, charismatic animals to less visible and less familiar forms of life, such as *fungi and insects*.” For those reasons, endemic or native fungi and insects should be protected and should not be suppressed under the guise of management for resiliency. This criterion should be removed.

Third, “R3. Public Safety,” allows removal “if keeping one or more trees on site would create a public safety hazard or attractive nuisance. Forest Service policy is to eliminate safety hazards from developed recreation sites, including trees or tree limbs identified as hazardous (FSM 2332).” GSNM Plan, p. 79. This criterion must be applied only in developed recreation sites and not along roads or trails. Moreover, as discussed before, these trees should first be considered for relocation to other parts of the GSNM where large down logs are needed for wildlife, or they should be considered for other purposes in the monument before being considered for mechanical removal from the monument. While this criterion has been improved because of its restriction to developed recreation sites, the “attractive nuisance” criterion is still absurd. Under this criteria any tree would pose a public safety concern because trees are attractive to children for climbing, who could then

fall from the tree and injury themselves. Under such rationale, the Forest Service could justify removing any tree, whether standing or down to get rid of these attractive nuisances.

The Forest Service should correct this deficiency by unambiguously articulating when a “clear need” exists for tree removal. This limitation should not be subjective (i.e., it should be based on explicit metrics) and be capable of verification through monitoring. SFK believes that a clear need only exists when the agency issues a site-specific finding for each tree that no other alternative is available to meet the site specific restoration and safety goals and that this site-specific finding is grounded in science. As we stressed in our DEIS comments:

“[T]he Forest Service may not remove trees from the Monument area without:

- a. A finding that it has no other alternative available for accomplishing site specific restoration or safety goals.
- b. Scientific verification that tree removal will accomplish the goals in question.
- c. A separate finding of “clear need” specific to the Monument, based on a factual inquiry concerning the alternatives to and efficacy of any such undertaking.
- d. Additionally, the Forest Service must consider the effects of that management on the Monument's specific purposes, primarily any effects on the objects of scientific interest the Monument was designed to protect. The Forest Service must find that the health and protection of these species and resources are being advanced by the proposed project.
- e. Removal of Hazard Trees: If a structure or human being is about to be crushed by a leaning tree, that tree may be felled. Removal, however, must be guided by new standards that comply with habitat needs for wildlife. Furthermore, the Forest Service must identify each tree to be felled or removed and the reason for removal.
- f. The plan should establish peer-reviewed, scientific criteria to determine what areas are subject to hazard tree removal.”

Sierra Club DEIS Comments, pp. 109-110. The GSNM Plan has not addressed these concerns. For the foregoing reasons, the tree removal criteria are inadequate.

- b. Criteria do not include adequate priorities or hierarchies for first retaining trees in the monument before removal can be considered.**

While the GSNM Plan now includes a decision tree for site-specific projects (GSNM Plan, p. 81, Figure 4), there is no equivalent decision tree or hierarchy for tree removal that prioritizes retention of trees in the GSNM under the “clearly

needed” requirement. In our comments on the DEIS, we stressed the need for retaining trees in the GSNM, either as snags or as large down logs, for wildlife, thus for ecological restoration. *See* Sierra Club DEIS Comments, pp. 110-115. Not only is there a pervasive deficiency of large snags in the Sierra Nevada, Pacific fishers need large amounts of down woody material as habitat in the GSNM to assist in their recovery.

We applaud the Forest Service for separating its decisions with regard to felling from those for removal, but it is still impossible for the GSNM Plan to meet the “clearly needed” requirement without a hierarchy or decision tree that favors retention over removal, similar to what we suggested in our DEIS comments. *See* Sierra Club DEIS Comments, pp. 113-114; *see also* Citizens’ Park Alternative, pp. 17-19. The overall tree removal criteria should always consider the need for woody material in other parts of the monument before it would be removed by burning or mechanical means.

2. Tree Felling Criteria Fail to Comply with GSNM Proclamation

a. Criteria for tree felling are inadequate and incomplete to comply with “clearly needed” requirement.

The Proclamation’s “clearly needed” language also suggests a strong presumption against felling, and the criteria for removal should state unambiguously that tree felling should be rare and the exception, and that most trees should remain standing, whether live, dead, or killed, as much as possible. Criteria in the GSNM Plan for tree felling have been written to be permissive when they should be restrictive.

More specifically, the tree felling criteria are too vague and amount to unenforceable standards, which would allow for their arbitrary application to projects. *See* DellaSala Report (Exhibit A), pp. 35-36. The vagueness of these criteria, rather than restrictive, make them permissive and subject to abuse, so that managers can easily fell trees when they should instead be either left standing, as is, limbed from below to mitigate against fire reaching the forest canopy, or turned into snags to assist with ecological restoration. All of these latter option should be explored first before the Forest Service considers any mechanical removal.

The first criterion, “F1 – Resiliency,” allows felling “if maintaining one or more standing trees on a site would deplete moisture, light, or nutritional resources critical to the health and survival of the plant community or forest.” GSNM Plan, p. 79-80. Initially, it is unclear how the agency will determine if the retention of a single tree would somehow deplete moisture, light, or nutritional resources for the plant community or forest at any level. Moreover, “how will the Forest Service determine whether a single tree will meet this criterion and what does tree or forest

health really mean?” DellaSala Report (Exhibit A), p. 35. This criterion invites abuse by managers eager to fell and then remove trees. The Forest Service cannot legitimately make this kind of determination. For that reason, this criterion should be removed in its entirety.

As it applies to most of the felling criteria, other options have not been considered or included in the criteria, including killing any trees by girdling, especially larger trees, if they are deemed to potentially “deplete moisture, light, or nutritional resources.” These standing dead trees will serve as valuable future snags for wildlife needs and will no longer use moisture or nutritional resources when dead. Moreover, when the tree loses its leaves and limbs, it will no longer “deplete ... light ... resources.” As Dr. Chad Hanson explained in his declaration in support of Sierra Club’s GSNM DEIS comments with regard to both felling and removal:

There is currently a pervasive deficiency of large snags in California’s forests, with less than 2 large snags per acre presently existing in every region, including the Sierra Nevada, according to a comprehensive analysis conducted by Forest Service scientists in a recently-released report (Christensen et al. 2008).

Nowhere does the DEIS explain why, ecologically, a 19-inch-diameter tree, for example, would need to be “removed” from the ecosystem, as opposed to being converted into a large snag or large downed log. Nowhere does the DEIS explain why, ecologically, a 19-inch-diameter stump would be more ecologically valuable than a 19-inch-diameter live tree, snag, or downed log; or, stated differently, why a 19-inch-diameter tree would be more ecologically valuable to the GSNM forest ecosystem on the bed of a log truck headed for the timber mill than it would be as a live tree contributing to canopy cover for fishers, or a large snag providing prey habitat for fishers and spotted owls or nesting habitat for Black-backed woodpeckers.

Dr. Hanson Declaration (Exhibit E), ¶ 10.

The second criterion, “F2 – Regeneration” allows felling “if maintaining one or more standing trees on a site would adversely affect the regeneration, longevity, or growth of giant sequoias and other desired species.” GSNM Plan, p. 80. Again, “how will the Forest Service determine whether a **single tree** will meet this criterion?” DellaSala Report (Exhibit A), p. 35. This criterion also invites abuse by managers eager to fell and then remove trees. This criterion should be reworked to only address “regeneration” of giant sequoias and remove the language “and other desired species” because the GSNM Proclamation only proscribes this goal because it does not include other tree species in the statement that “a century of fire

suppression has led to an unprecedented failure in sequoia reproduction in otherwise undisturbed groves.”

Moreover, there can be no legitimate basis that agency managers could actually influence “longevity, or growth of giant sequoias.” This language should be eliminated from the criterion. Giant sequoias can live up to 3000 years and their longevity is only influenced by their ability to remain standing. Logging that opens the canopy, roads, and heavy equipment all influence longevity by providing a vector for windstorms to blow over the trees or weaken their root systems to make them more susceptible to falling. Giant sequoia growth, is addressed in the resiliency criterion above, can be accomplished through killing (girdling) trees that may influence sequoia growth by depleting the tree of moisture, light, or nutritional resources.

The third criterion, “F3 – Heterogeneity” allows tree felling “if maintaining one or more standing trees on a site would adversely affect the desired diversity or structure of a stand or forest.” GSNM Plan, p. 80. Again, “how will the Forest Service determine whether a **single tree** will meet this criterion and at what scale (canopy gap, stand, landscape)?” DellaSala Report (Exhibit A), p. 35. This criterion also invites abuse by managers eager to fell and then remove trees because the criterion does not define what “desired diversity or structure of a stand or forest” means. Moreover, as discussed below, heterogeneity is best accomplished by reintroducing and promoting natural process, including fire, insects, and disease. Fire, in particular, with its patchiness effect can provide heterogeneity better than any plan for mechanical treatment. *See* Royce Report (Ex. B), p. 6.

The fourth criterion, “F4 – Public Safety” allows tree felling “if maintaining one or more standing trees on site would create a public safety hazard.” While this would appear to be a legitimate reason for felling, the criterion is incomplete and the entire Hazard Tree program for the GSNM needs to be revisited, as we discussed in our DEIS comments and in the section below.

Finally, the fifth criterion, “F5 – Recreation and Administrative Sites” allows tree felling for “recreation or administrative site development and maintenance, scenic vistas, and road access and parking for these sites.” We believe that this criterion is likely to be rarely used because any recreation or administrative sites, including any new roads or trails, can only be built “to further the purposes of the monument,” and those purposes include the protection of the objects of interest. Failure to protect the objects of interest in the monument by felling trees (which are objects of interest) for recreation or administrative sites would therefore violate the GSNM proclamation.

- b. Felling criteria do not include adequate priorities or hierarchies for first leaving trees standing before felling them.**

While the GSNM Plan now includes a decision tree for site-specific projects (GSNM Plan, p. 81, Figure 4), there is no equivalent decision tree or hierarchy for tree felling that prioritizes retention of trees under the “clearly needed” requirement.

First, if the reason for the project is to restore fire or to reduce fuels, the Forest Service must initially determine whether it can safely reintroduce fire without felling ladder fuel trees and instead “limb” these trees up to the desired level, so that flames will not travel into the canopy.

Next, before a tree is felled for ecological restoration, whether for resiliency, regeneration, or heterogeneity, the Forest Service must also determine whether the tree is better left standing as a snag for wildlife. In our comments on the DEIS, we stressed the need for leaving trees standing as snags for wildlife and thus for ecological restoration. *See* Sierra Club DEIS Comments, pp. 110-112. There is a pervasive deficiency of large snags in the Sierra Nevada, and as previously discussed, it would be ecologically preferable to create a snag instead of felling a tree over 15 inches in diameter. Again, as Dr. Chad Hanson explains:

The scientific literature indicates that California spotted owls should have at least 20 square feet per acre of large snag (>15 inches in diameter) basal area per acre, which equates to about 6-8 large snags per acre at least (Verner et al. 1992). The scientific literature indicates that Pacific fishers select areas with 31 square feet of medium/large snag basal area per acre (two and a half times higher than the snag basal area at random sites), and that medium/large snag basal area is one of the two most important factors in predicting occupancy at fisher rest sites (Purcell et al. 2009).

Indeed, page 573 of Appendix I of Volume 2 of the DEIS provides data on current snag density in the giant sequoia groves alone within the GSNM (these groves comprise only a minor portion of the total area of the GSNM), and shows that the current snag basal area in the sequoia groves is only 17 square feet per acre—and that includes basal area from small snags (generally less than 10 inches in diameter) that are little used by imperiled wildlife species or their prey.

Dr. Hanson Declaration, ¶ 12.

3. The 20 inch Diameter Limit for Tree Felling is Arbitrary and Unsupported by Science

The Forest Service admits that its diameter limit of 20 inches is unsupported by the scientific literature. While there is no scientific support for a 20 inch diameter limit, as admitted, the statement in the FEIS that “a scientific basis for the use of diameter limits does not exist” (FEIS, Appx. L, p. 569 – Response to Comments) is highly misleading because the scientific literature does support lower diameter limits. And the statement that “Diameter limits were included in response to public comment and concerns” (*id.*), illustrates the arbitrary nature of choosing 20 inch diameter limits over scientifically-supported lower diameter limits.

a. The FEIS and Plan provide no rational explanation for setting a diameter limit above 8 inches, found to be adequate by neighboring Sequoia and Kings Canyon National Parks (SEKI)

In the DEIS, the Forest Service admits that “In practice, cutting trees up to and including 8” in diameter has proven effective in fuels reduction in SEKI.” DEIS, p. 90, Table 9, n. 1; *see* FEIS, p. 412 (“according to SEKI personnel, there is rarely a need to cut a tree over eight inches in diameter.”). But there is no explanation anywhere in the Record of Decision, FEIS, or GSNM Plan for why an 8 inch diameter limit could not prove effective in the GSNM as well.

As Dr. Ed Royce explains:

If [] we rely on prescribed burns (under benign weather conditions) to reduce the present fuel load, good results can be obtained in many cases, and there is abundant scientific research that supports this approach. However, this research also finds that in some cases surface fuel loads and the presence of ladder fuels are too great to carry this out without the result being a locally undesired crown fire. In these cases [] the research indicates that best results are obtained with mechanical treatment of the fuels followed by prescribed burning. Mainly this treatment consists of felling smaller trees that may constitute ladder fuels and the reduction of standing brush. Following this practice, Sequoia Kings Canyon National Park (SEKI) fells trees up to eight inches dbh prior to burning. The research also indicates that using mechanical treatment alone [] does not adequately mimic natural processes that occurred in the pre-EuroAmeican forest.

Royce Report (Ex. B), p. 2.

Dr. Dominick DellaSala also explains:

[T]he agency’s preferred alternative needs improvement on diameter limits in order to be based on best science of giant sequoia regeneration and fire history in the area. For instance, Martinson and Omni (2003)

[discussed further below] provide a meta-analysis on fuel treatment efficacy concluding that treatments are most effective when the *smallest* trees are removed. Therefore, the selection of a 20 in cap is not the smallest tree removal cap compared to Alternatives C and D that may better meet the science on fuel reductions as described by Martinson and Omni (2003). Removal of smaller trees also would better meet the intent of the proclamation that directs the Forest Service to consider “*opportunity to understand the **consequences of different approaches** to forest restoration.*” Thus, the Forest Service should adopt the tree removal standards of Martinson and Omni (2003) to better meet the monument’s proclamation: “*removal of trees, except for personal use fuel wood, from within the monument area may take place only if **clearly** (emphasis added) needed for ecological restoration and maintenance of public safety*” (proclamation p. 24097).

DellaSala Report (Ex. A), p. 33.

Choosing a higher diameter than necessary and proven effective for fuel reduction is therefore arbitrary and capricious.

b. Accepted scientific findings state that 8-10 inch diameter limits are adequate for fuel reduction to avert fire risk

As explained in comments submitted by the John Muir Project of Earth Island Institute (JMP),

[S]cientific studies have found that precommercial thinning of sapling and pole-sized trees only (up to 8-10 inches in diameter) effectively reduces fire severity, and to the extent that the DEIS implies otherwise, this is a misrepresentation of the current science. See, for example:

- a) Omi, P.N., and E.J. Martinson. 2002. Effects of fuels treatment on wildfire severity. Final report. Joint Fire Science Program Governing Board, Western Forest Fire Research Center, Colorado State University, Fort Collins, CO. Available from <http://www.cnr.colostate.edu/frws/research/westfire/finalreport.pdf> (found that precommercial thinning of trees under 8 to 10 inches in diameter reduced potential for severe fire (email communication with the authors confirmed that trees removed were of this small size class)). More specifically, the Omi and Martinson (2002) study, found that precommercial thinning reduced stand damage (a measure of fire severity generally related to stand mortality) in both of the two thinned study sites, Cerro Grande and Hi Meadow (the authors

reported that the Hi Meadow site was marginally significant, $p < .1$, perhaps due to small sample size), each with several plots.

- b) Martinson, E.J., and P.N. Omi. 2003. Performance of fuel treatments subjected to wildfires. USDA Forest Service Proceedings RMRS-P-29 (found that non-commercial thinning of submerchantable-sized trees, generally followed by slash burning or removal, in several areas across the western U.S. greatly reduced fire severity, and that this result held true regardless of post-thinning basal area density).
- c) Strom, B.A., and P.Z. Fule. 2007. Pre-wildfire fuel treatments affect long-term ponderosa pine forest dynamics. *International Journal of Wildland Fire* **16**: 128-138 (non-commercial thinning of very small trees under 20 cm dbh (8 inches dbh) in seven different sites dramatically reduced fire severity, resulting in post-fire basal area mortality of only about 28% (low severity) in non-commercially thinned areas versus post-fire basal area mortality of about 86% in untreated areas).

JMP Comments, p. 8.

- c. **The 20 inch diameter limit is not justified anywhere in the analysis for restoration, whether for fuel reduction, resiliency, or heterogeneity**

First, while restoration of areas from previous logging is clearly a mandate from the GSNM Proclamation, mechanical treatments to manage for resiliency or heterogeneity are not mentioned with respect to restoration. Those methods and definitions come from the Forest Service Manual, which includes definitions for ecological restoration and resilience (*see* FEIS, pp. 392-93) and a Forest Service management report (North et al. 2009),¹ which discusses the creation of heterogeneity using mechanical means.

Second, “Regeneration and heterogeneity are also fine objectives, but again they can be achieved by the operation of natural processes ... the re-introduction of the natural process of wildfire” Royce Report, p. 6. Although promoting heterogeneity through restoration is supported by the scientific literature, which also discusses the use of mechanical treatments followed by fire as a method (FEIS, p. 400), the primary reason for mechanical treatments is to reduce fuels so that fire can play its proper role in restoring heterogeneity. There is nothing to support the

¹ North et al. 2009 has many loopholes that could be read to encourage logging because of the report’s failure to reference science for many of the unsupported conclusions it reaches.

contention that this requires felling or removing trees over 8 inches in diameter and up to 20 inches in diameter.

Finally, as Dr. Royce points out “Chapter 3 of the FEIS [pp. 166-67] states that the Monument ecosystem is depauperate of trees in the 20-28 inch size class. The way to correct this deficiency is to leave all trees in the 8-20 inch class so that they can grow into the desired larger sizes, exactly the opposite of the proposed felling.” Royce Report (Ex. B), p. 6. As a corollary, the FEIS, p. 167, Figure 4, also points out that the vast majority of trees are in the 1-10 inch size classes, which supports the need to focus treatments by managed fire, manual, or mechanical means on those overabundant smaller diameter trees.

There is nothing anywhere in the plan that describes why trees between 8 and 20 inches must be felled or removed for restoration, fuel reduction, resiliency, or heterogeneity.

In sum, the scientific literature and past practices in the adjacent SEKI National Parks support the use of an 8 inch diameter limit for restoration, if needed to precede the reintroduction of fire or for fuel reduction purposes. But the selection of diameter limits between 8 and 20 inches in diameter are arbitrary and unsupported by science or common sense.

4. Standards and Guidelines for Hazard Tree Felling or Removal Fail to Comply with the GSNM Proclamation

With regard to hazard trees, the Forest Service provides a huge loophole, allowing the felling and removal of any size hazard tree to deviate from all vegetation management standards and guidelines. See GSNM Plan, p. 82, S&G 3. (“Incidental removal of trees that present safety hazards may deviate from vegetation management standards and guidelines.”). This is unconscionable and violates the GSNM Proclamations’ stricture under the “clearly needed” strictures because it appears to discard all the previous criteria for tree felling and removal. Moreover, the next S&G 4. also deviates from the criteria by allowing both felling and removal of any hazard trees along Maintenance Level (ML) 3, 4, or 5 roads without further review, only requiring review by an appropriate resource specialist for ML 1 or 2 roads.

Both S&Gs make no distinction with regard to whether these trees would better serve as snags for wildlife, and neither invokes any particular procedure or criteria for whether a particular tree actually presents a hazard.

As we discussed in our DEIS comments, the Forest Service needs to craft new hazard tree procedures that take the special circumstances of the GSNM into consideration, and should not apply the general and outdated Sequoia National

Forest “Hazard Tree Procedures for Forest Plan Compliance” (HTPFPC) used in the past in the monument. HTPFPC (Exhibit H); *see* FEIS, Appx. L, p. 547 (“the established procedures for hazard tree abatement for the Sequoia National Forest and the Monument are included to comply with current management direction.”). While not actually mentioned anywhere in the GSNM Plan, the Forest Service’s HTPFPC provides guidance that often directly conflicts with the GSNM Plan S&Gs. For example, it would allow areas in defense zones to be “exempt” from down woody material standards, whereas the current plan requires 10-20 tons per acre of material 12 inches or greater in diameter everywhere in the monument for wildlife. *See* HTPFPC, PDF p. 11 (Item 4.);² GSNM Plan, p. 82 (S&G 4. “Retain felled trees, where needed, to meet down woody material standards.”); p. 87 (Monument Wide S&G: “3. Retain felled trees on the ground where needed to achieve down woody material standards of 10 to 20 tons per acre in logs greater than 12 inches in diameter.”).

Instead, the Forest Service has not addressed or even responded to our concerns about the special considerations for hazard trees. *See* Sierra Club DEIS Comments, pp. 115-118. Here are some of the highlights of our comments:

The felling of hazard trees is of special concern because these are likely to be the largest trees that may be cut in the Monument. Clearly, there will always be a need to avert dangers to the public and structures (targets) from hazards, including large trees, that may harm persons, buildings, recreation sites, or administrative sites. Therefore, hazard trees should be felled if it has been determined that the target cannot be moved.

Roads, with the possible exception of the paved highways in the Monument, should not be considered targets. There are over a thousand miles of unpaved roads in the Monument, and if there are significant hazards along some of these roads, those should be closed to vehicles to avert the hazard. Large trees, and especially large snags, are so important to the restoration of wildlife that they deserve special scrutiny before they are felled, and every alternative should be considered, including road closure, to preserve these large trees for wildlife needs.

Other options should also be explored, if the Forest Service concludes that part of the felled hazard tree would leave unwanted small fuels from limbs or tops of trees on the ground. As discussed below, any concerns about hazardous fuels can be averted by removing those limbs or tops because the large tree bole is not considered a fuel risk. In addition, the Forest Service can design a hazard tree criterion that

² Note that these HTPFPC still rely on the 2001 Framework for the GSNM.

doesn't cut the entire tree, but only tops or branches that present a potential hazard.

Id., p. 115. Thereafter, we provided specific Hazard Tree Felling Standards that were a part of our Citizens' Park Alternative that we believe include the minimum necessary to meet the "clearly needed" requirements from the GSNM Proclamation and to protect wildlife Objects of Interest. *See id.*, p. 116-117. But none of these options are a part of the GSNM Plan or the HTPFPC.

Hazard tree logging up to 200 feet along both sides of ML 3, 4, and 5 roads would involve a significant acreage of the GSNM. Based on the Transportation Plan, ML 3, 4, and 5 roads amount to about 254 miles of the road system. *See* GSNM Plan, p. 126, Table 51. That amounts to over 12,300 acres where large trees could be felled and potentially removed. If we include all ML 1 and 2 roads, along which the S&Gs provide managers the discretion to fell hazard trees, that mileage increases to 822 miles, amounting to over 39,800 acres or 11.3 % of the GSNM.

Most of the large trees felled and removed from the GSNM have been from Hazard Tree projects. For example, in 2009, the Forest Service felled and removed about 1 million board feet of timber as part of the Hume Lake Roadside Hazard Tree Removal Project in the Hume Lake RD of the GSNM, which included trees that were an average 36 inches in diameter and up to 60 inches in diameter. All merchantable timber was removed from the GSNM to offset project costs, in violation of the GSNM Proclamation. Removal of non-flammable tree boles was not "clearly needed" to avert public safety after felling. And all flammable limbs and tops were left in piles yet to be burned.

In fact, the Hume Lake RD is once again planning another Roadside Hazard Tree Project, in which agency managers propose to fell and potentially remove up to 1 million board feet from the GSNM. *See* Hume Hazard Project Notice (Exhibit D), PDF, p. 1. And while the proposal calls for use of the HTPFPC, Hume Lake District Ranger John Exline and his staff have admitted to us that they plan to sell trees for the purpose of defraying project costs, while also admitting that the project can be effectively implemented to avert public safety without selling trees. *See id.*, PDF p. 6 (Declaration of Ara Marderosian and René Voss).³ But offsetting project costs is

³ From the declaration, where "you" refers to Hume Lake District Ranger John Exline:

You also said that it is possible and even feasible to eliminate the falling hazard from those identified hazard trees by felling them and leaving them where felled. And you said that it is possible and feasible to just fell and leave and then burn the slash, limbs, and tops to reduce any fire-hazard. Moreover, you said that many of the trees proposed for felling would probably be left in place or pulled away from the road after felling.

not one of the reasons allowed for tree removal under the “clearly needed” mandates in the GSNM Proclamation. In fact, District Ranger Exline admitted, as documented in our declaration, this project could be effectively implemented to avert safety hazards and fuels using force accounts without the need to sell the trees. *Id.* These admissions from a GSNM line officer and his staff clearly show that removal of hazard tree boles is not “clearly needed” after they are felled, and leaving them on the ground as large woody debris, while treating the slash, tops, and limbs alone can avert the safety hazards and effectively treat activity fuels.

Unfortunately, none of these acknowledgements have been integrated into the GSNM Plan as S&Gs, as we proposed in our DEIS comments. For those reasons,

Of note is that we expect this Hume Lake Roadside Hazard Tree Project to be the first tree felling and removal project to be implemented under the new GSNM Plan, as early as the Spring of 2013. This is relevant because appellants may ask the Chief to issue a stay pending disposition of this appeal if implementation of this hazard tree project is proposed before the Chief issues his appeal decision.

5. Standards and Guidelines for Treatment Priority are Inconsistent with the Decision Tree and Inadequate to Comply with the GSNM Proclamation

It is unclear how the “Decision Tree for Site-Specific Projects in the Monument” relates to the S&Gs, since it is never specifically referred to therein. *See* GSNM Plan, p. 81 (Decision Tree). The Forest Service states that “This decision tree (shown on the following page) will be used for each site-specific project proposed in the Monument.” *Id.* at 80. But the Strategies and S&Gs immediately depart from the mandate in this Decision Tree.

As Dr. Carol Rice points out in her Declaration,

The Decision Tree for site-specific projects, described on pages 80-81, the Plan states, “The desire to return the Monument to natural cycles and processes, including a natural fire interval, makes managed wildfire the preferred tool to accomplish ecological restoration and maintenance.” If a wildfire is not available, prescribed fire is to be

We also heard you say that a reason you were planning to remove the trees was to help pay for the project with receipts from the sale of the trees as timber, but that the project could be implemented without selling trees by using “force accounts” and using just Forest Service personnel.

evaluated for use. This is inconsistent with Tables 10⁴ and 20⁵ [Strategies]. . . . Tables 10 and 20 of the Plan note that for restoration and fuels management prescribed fire would be the tool of choice.

This inconsistency is promoted in the standards and guidelines on pages 82-86 of the Plan. . . . [And] [p]ages 26 and 38 of the Fire and Fuels report compare the priority of the management tools, which conflicts with the Plan. It states that for Alt B, the priority would be prescribed fire, mechanical treatment, then managed wildfire (when available).

Declaration of Carol Rice, p. 20 (Exhibit D) (footnotes added).

Moreover, Dr. Rice also points out the Forest Service's bias towards thinning and mechanical treatments, which are favored even for things that cannot be accomplished with these tools: the reduction of surface fuels. While wildland and prescribed fire are effective in reducing surface fuels, thinning and mechanical treatments actually increase rather than decrease surface fuels:

The Forest does not demonstrate a commitment to the use of wildfire and prescribed burning[.] While the discussion of the Decision Tree on pages 80 and 81 of the Plan indicate wildfire, then prescribed fire, would be the treatments of choice over mechanical treatments, there are no incentives for using prescribed fire.

The Standards and Guideline for WUI Defense and Threat Zones (pages 85 and 86 of the Plan), indicates mechanical treatments must result in benign fire behavior. The result would remove the need for subsequent treatment with prescribed fire for several years. The standards and guidelines do not mention prescribed fire, so one could question the level of commitment to this tool

The Standards and Guidelines #9 (page 85 of the Plan), #17, #20, and #25 (page 86 of the Plan) guides the Forest to use mechanical treatments or thinning from below to reduce or remove surface and ladder fuels. Mechanical treatments or thinning itself does not remove surface fuels, and sometimes produces more (Agee and Lolley, 2006, Stephens et al 2009, Valliant et al 2009,). This is another example of where prescribed fire to reduce surface fuels is not promoted, but

⁴ Strategy "13. Promote resiliency in Monument ecosystems by using the following tools, in order of priority: prescribed fire, mechanical treatment, managed wildfire (when available)."

⁵ Strategy "13. Use the following tools for fuels reduction, in order of priority: prescribed fire, mechanical treatment, managed wildfire (when available)."

thinning and mechanical treatment are. It further makes the reader suspect that prescribed fire is not fully embraced.

Id., pp. 15-17.

This last point is very important with respect to accomplishing the goals of restoration in the GSNM Proclamation. The Forest Service cannot thin or mechanically treat its way out of the build-up of fuels from 100 years of fire suppression, because (1) the treatments may actually increase surface fuels, and (2) only wildfire or prescribed fire can effectively remove surface fuels.

The GSNM Proclamation states:

These giant sequoia groves and the surrounding forest provide an excellent opportunity to understand the consequences of different approaches to forest restoration. These forests need restoration to counteract the effects of a century of fire suppression and logging. Fire suppression has caused forests to become denser in many areas, with increased dominance of shade-tolerant species. *Woody debris has accumulated, causing an unprecedented buildup of surface fuels.* One of the most immediate consequences of these changes is an increased hazard of wildfires of a severity that was rarely encountered in pre-Euroamerican times.

In previous sections, we have discussed the ways that ladder fuels treatments (limbing trees up to a certain height and/or felling 8 inch or smaller diameter trees) can be effectively used to prepare an area for fire. But none of those treatments can do anything to reduce the “unprecedented buildup of surface fuels” (downed trees, limbs, duff, and shrubs) of “a century of fire suppression and logging.” Only wildfire or prescribed fire can effectively reduce these surface fuels, and the S&Gs must reflect this to comply with the GSNM Proclamation.

Finally, even in the S&Gs for Pacific fisher, the Forest Service advances mechanical treatments over prescribed fire due to “uncertainty” of the effects from managed fire. But as Daniel Gammans, Wildlife Biologist for the Sequoia and Kings Canyon National Parks explains, the effects from mechanical treatments are equally uncertain and most likely worse:

Daniel Gammons, Wildlife Biologist:

On page 141 of Appendix F, which addresses the Standard and Guidelines to be used in implantation of alternatives, the plan states “Because the effects of prescribed fire on key components of fisher habitat are uncertain, give preference to mechanical treatments over prescribed fire.”

This does not seem to be a sufficient justification for preferring mechanical treatments over prescribed fire for fisher habitat conservation because the effects of mechanical treatments on key components of fisher habitat are just as uncertain as the effects of prescribed fire. A lot of research is ongoing to resolve these questions (e.g., the Kings River and SNAMP fisher projects), but this is currently a significant knowledge gap.

However, given that mechanical treatments could have effects on the subsequent development of fisher habitat beyond what occurs with a prescribed fire (e.g., through soil compaction, erosion, physical damage to standing trees), a more conservative approach would seem to be giving preference to prescribed fire, especially because it is a disturbance that fishers have evolved with (i.e., they are “used” to it). Of course, this must be balanced with the need to reduced the risk of catastrophic fires—sometimes mechanical thinning may be required for that reason—but as a general rule it seems that prescribed fire for maintenance of fisher habitat should be preferred.

FEIS, Appx. L, p. 701.

6. Failure of the WUI and TFETA to Conform to Accepted Science, and Failure to Elevate Protection of Objects of Interest over Structure Protection

a. The WUI and TFETA are unacceptably large and unsupported by science or any rational explanation

The Forest Service’s Wildland Urban Intermix (WUI) and Tribal Fuels Emphasis Treatment Area (TFETA) zones are arbitrarily large, and their size is not supported with any ration explanation in the FEIS or ROD. The chosen Alt. B has a WUI made up of huge defense zone and threat zone (45,340 and 145,520 acres, respectively) and a TFETA of 56,640 acres. These objectives indicate that treatments in the WUI defense zone, certain TFETA areas, and the WUI Threat Zone together comprise well over half the Monument. *See* Rice Declaration, pp. 5-7 (Exhibit D); and California Attorney General DEIS comments at FEIS Vol. 2 pp. 683-84, n. 6. Moreover, the treatment placement is not discussed anywhere in the FEIS or ROD.

The width of 1.5 miles designated as WUI is excessive, and not defensible considering the best available science and comparison to SEKI, which is “300 feet out from developed private land.” GSNM FEIS p. 84. Even the 300 ft. zone referenced there is excessive since treatments should be measured from structures, not private property boundaries, if the ostensible interest is protecting the structures. Also, only a 200 ft. zone is necessary to protect structures. This is evident from research conducted by Forest Service researcher Jack Cohen. Dr. Jack Cohen of the Forest Service’s Fire Sciences Lab (www.firelab.org) advises that the only effective way to protect homes is by clearing brush and small trees within 100-

200 feet of individual structures, and that logging at further distances (e.g., 0.25 - 1.25 miles) is both ineffective and unnecessary to manage fire risk. *See, e.g., Reducing the Wildland Fire Threat to Homes: Where and How Much?*, Jack D. Cohen, U.S. Forest Service, Research Physical Scientist, Fire Sciences Laboratory, Rocky Mountain Research Station, 1999. Paper presented at the Fire Economics Symposium, San Diego, CA April 12, 1999. Cohen (1999).⁶ This is also supported by the additional Cohen studies filed herewith (Cohen (2000) & Cohen (2008)), the First Rice Declaration filed with Sierra Club's DEIS Comments, the Second Rice Declaration (Exhibit D), the Bond Declaration, p. 9 (Exhibit C), the DellaSala Report, p. 36 (Exhibit A), and with the authorities cited therein.

In addition, the designation of the TFETA is arbitrary. The Monument should be managed to protect the Monument and objects of interest within, not adjacent lands outside the Monument. Nonetheless, the Plan includes treatment to the TFETA to "*protect the reservation, and its watersheds, but also its objects of interest* and watersheds in the Monument from fires spread from one to the other." On Map 3 on p. 49 of the current GSNM Management Plan the TFETA is shown to extend as much as 5 miles from the Tule Reservation boundary without a rational explanation.

The unnecessary and undesirable nature of the WUI and TFETA selected in the Plan is discussed in the First Rice Declaration and Sierra Club's DEIS Comments at pp. 84-95. To recap: a) the size of the Wild Urban Intermix is not scientifically defensible; b) the Forest Service should measure treatments from structures, not private property boundaries; c) the Forest Service unlawfully places protection of WUI above objects of interest; d) the EIS contains no scientific justification for a Tribal Fuels Emphasis Treatment Area; and e) the Forest Service unreasonably focuses on low intensity fires in its desired conditions.

These problems were not fixed in the FEIS or Plan, as is explained in Rice's Second Declaration (Exhibit D). To summarize, the width of the WUI (both Threat and Defense) land allocation is excessively wide and arbitrary. This is important because fuel treatments appear to trump all other Dominant Management Directions, as seen on Table 3 of the GSNM Plan (page 33). And yet, with this excessive width, page 31 of the Fire and Fuels Report states that an assumption is "Fuels reduction, as proposed to protect communities and objects of interest in the

⁶ Cohen reports from 1999, 2000 and 2008 are filed herewith (Exhibits M, N, & O) and were filed with Sierra Club's DEIS Comments. *See* Sierra Club DEIS Comments, p 3, n. 2. We filed these with all highly relevant scientific reports, as indicated, on the Forest Service's Region 5 FTP site because it is too difficult to electronically submit (or provide individual internet links) to all of the scientific studies and reports that the Forest Service should consider. The agency and reviewers can download these studies from <ftp://ftp2.fs.fed.us/incoming/r5/Science>. Because these studies are on the Forest Service's servers and therefore in their possession, the Forest Service must analyze and include all of these studies in the project record.

Monument, may not be effective in terms of how much is treated and the kinds of treatments used.” This is an admission of the WUI’s ineffectiveness despite treatments throughout a 1.5-mile wide area.

The Second Rice Declaration, pp. 14-15 (Exhibit D) also describes how the width of the TFETA land allocation is excessively wide. We do not know whether the Tule River Indian Reservation (TRIR) has a threat of severe wildfire since no data/maps are presented. According to CalFire’s VHFHSZ map the extent and location of Very High Fire Hazard Severity Zones in state-responsibility lands is limited and localized, but this information is not included in the Plan or DEIS. The only unit of measure is acres in the TFETA, which is not a realistic indication of likelihood of a fire spreading between the Monument and the TRIR and to objects of interest. As above, treatment width does not equate to effectiveness of management to reduce the potential for fire spread to the Reservation.

The Forest Service’s action is also contrary to the science advisories from the SAB. Advisory XXIII states: “Contrary to one possible interpretation of the DEIS, limiting mechanical fuels treatments to relatively narrow zones around communities does not in itself automatically result in sub-standard defense and threat zones, and therefore greater risks to communities. This is because mechanical treatments aren't the only available means to reduce fuels. Zones of mechanical fuels reduction, sometimes relatively narrow (depending on local conditions), can be used as anchor points for prescribed fires, and prescribed fires are capable of creating forest conditions that meet the Framework's standards for defense and threat zones. In fact, unless mechanical treatments are followed by thorough treatment of surface fuels (such as through a prescribed fire), prescribed fire may result in fuels conditions that better protect communities.” Advisory XXIII., p. 48 (Exhibit K).

b. The Plan still prioritizes fire and fuels strategies in the WUI & TFETA over monument objects, including giant sequoias groves

In addition to elevating fuel treatments in the WUI and TFETA land allocations over other land allocations, (*see* GSNM Plan, Table 3, p. 33 & 34), the Standards and Guidelines also promote fuel treatments over the protection of monument objects, including giant sequoia groves. *See* GSNM Plan, p. 48, Table 18, S&G 10. As Dr. Rice explains:

The priority of treatments in a wide area is reinforced in Table 19, Strategies for Ecological Restoration of Fire and Fuels Strategies, on page 48 of The Plan: 10. Prioritize treatments for fuels reduction and ecological restoration by land allocations/management areas as follows:

1. WUI defense zones

2. TFETA areas of high and moderate fire susceptibility within 1/4-mile of the reservation boundary
3. WUI threat zone
4. Giant sequoia groves (not previously treated in 1 through 3)
5. TFETA areas of high fire susceptibility (not previously treated in 2)
6. Old forest emphasis areas (not previously treated in 1 through 5)⁷

These objectives indicate that treatments in the WUI defense zone, certain TFETA areas, and the WUI Threat Zone (which together comprise over half the Monument) are the highest priorities. One might expect that given limited funding little restoration will occur in the giant sequoia groves, and in old forest emphasis areas when the WUI Defense Zone and Threat Zones are so wide. While placing life safety and property [i]s an appropriate priority, the width of the treatment area is wider than needed to accomplish this goal.

Rice Declaration, p. 6 (Exhibit D).

7. Failure to Adequately Protect Wildlife Objects of Interest

In addition to prioritizing structure protection in the WUI & TFETA over restoring fire in giant sequoia groves and protection of various other objects of interest, the GSNM Plan also fails to place a priority of protection and restoration of the two most sensitive wildlife objects of interest over goals for fuel treatments in the WUI & TFETA: the Pacific fisher and the California spotted owl.⁸

a. Failure to Adequately Protect Pacific Fishers

The GSNM Proclamation makes particular mention of the imperiled Pacific fisher, providing that the GSNM provides one of its last refugia:

This spectrum of interconnected vegetation types provides essential habitat for wildlife, ranging from large, charismatic animals to less visible and less familiar forms of life, such as fungi and insects. The mid-elevation forests are dominated by massive conifers arrayed in a

⁷ Surprisingly, there is nothing in this list about treating past logged areas, amounting to 115,145 acres or 35% of the Monument or the 26,700 acres of plantations, amounting to 8% of the Monument. FEIS, p. 192. These logged areas and plantations have resulted in the most flammable acres in the monument and should be included somewhere in the treatment priority.

⁸ Based on information and belief, the Biological Opinion was not finalized or signed before consultation with the U.S. Fish and Wildlife Service on the plan. Thus, any Forest Service ESA §7 consultation with the FWS on the Plan was not completed and should not have been relied on in the Plan or its NEPA analysis.

complex landscape mosaic, *providing one of the last refugia for the Pacific fisher in California. The fisher appears to have been extirpated from the northern Sierra Nevada mountain range.*

Yet, prioritizing protection and restoration, and providing the necessary information to do so is fundamentally lacking in ROD, FEIS and Plan.

Fisher expert, Dr. Reginald H. Barrett of U.C. Berkeley, who has conducted research studies on the Pacific fisher in the southern Sierra Nevada for about 30 years, confirms the importance of the GSNM for fisher conservation:

The bulk of the remaining high quality fisher resting/denning habitat with recent confirmed fisher detections in the southern Sierra Nevada is within the Giant Sequoia National Monument area (Spencer et al. 2011). Thus, the importance of this area to the conservation of the southern Sierra Nevada subspecies of the fisher cannot be overstated.

Barrett Declaration, ¶ 3 (Exhibit F). As Dr. Barrett explains:

The Pacific fisher depends upon dense, mature/old conifer forest—with high live tree densities, live tree basal area (the cumulative total of the horizontal surface area of live trees, measured at 4.5 feet above the ground, usually expressed on a per-acre or per-hectare basis), canopy cover, snag densities, and large downed log densities—for resting and denning (Zielinski et al. 2004a, 2004b, 2006, Purcell et al. 2009, Lofroth et al. 2010, Underwood et al. 2010, Zhao et al. 2012), and logging/thinning activities that reduce these characteristics degrade fisher resting/denning habitat and pose a significant threat to the viability of the species. The southern Sierra Nevada population of this species is genetically isolated and distinct at the level of subspecies (Knaus et al. 2011). The Pacific fisher, including the southern California subspecies, is currently a Candidate for listing under the federal Endangered Species Act, and population numbers are perilously small—estimated to be only about 125-250 adults in the southern Sierra Nevada subspecies currently (Spencer et al. 2011).

Barrett Declaration, ¶ 3 (Exhibit F). SFK also pointed out the unique habitat needs in our DEIS comments. *See* Sierra Club DEIS Comments, pp. 110-112 (fishers need 12.5 large snags per acre (over 15 inches in diameter) and need 26 down logs per acre (over 10 inches in diameter) for a total of 2,427 cubic feet of large down logs per acre in their habitat, citing various scientific studies). But the Forest Service failed to adjust the S&Gs from the draft to the final EIS or in the final GSNM Plan to provide for these unique habitat needs of the fisher. For example, the S&Gs for snags and down logs fall far short of these needs. *See* GSNM Plan, p. 87, Item 2.

(suggesting management of snags for ecological restoration, but including no minimum numbers per acre); *see also* Item 3. (only requiring “10 to 20 tons per acre in logs greater than 12 inches diameter at midpoint”).

But, as Dr. Barrett explains there are even more shortcomings of these S&Gs, stating that:

the standards and guidelines of the GSNM Plan, pp. 82-107, allow extensive landscape-level thinning and mechanical treatments of trees up to 20 inches in diameter and reduction of canopy cover down to 50%, requiring only 60% canopy cover retention on half of the forested landscape in which fishers occur. There are no requirements for retention of live tree basal area. Within Wildland-Urban (WUI) “Defense” Zones, which comprise a substantial portion of the GSNM, there are no requirements for canopy cover retention or live tree basal area retention. Moreover, there are no upper diameter limits with regard to the potential felling and removal of large trees along hundreds of miles of roads or any place in the Monument if tree removal is incidental to providing safety. The Management Plan contains no minimum retention requirements for snags, and requires a minimum of only 10 tons per acre of downed logs over 12 inches in diameter at midpoint (equating to a minimum of roughly only 40-50 square meters per hectare).

These standards are simply inadequate to prevent substantial degradation of high quality fisher habitat or to maintain suitable fisher habitat. For example, the data indicate that fishers select areas with well over 70% canopy cover, not 50% (Purcell et al. 2009), and select areas with about 25 square meters per hectare in live trees less than 20 inches in diameter—a much greater density of these small/medium-sized trees than the 15.5 square meters per hectare that occur on average sites in the southern Sierra Nevada forests occupied by fishers (Zielinski et al. 2006, Table 2). Moreover, fishers select areas with about 15 large snags per hectare (about 6 per acre)—substantially more than the 10 per hectare on average sites (Zielinski et al. 2006). Another study found that fishers select areas with snag densities that equate to about 31 square feet per acre of snag basal area (snags over 10 inches in diameter)—about 2.5 times higher than random sites (Purcell et al. 2009, Table 3). Further, fishers select areas with 169 square meters per hectare of downed logs (Zielinski et al. 2006, Table 2)—over three times the minimum downed log retention required by the GSNM Management Plan. Outside of the Defense Zone, the Management Plan also allows thinning or mechanical treatments that will substantially degrade and eliminate suitable fisher habitat; and,

within the Defense Zone, there are few standards in the Management Plan to adequately maintain fisher habitat.

Barrett Declaration, ¶¶ 6-7 (Exhibit F).

Moreover, fundamental inventory requirements to inform both the GSNM Plan and future projects are lacking, which place the fisher at substantial risk of further decline from implementation of the GSNM plan:

In the GSNM FEIS and accompanying documents, only four fisher natal den sites are documented, (in a study led by myself) meaning that the vast majority of den site locations are entirely unknown because the Sequoia National Forest has not undertaken the effort to determine their locations. While this is a significant undertaking, it is entirely possible and feasible and has, in fact, been done by the U.S. Forest Service and U.C. Berkeley on the Sierra National Forest and Yosemite National Park through the Sierra Nevada Adaptive Management Project (SNAMP, <http://snamp.cnr.berkeley.edu/>) by capturing fishers and using radio telemetry methods to locate natal den sites. Without a similar effort on the GSNM—one that should be required by the forest wide standards in the Management Plan—there is no rational basis for concluding that planned thinning or mechanical treatments under the Management Plan will not threaten fisher population viability for the simple reason that there will be no way to know whether the thinning or mechanical treatments will push directly through an occupied fisher natal den site until it actually occurs and the damage is already done, potentially causing direct mortality of fisher kits (young fishers), and possibly even adult females.

Barrett Declaration, ¶ 8 (Exhibit F). Dr. Barrett summarize the GSNM Plan’s adverse impacts:

The GSNM Plan represents a significant potential adverse impact on Pacific fishers because: a) it does not require any surveys to determine the location of fisher den sites, or rest sites, prior to planning and implementing thinning or mechanical treatment activities; b) the Management Plan eliminated the previous forest plan standard prohibiting the Forest Service from undertaking forest management activities that threaten the population viability of the Pacific fisher, converting it instead into an ambiguous “strategies” (see GSNM Plan Appendix A, pages 171, Table 51 (see “furbearers”) and 170, Table 50; see also GSNM Plan, p. 51); and c) the GSNM FEIS does not include any analysis of the adverse impacts of eliminating the viability

requirement for fishers, and does not provide any analytical or scientifically credible basis for the conclusion in the FEIS and ROD that Alternative B will not threaten the viability of fisher populations. Given the potential for widespread loss and degradation of suitable fisher habitat due to thinning and mechanical treatments allowed under the GSNM Plan, as discussed above, the conclusion in the FEIS and ROD that the chosen alternative (Alt. B) will not threaten the viability of the Pacific fisher simply cannot be credibly made without knowing the location of fisher den sites, as well as rest sites, without an enforceable forest-wide standard requiring surveys at a level and intensity that would allow the Forest Service to credibly know such locations. This is especially true in light of the fact that reproductive female fishers tend to use a new den site location each year, and will typically use more than one den site even within a given year—one den site to give birth, one or more for pre-weaning, and one or more additional sites for post-weaning (Lofroth et al. 2010, p. 59).

Barrett Declaration, ¶ 7. In addition,

the FEIS fails to analyze the impacts to Pacific fishers from rodenticide (rodent poison) use on national forests due to illegal marijuana growing operations (Gabriel et al. 2012). This is a significant and growing cause of mortality of fishers (Gabriel et al. 2012) and, since it is occurring on national forest lands within the jurisdiction and responsibility of the U.S. Forest Service, the Forest Service's plan to address and reduce this threat must be discussed in detail. The FEIS fails to do this which, once again, renders baseless the FEIS's and ROD's conclusion that the Management Plan will maintain the viability of Pacific fisher populations, especially given the combined impact of the planned thinning or mechanical treatments allowed under the Management Plan.

Barrett Declaration, ¶ 9. In conclusion:

the importance of [the GSNM] to the conservation of the southern Sierra Nevada subspecies of the fisher cannot be overstated.

Based upon my review, the GSNM Plan fails to meet this objective. Because of this failure, I respectfully disagree with the statement regarding Pacific fisher that "All Alternatives: may affect individuals, not likely to contribute toward a further downward trend or a loss of viability." (FEIS, Appendix M, Volume 2 Page 722). Instead, it is my opinion that the GSNM plan would degrade fisher habitat and threaten the viability of the fisher.

Barrett Declaration, ¶¶ 3-4.

If the GSNM Plan threatens to degrade fisher habitat and threatens the viability of the fisher, it logically follows that the Forest Service has failed to provide the necessary protection of the fisher as an object of interest.

b. Failure to Adequately Protect California Spotted Owls

In its previous comments, SFK outlined the various problems with analysis of effects from the alternatives on the spotted owl, based on the review of California spotted owl expert Monica Bond. *See* Sierra Club DEIS Comments, pp. 153-155; *see also* first Monica Bond Declaration, submitted therewith. The vast majority of the issues therein have not been resolved in the FEIS and GSNM Plan, therefore we incorporate those comments herein as additional appeal issues.

Ms. Bond has also reviewed the FEIS and final GSNM plan, and we incorporate her second declaration herein in full. *See* Monica Bond Declaration (Exhibit C). Ms. Bond explains that the mechanical treatments proposed under the GSNM Plan will affect at a minimum dozens of Spotted Owl breeding sites throughout the Monument; however, the Wildlife Biological Evaluation (BE) and FEIS fail to properly and thoroughly discuss the vast majority of recent scientific findings readily available in the literature regarding the owl and fire. Findings in this literature would largely eliminate the justification for mechanical treatments as proposed in the plan. Further, after failing to discuss important recent research findings, the BE then makes a broad, sweeping, unsubstantiated conclusion that Alternative B is “not likely to result in a trend toward Federal listing or loss of viability” of the California Spotted Owl. This unsubstantiated conclusion is made despite the fact that nearly one-half (47%) of all Spotted Owl Home Range Core Area (HRCA) acreage is prioritized for mechanical treatments of trees up to 20 inches diameter within an excessively large WUI and TFETA, and research shows that habitat use and survival of California Spotted Owls is associated with stands dominated by both large (>24 inches diameter) and medium-sized (>11 inches) trees (Chatfield 2005, Seamans 2005).

The BE appears to downplay the adverse impacts of mechanical treatments and thinning on California Spotted Owls. In addition to failing to provide any discussion of studies that concluded adverse effects of thinning on site occupancy (Seamans and Gutiérrez 2007, for example), the BE apparently willfully omitted important contextual information about the longer-term impacts on population viability of owls after habitat reduction. The FEIS for the Monument Plan analyzed two promising alternatives (C and D) that better reflect the current state of the science regarding fire and Spotted Owls, and Ms. Bond ardently recommended the

Forest Service re-consider its selection of Alternative B in favor of these alternatives.

In sum, Ms. Bond's report shows that that the GSNM Plan allows widespread habitat degradation in the majority of Spotted Owl HRCA acres in the WUI and TFETA, thus elevating WUI & TFETA priorities over the protection of the owl, a GSNM object of interest. Within the excessively large treatment zones, nearly one-half of all Spotted Owl HRCA acres (47 percent) would be prioritized for thinning and mechanical treatments of trees up to 20 inches diameter and reduction of tree canopy down to 50 percent to reduce risk of fire. The scientific studies described in her report suggest that management objectives in the GSNM Plan that include felling trees over 11 inches and up to 20 inches to 'protect' the forests from future disturbances such as "uncharacteristically severe" fires will certainly degrade current Spotted Owl habitat in order to do so – potentially affecting survival and occupancy, and thus the viability of the local population. Such an outcome is not supported by the best available science and should therefore be rejected.

Finally, Ms. Bond points out that new research, not considered by the Forest Service, strongly suggests that owls benefit from the effects of even high-severity wildfire by preferentially selecting these areas for forage. Moreover, even newer research from 2011 and 2012 suggest that current fire patterns are not adversely impacting California Spotted Owl occupancy in the Sierra Nevada (Roberts et al. 2011, Lee et al. 2012). She points out that this and previous research indicate that the risk of high-severity fire is likely overestimated in the Sierra Nevada based on recent analyses of actual rates of fire (Stephens et al. 2007, Odion and Hanson 2008), and recent research by herself and others (Bond et al. 2002, 2009, Roberts et al. 2011, Lee et al. 2012) suggest that fire likely does not adversely affect and in some cases may even positively affect Spotted Owls by providing important foraging habitat.

The bottom line conclusion from this research therefore shows that fire risk reduction for the purpose of averting the loss of California spotted owl habitat is unnecessary (since even high-severity fire benefits the owls), and therefore any of the thinning or mechanical treatments proposed in the GSNM can only degrade and harm the owl's habitat, in violation of the GSNM's requirements to protect this iconic object of interest.

8. The Monument Plan Relies on a Fire Plan that is Inconsistent with the Standards and Guidelines of the GSNM Plan

The plan acknowledges that "While the Monument Plan is a stand-alone document, it is also a subset of the entire Forest Plan." GSNM Plan, p. 7 (aka. the 1988 LRMP or 1988 Forest Plan). For wildfire management decisions, the GSNM

Plan continues to rely on the 1988 Forest Plan. But the old 1988 Forest Plan relies on a now withdrawn fire plan. As the FEIS explains:

On June 2, 2006, the Chief of the Forest Service, Dale Bosworth, issued a letter approving the withdrawal of the 2005 Fire Management Plan and granting the Sequoia National Forest a waiver of the requirement in FSM 5103 that each national forest have such a plan. This exemption remains in effect.

The Sequoia National Forest follows fire management guidelines in the 1988 Land and Resource Management Plan, 2001 Sierra Nevada Forest Plan Amendment Record of Decision, and Federal Wildland Fire Management Policy.

Forest managers have chosen to defer the development of a detailed fire management plan until the forest plan revision is completed. Plan components in a revised plan are expected to address some of the needs of a fire management plan. Plan revision for the Sequoia National Forest is expected to start in 2012 and will be completed within the 5-year time frame cited previously.

FEIS Appx L, pp. 545-546. Deferring development of a detailed fire plan, however, leaves the Forest Service with no standards at all. Moreover, there are several problems with the statement that the Sequoia National Forest follows guidelines in other documents.

First, the 1988 Forest Plan refers to the development of a future fire plan, but that plan was withdrawn by the Chief in 2005. *See* 1988 LRMP, Appx. A, p. A-1 (providing a list of existing plans and those to be prepared) and p. A-2, Item 18 (“Fire Management Implementation Plan,” providing the status that the “Plan will be prepared. (This Plan will supersede the 1972 Fire Plan.)”).

Second, references to the 2001 Sierra Nevada Forest Plan Amendment ROD (aka. 2001 Framework ROD) and the Federal Wildland Fire Management Policy are unavailing here because both documents only state that they require preparation of a “fire management plan”:

Wildland Fire Use

Lightning-caused fires can be used to reduce fuel loads or to provide other resource benefits, such as conserving populations of fire-dependent species. *Before wildland fires can be used, national forest managers must prepare a fire management plan that describes how prescribed fires and naturally caused wildland fires will achieve resource management objectives.* (emphasis added)

2001 Framework ROD at A-12.

Management response to a wildland fire on federal land is based on objectives established in the applicable Land/ Resource Management Plan and/or the Fire Management Plan.

2009 Guidance for Implementation of FWFMP (National Fire Plan) at 7.

So, the explanation in the FEIS, referring to the 2001 Framework, the 1988 Forest Plan, and the National Fire Plan, do not help the Forest Service at all because none of these documents are a substitute for a fire management plan, which should provide the necessary standards and guidelines for making wildland fire suppression or let-burn decisions.

In sum, all of these documents say essentially the same thing, that a fire management plan must be prepared. So, in the mean time, the only reference to some sort of fire management standards is to a 1972 fire plan, referenced in the 1988 Forest Plan. Even though we could not locate this old outdated plan, older fire planning standards favor suppression in most cases and are likely to be inconsistent with more modern policies that include standards that allow managers to let wildland fires burn for purposes of wildland fire use. So, managers are left with a dilemma: either apply outdated standards from a 1972 plan, which they should follow because it is the only fire plan available, or make fire management decisions without standards, in violation of the 2001 Framework, which requires a “fire management plan” before managers can use wildland fire for management purposes.

As discussed further below, these circular references also make fire management decisions unclear or incomprehensible, as discussed in the NEPA section below.

9. Failure to Reconstitute a Scientific Advisory Board (SAB)

The Proclamation unquestionably requires the Forest Service to prepare its initial Monument management plan in consultation with a Scientific Advisory Board appointed to provide scientific guidance regarding the unique ecology of the area. Proclamation No. 7295, 65 Fed. Reg. at 24098.

The Forest Service violated this mandate because it developed the draft plan and DEIS without consulting with a Scientific Advisory Board. The agency claims this is not unlawful because it used a Scientific Advisory Board when it issued the management plan that the court invalidated, which the Forest Service claims was its “initial plan” under the Proclamation. The Forest Supervisor also claims to fulfill this obligation because it determined that a number of advisories from the

earlier Scientific Advisory Board were “still relevant” and “applicable” to the new management plan. 74 Fed. Reg. at 11521.

First and foremost, an agency cannot meet a legal obligation with an illegal action. It is analogous to writing a bad check to pay your taxes and then claiming that your obligation to pay taxes has been met. Therefore, the issuance of a legally deficient management plan cannot satisfy the Proclamation requirements. When the court enjoined the management plan it effectively retroactively invalidated the plan; so there never was an initial management plan.

Second, reliance on a few outdated advisories does not satisfy the agency’s obligation to empanel a Scientific Advisory Board for three reasons. The management plan was not prepared in consultation with the board as the board was only asked to review the agency’s previously proposed plan. So the board never reviewed all pertinent science, never undertook a holistic view of Monument lands, never gave general advice outside of the previous “proposed action,” and never retroactively questioned the management direction. The advisories were narrowly tailored to address Alternative Six in the invalid plan. Thus, even when those advisories were current (which was 8 years ago), the advisories contained no solid composite of the appropriate scientific information upon which to base a management direction and certainly do not provide such guidance today.

In addition, the SAB only made recommendations for unanimous decisions. This meant that important issues under dispute were blocked from inclusion in the advisories. For instance, if all but one member agreed on a point, that point was precluded from inclusion in the advisories. The most egregious omission is an Advisory on the Desired Future Conditions of the Monument. The Forest Service relied on a paper regarding Desired Future Conditions that was penned by a member of the SAB. *See* FEIS, p. 163 & 166 (citing to (Piiro & Rogers, 1998 & 1999); *see also* GSNM Plan, p. 76 (citing to Piiro & Rogers 1999). However, all criticisms of his approach were blocked because it was not unanimous (as one of the authors, Piiro was a member of the SAB). *See* Draft Advisory on Desired Future Conditions (Exhibit L); *see also* SAB Meeting Notes, March 12-13, 2003, pp. 11-13 (available at http://www.fs.fed.us/r5/sequoia/gsnm/meeting_minutes.html) (no consensus on draft advisory). The SAB thus failed to provide a comprehensive list of recommendations.

Finally, the advisories were written in the context of reflection and advice on the Alternatives that were embodied in the plan invalidated by the Northern District of California. Even if the process were not flawed, the Forest Service should not rely on these advisories since they are part and parcel of plan that is permanently enjoined.

The Forest Service must empanel a new SAB to develop the initial management plan based on the Proclamation or the agency will violate the Administrative Procedure Act.

10. The Desired Future Conditions for Vegetation are Arbitrary and without Adequate Scientific Bases

The Forest Service has arbitrarily created numeric goals for its desired future conditions to create canopy gaps and spacing, without providing a basis and in contradiction with scientific advice supported by most SAB members. The GSNM Plan has adopted desired conditions to create 10 to 20 % early seral habitat in various forest types (FEIS, p. 102-104) & for objectives to increase specific percentages to early seral stage in the first 10 years (FEIS, p. 106-108). Moreover, it has adopted specific percentages of increase in tree growing space for each decade (FEIS, p. 107-108), which will result in increase canopy spacing. These figures are derived from a paper by Piirto and Rogers (1999) regarding Desired Future Conditions, which the Forest Service has relied on in the plan and its supporting analysis. *See* GSNM Plan, p. 76; FEIS p. 163 (“The foundation for these ecological conditions is the report “An Ecological Foundation for Management of National Forest Giant Sequoia Ecosystems” (Piirto & Rogers, 199[9]).⁹ This report describes specific structural and process indicators in the mixed conifer-giant sequoia forest ecosystems in the Giant Sequoia National Monument.”).

During the SAB process, SAB member Dr. Nate Stephenson, the National Park Service’s expert on giant sequoia ecosystems, advance an advisory that criticized the desired future conditions, similar to those advanced in the current GSNM Plan. His advisory was supported by all members of the SAB except one (Douglas Piirto, the author of the Piirto & Rogers (1999) report) thus blocking its advancement as a formal advisory.¹⁰

Dr. Stephenson’s draft Advisory said

the document from which the desired conditions were taken (Piirto and Rogers 1999) does not fully explain how the desired conditions were derived, it suggests that they were based in part on Bonnicksen and Stone (1982). However, because Bonnicksen and Stone's study was

⁹ Corrected in the letter by Kevin Elliott to Interest Parties, dated November 29, 2012; *see* Item 3.

¹⁰ This was witnessed by Sierra Club Member Ara Marderosian at the March 13, 2003 meeting, who can testify to these facts in a declaration, if necessary. These facts are not reflected in the SAB meeting minutes. The SAB only made recommendations in advisories with unanimous decisions, so some of the majority scientific advice was omitted. This was the most egregious omission because it was blocked by the author whose report, Piirto and Rogers (1999), was being criticized.

limited to a single grove and some of the dead trees they needed for analysis could have been lost to rot (Stephenson 1987), their results should be considered qualitative and may not be representative of sequoia groves in general (Stephenson 1996, 1999). In general, numerous factors confound our ability to precisely define forest reference conditions before 1875 (see Stephenson 1999), suggesting that management must cope with intrinsic uncertainty.

Draft Advisory A, PDF p. 2 (Exhibit L) (submitted by Nate Stephenson for consideration by the SAB at its March 12-13, 2003 meeting). The implication for the GSNM was that

we do not have a strong basis for setting quantitative targets for proportions of sequoia groves in patches of different ages.

Given inherent limitations on other methods of determining past forest conditions (Stephenson 1987, 1996, 1999), we cannot yet confidently define pre-1875 gap and patch frequencies in sequoia groves. We currently must be satisfied with qualitative statements like those in the preceding paragraph, and not quantitative descriptions.

In the short term, gap creation is an irreversible process; once a gap is created, the trees that have been killed or removed cannot be resurrected. This fact, coupled with our relatively weak knowledge of past forest conditions, argues that gap creation should be approached rather conservatively.

Id. This advice, however, has not been heeded. SFK had suggested the same advice in its Citizen Park Alternative (CPA) with regard to desired conditions. *See* Sierra Club DEIS Comments, pp. 15-16 and CPA attached as an exhibit thereto.¹¹ Dr. Stephenson's advice then was roughly the same as ours:

Abandon the [DEIS] desired conditions for "Gap and patch frequency"
□. Acknowledge that our current understanding is not complete enough to set such quantitative standards.

Beyond gap creation in plantations or in sparse young forest that is already close to being a gap, generally focus any new gap creation in the currently overrepresented age group of forest patches: that which is less

¹¹ In the Citizens Park Alternative we stated "The DEIS for the Monument Plan includes uniform desired conditions for all alternatives. This proposed plan changes the desired conditions to reflect a Monument that will be restored and maintained by natural processes to the greatest extent possible to mimic conditions on the adjacent Sequoia and Kings Canyon National Parks . . ." CPA, p. 5; *see also* CPA, pp. 5-10 for all desired future conditions.

than about 130 years old. When using prescribed fire, different firing techniques can be used to selectively encourage such gaps. Prescribed fire will undoubtedly create some gaps in forest stands older than this; this is to be expected and in itself is not a reason to avoid the use of prescribed fire.

In all areas being treated, limit gap creation to a few percent of the landscape, with an absolute maximum of 5%.

Id., PDF p. 2-3. But according to the FEIS, “During the last 25-30 years, 4 percent (approximately 1,000 acres) of the grove acreage in the Monument has had sufficient disturbance (through logging and subsequent burning for fuel reduction and site preparation) to initiate regeneration of young giant sequoia and associated mixed conifer species and other vegetation.” FEIS, p. 165. Any need for further gap creation can and should be done by prescribed burning or by wildland fire, which will likely occur independent of any further human interference. Moreover, “There are approximately 26,700 acres of plantations in the Monument.” FEIS, p. 192. These already represent well over 5% of the gaps or early seral stage habitats suggested for the Monument.

Based on these criticisms and the lack of quantitative bases for the desired future conditions for vegetation, the Forest Service’s continued advancement of quantitative values in its desired future conditions is arbitrary and capricious.

11. Modifying the Remaining “Grandfathered” Timber Sale Contracts Violates the GSNM Proclamation, Regulations, and Directives

The Forest Service’s modification of the “terms” of the White River, Saddle, and Ice Timber Sale Contracts by extending termination dates violates the GSNM Proclamation, agency regulations, and the Forest Service Manual.

On April 15, 2000, President Clinton issued a Presidential Proclamation creating the GSNM. With respect to pre-existing timber sales, the Proclamation states that: “Timber sales under contract as of the date of the proclamation and timber sales with a decision notice signed after January 1, 1999, but prior to December 31, 1999, may be completed *consistent with the terms of the decision notice and *contract**.” (emphasis added).

On November 2, 1999, July 22, 1998, and November 15, 1999, the Forest Service entered into timber sale contracts for the Saddle Helicopter, White River Helicopter, and Ice Helicopter logging projects, respectively, with Sierra Forest Products. Subsequent to April 15, 2000, and prior to litigation against these timber sales, the Forest Service modified the terms of each of these contracts to extend

their termination dates, which would have expired in 2003 and 2004 by their original terms. Then after Federal District Judge Breyer of the N.D. of Cal. entered preliminary and then permanent injunctions against these timber sales on September 9, 2005, and August 22, 2006, respectively, the Forest Service again extended the termination dates, and has done so annually in order “to allow the Forest Service adequate time to comply with Court Ordered supplemental NEPA reviews and any subsequent contractual actions.” *See* Agreement(s) to Modify Contract (Timber Sale), Form FS-2400-9 (Exhibit J), for each of the respective contracts.

The original contract extensions, issued prior to the court’s orders, were not “consistent” with the original *terms* of the contracts entered into prior to issuance of the GSNM Proclamation. Moreover, the annual extensions issued after the Federal Court enjoined these timber sales are also inconsistent with the original *terms* of the contracts and thus inconsistent with the GSNM Proclamation strictures.

By the Forest Service’s own interpretations, “Contract modifications are changes in the *terms* of timber sale contracts.” Forest Service Manual (“FSM”) 2453.2 (Jun. 10, 2004), available at (<http://www.fs.fed.us/im/directives/fsm/2400/2450.doc>) (emphasis added). Even the Forest Service’s forms used to extend each contract’s termination date (Form FS-2400-9) are titled an “Agreement to Modify Contract.” Therefore, each contract can no longer be “completed *consistent with the terms of the . . . contract.*” And therefore, each contract is no longer “grandfathered” under the provision of the GSNM Proclamation, which allowed implementation of these contracts.

Moreover, both the original and subsequent contract modifications that extended each termination date also violate explicit Forest Service rules and directives. Forest Service regulations provide that contracts “shall not be extended” unless a finding is made: (a) that the purchaser has diligently performed in accordance with contract provisions and an approved plan of operation; or (b) that the substantial overriding public interest justifies the extension. 36 C.F.R. § 223.115 (emphasis added). Even if such a findings had been made, the FSM further directs contracting officers not to grant extensions under the “diligent performance” authority of § 223.115(a) when the extension “would adversely impact resource management or protection problems or would cause environmental damage that contract modification cannot prevent or correct.” FSM 2453.12, ¶ 1.c.(1). Further, except in unusual circumstances, officers “may grant only one contract extension for a duration not to exceed one year.” *Id.* ¶ 1b. Here, the contracting officer for the Forest Service has issued multiple contract extensions both prior to the court’s injunctions and subsequent to the court’s injunctions. Furthermore, extensions must not be granted unless 75 percent of the volume has already been cut or removed, which has not occurred for these three timber sales. FSM 2453.12, ¶ 2.a.

Only the Chief of the Forest Service may authorize a contract extension under the “substantial overriding public interest” authority of § 223.115(b). FSM, 2453.13. But the extensions for each of the three contracts were signed by the local contracting officer, and appear to have been routinely given. Even if the extensions had been properly authorized, the “substantial overriding public interest” counsels against extending contracts because of the unique ecological features of the monument. Compare 36 C.F.R. § 223.115(b) with GSNM Proclamation (prohibiting timber harvest because, due to various unique ecological features of the Sequoia National Forest, “it would be in the public interest to reserve such lands as a national monument”).

In sum, the Saddle, White River, and Ice Helicopter contracts are no longer “grandfathered” timber sales under the GSNM Proclamation. Moreover, in this case, Forest Service rules and policies in effect at the time of the original contract, and even now, preclude the ongoing contract extensions. *See also* FSM, 2453.12, ¶ 1.c (“the Contracting Officer is not obligated to grant a contract extension.”).

Finally, as a matter of policy, the Chief of the Forest Service should exercise his discretion and direct the agency to discontinue the annual contract extensions and allow each contract to terminate according to their original terms. The terms of each contract still expressly provide for ongoing oversight by the Forest Service and cancellation or modification to prevent environmental harm. These regulations also protect the purchaser’s contract rights by providing for compensation in the event of cancellation or modification. *See* 36 C.F.R. §§ 223.40, 223.113, 223.116. And for those reasons, the termination of these contracts will allow the timber purchaser to be compensated, while at the same time protecting the Monument’s ecological conditions. These policies and rules were embodied in numerous provisions of each contract: paragraph C6.24 provides that the agency may unilaterally cancel or modify this contract to protect an area, object of antiquity, artifact, or similar object which is or may be entitled to protection under the Antiquities Act “regardless of when an area... is... identified”; paragraph C.6.25 allows cancellation of the contract if new species are listed on the Endangered Species Act list or the Regional Forester's sensitive species list; paragraph C6.01 provides that the contractor agrees to interrupt or delay operations to prevent environmental degradation, which might require contract cancellation or modification; and paragraph C8.2 allows the agency to cancel the contract if it would: a) cause significant environmental damage, b) be significantly inconsistent with Forest Plans, c) cause significant damage to cultural resources as described above in C6.24, or d) adversely affect species as described in C6.25. Here, these contacts should be cancelled to protect the objects of interest in the GSNM, to protect the Pacific fisher, a sensitive species and a species proposed for listing under the ESA, to prevent environmental degradation, since these timber sales are likely to cause significant environmental damage, and they are inconsistent with the GSNM Management Plan’s stricture against commercial logging and tree removal.

For these reasons, the Saddle, Ice, and White River Helicopter contracts are either void, by the terms of the GSNM Proclamation because they could not have been legally extended, or they should be void under Forest Service directives. We therefore request that the Chief of the Forest Service immediately terminate these contracts to comply with the GSNM Proclamation, Forest Service timber sale regulations, or the Forest Service Manual, and to protect the objects of interest in the GSNM.

12. The Transportation Plan Fails to Comply with GSNM Proclamation

As we stated in our DEIS Comments, the Transportation Plan is insufficient as a plan in violation of the Proclamation. *See* Sierra Club DEIS Comments, pp. 61-64. Nothing has changed between the draft and the final plan. It includes little or no analysis and punts real transportation planning under Subpart A of 36 C.F.R. § 212 for roads to 2 years from now.

In fact, there are no standards and guidelines provided in this plan for how to deal with specific transportation or access issues, which should have been possible give that seven years have passed since the roads analysis process (RAP) was completed. While some roads may be converted to trails or decommissioned; however, there are no standards and guidelines provided in the plan for how to do this and what factors should be considered. And there are still no standards or guidelines provided to determine how roads would be upgraded or downgraded to different maintenance levels. There are no standards or guidelines to deal with user conflicts on trails, such as how to deal with the dangers of mountain bikes to hikers and horses or snow mobiles to cross-country skiers, snow shoe/hikers, or horses.

And although the GSNM Proclamation required a Transportation Plan that also deals with trails, the plan is completely inadequate with regard to the trail system. It does not include any desired conditions, strategies, or objectives for trails (only for roads). And it does not list any restrictions, allowing nearly complete use of the system for mechanized transport (mountain bikes) without any analysis or discussion at all. GSNM Plan, p. 126. The only mention of the Trail System is a section with 2 paragraphs, summarizing a few trails in the system. *Id.*, p. 127.

The Transportation Plan also fails to discuss how it will deal with impacts to wildlife, especially the Pacific fisher, an object of interest and a candidate for listing under the Endangered Species Act. In its recent EIS for the Sequoia NF Travel Management Plan south of the Monument, the Forest Service conceded “The effects of motorized routes on fisher habitat are negative in both the short and long term by causing a reduction in habitat quality due to disturbance and fragmentation.” But there is only one reference to wildlife, referring the reader to the RAP, which is not included anywhere in the project record.

Finally, there is little guidance about how the Transportation Plan would inform decisions for access to the objects, consistent with their protection.

The Transportation Plan thus is inadequate and violates the letter and intent of the Proclamation.

**13. Specific Problems with the GSNM Standards and Guidelines (S&Gs)
Make Them Inconsistent, Unworkable, or Too Vague for Compliance**

a. The Plan S&Gs Still Appear to Allow OHVs on Future Trails

The S&Gs should eliminate the consideration of new trails for “off-highway vehicle routes” p. 89, Item 24; p. 91, Item 53; and p. 92, Item 58. The GSNM Proclamation prohibits the use of OHVs on trails, including new trails. This should be corrected in errata.

b. Strictures on Tree Felling, Removal, and the Decision Tree should be specifically enumerated in the S&Gs

Although the first S&G states: “For all projects that include a proposal for tree removal from within the Monument, except for personal use fuelwood, conduct an evaluation to document the clear need for removing trees for ecological restoration and maintenance or public safety” (GSNM Plan, p. 82, S&G 1.), this S&G does not refer to the tree felling, removal, and decision trees on the previous pages. Without specific reference to these criteria, managers could deviate from those strictures. The Forest Service should add the following statement at the end of this S&G: “according to the tree removal and felling criteria, and the decision tree in this plan.”

c. The S&Gs should be applied to all forest types

The second S&G for “implementation of vegetation and fuels treatment” limits the diameter limits its provisions to only “westside forest types.” GSNM Plan, p. 82, S&G 2. No other provisions in the GSNM Plan explain why the limitations should be limited to only “westside forest types” when diameter limits generally apply without limitation, according to other parts of the plan. *See* GSNM Plan, p. 77, Figure 46 (providing diameter limits for various land allocations and species habitat). Moreover, other S&Gs also refer to the limiting term “westside forest types.” *See* GSNM Plan, p. 85 (S&G 11.); p. 86 (S&G 21.), p. 89 (S&G 30.); *see also* GSNM Plan, p. 119 (Design Criterion for Range). Even though the entire monument appears to be within “westside forest types,” these terms could cause confusion and should be eliminated.

d. The S&Gs inappropriately provide loopholes that may allow managers to arbitrarily deviate from the S&Gs to fell or remove trees

The S&Gs allow, “Incidental removal of trees that present safety hazards may deviate from vegetation management standards and guidelines.” GSNM Plan, p. 82, S&G 3.). This provision appears to allow managers to ignore all S&Gs, as well as the tree felling and removal criteria, and the decision tree. This S&G should be eliminated. At the very least, the word “removal” should be changed to “felling” so that the tree removal criteria can be appropriately applied to a felled tree, which no longer poses a “present safety hazard.”

e. Thinning and Mechanical Treatments cannot be used as tools to reduce surface fuels

The S&Gs, GSNM Plan, p. 85, Item 9; and p. 86, Items 17, 20, and 25 suggest that mechanical treatments or thinning from below will somehow reduce or remove surface fuels. Mechanical treatments or thinning itself does not remove surface fuels, and sometimes produces more surface fuels. *See Rice Declaration*, p. 17 (Exhibit D), citing Agee and Lolley, 2006, Stephens et al 2009, Valliant et al 2009.

The Forest Service cannot thin or mechanically treat its way out of the build-up of fuels from 100 years of fire suppression, because (1) the treatments may actually increase surface fuels, and (2) only wildfire or prescribed fire can effectively remove surface fuels.

B. FAILURE TO COMPLY WITH NEPA

The FEIS and ROD do not satisfy NEPA, and thus violate the APA. The legal background, facts, science and discussion under the GSNM Proclamation section above and the exhibits filed with this appeal indicate not only violations of the Proclamation but violations of NEPA, its implementing regulations and the APA as well. SFK incorporates those sections and exhibits into this section on NEPA.

1. The FEIS and ROD are Incomprehensible in Violation of NEPA and the APA

In *Lockyer v. U.S. Forest Service*, 465 F.Supp.2d 917 (N.D. Calif. 2006) the court vacated the previous version of the GSNM Management Plan because, among other reasons, the Plan was vague, unintelligible and failed to satisfy NEPA’s “readability” or “understandability” requirement in 40 C.F.R. §1502.8, *i.e.* the requirement that the Plan be “properly defined.” *Id.* at 923. The court found it a key fact that the Plan ‘includes a considerable overlay of direction from both the 1988 [LRMP] and the 2001 [Framework] . . .’ *Id.* at 924. It agreed with Plaintiffs that the Plan’s “overlay” of requirements from these other documents was “so vague

as to be unintelligible” and “not only confusing but also contradictory.” *Id.* at 924. The court directed the Forest Service to develop a new Plan to correct this and other flaws in the Plan. *Id.* at 930.

The new proposed GSNM Management Plan again violates NEPA’s comprehensibility requirement, and does not meet the requirements set forth in *Lockyer*. For example:

- a. **Management Standards for Areas with Overlap (WUI, TFETA) are unclear with regard to Groves, Old Forest Emphasis Areas, and other protected areas.**

The Plan at p. 31 states:

Overlapping land allocations/management areas are those that are likely to overlap with static and dynamic areas. Where they overlap, the area with the most restrictive direction is given priority, as stipulated in the 2001 SNFPA or this document. Land allocations/management areas that have more restrictive management direction preempt those with less restrictive direction. For example, when a wildland urban intermix (WUI) defense zone overlaps designated wilderness, the management direction for the more restrictive land allocation/management area--in this case, the direction for the wilderness area because of the importance of its legal status--is followed.

But this is contradicted by the matrix table on Plan pages 32-33, which applies WUI direction as dominant when there is an overlap between WUI or TFETA and Groves. It is not clear from the Plan which takes precedence.¹²

- b. **Continued reliance by reference on 2001, 2004 Framework and 2007 SNF MIS Amendment and other documents outside of plan violates *Lockyer* and requirements for standalone plan**

There are numerous examples of the Plan still not complying with the clarity and standalone Plan requirement of *Lockyer*. *See e.g.*, FEIS, pp. 493-502 for MIS; see list of pages referenced in FEIS Index, p. 741 for Framework. In addition:

- i. *See* Plan, p. 51, Table 23, Item 7 (“Manage wetlands and meadow habitat for willow flycatchers and other species following the standards and guidelines from the 1988 Forest Plan, as modified by the 1990 MSA and the 2004 SNFPA.”);

¹² On November 28, 2012 the Forest Service issued a letter purporting to correct errors in the FEIS, items 6 and 7 of which addressed the overlap issues. However it did not correct all of these inconsistencies and contradictions.

- ii. The Plan does not define WUI Threat or Defense Zones; instead, the FEIS relies on the 2001 & 2004 Framework for these definitions. *See* FEIS Glossary at 671, 682; and
- iii. References to the 2001 Framework for fire management planning are circular. For example, the 2001 ROD at A-12 states:

Wildland Fire Use

Lightning-caused fires can be used to reduce fuel loads or to provide other resource benefits, such as conserving populations of fire-dependent species. Before wildland fires can be used, national forest managers must prepare a fire management plan that describes how prescribed fires and naturally caused wildland fires will achieve resource management objectives.

The GSNM statement that refers to the 2001 Framework is not a substitute for a fire management plan and is not specific enough for the Forest Service to make its decisions to suppress fire or let it burn. The 1988 Sequoia LRMP and Federal Wildland Fire Management Policy say essentially the same thing, that a fire management plan must be prepared. So there is nothing to guide the fire management decisions in the new Monument plan, since the Chief withdrew the Sequoia's 2005 Fire Management Plan.

c. Reliance on 1988 LRMP for fire management is inconsistent with the GSNM Plan to prioritize letting wildland fires burn

As discussed in Section IV.A.8. above, the 1988 LRMP no longer relies on an actual fire plan, which the Forest Service withdrew in 2005, defaulting to a 1972 plan, which is likely to be inappropriate and inconsistent with current management needs. *See* LRMP, Appx. A at A-1 to A-2 (Exhibit G).

d. Additional unclear management standards

The Plan's design criteria for wildlife and plant habitat consist of a list of laws and Forest Service guidance documents. GSNM Plan, p. 69. Simply listing other sources is not an adequate design criteria or mitigation measure.

Also, logging up to 20 inches dbh is allowed, but the Decision Tree lacks definitive standards on when this will be allowed, thus giving the Forest Service too much discretion to determine if this is consistent with the Proclamation. The Decision Tree is so vague it can easily direct implementation away from fire and to mechanical treatments with tree removal, without clear need.

In Sierra Club's DEIS Comments, pp. 108 *et. seq.*, we raised the issue that the Plan is too vague for implementation. Those concerns have not been addressed or corrected in the final EIS, ROD or Plan. For instance, we noted that the Fuels Report quotes Knapp recommending prescribed burning be conducted at various times of the year or with different prescriptions (firing patterns), but this specificity is not included in the plan itself as a standard and guideline. *See* SC Comments, p. 108, *citing* [First] Rice Decl., p. 16. As set forth in the Second Declaration of Carol Rice (Exhibit D), this was not corrected between the draft Plan and the new, final Plan. She states for example:

The Plan is not specific enough to guarantee implementation.

Page 42 of The Plan states, "Objectives are concise projections of measurable, time-specific outcomes that are consistent with the strategies. They provide a way to measure progress toward achieving or maintaining desired conditions."

While the vision for the vegetation types is fairly specific, the strategy to achieve those goals is not. For example, Table 12, Objectives for Giant Sequoias, on page 46 of The Plan notes three objectives: "Within 20 years, complete a grove-specific fuel load reduction plan for each giant sequoia grove.", Accomplish restoration projects in the WUI defense zone in the giant sequoia groves, and accomplish ecological restoration projects in 25 percent of the giant sequoia groves outside the WUI defense zones. These are very broad objectives, with a very low bar for success. One project inside the WUI, and one plan would achieve two of the three objectives for the Giant Sequoia.

Similarly Table 13, Objectives for Mixed Conifer on page 46 requires the Forest to "Change approximately 10 percent of the mixed conifer types to reduce fuels and increase tree growing space in groves per decade.", and "Change approximately 6 percent of the mixed conifer types to reduce fuels and increase tree growing space outside of groves per decade." How would one measure success toward this objective? Picking up one log? Further, fuel load reduction is not the ultimate objective, changing fire behavior is. The objective would be better stated in terms of fire behavior (rate of spread, and flame length, for example), which is consistent with the 2001 SNFPA. This same emphasis on fuel load reduction persists in the stated objectives for montane Hardwood-Conifer and Red Fir vegetation types, in Tables 16 and 17, respectively, on page 47 of The Plan.

Rice Declaration, p. 20 (Exhibit D).

Finally, SFK adopts and incorporates the California Attorney General comments on the DEIS regarding unclear management standards at FEIS Vol. 2 p. 687, including but not limited to objections to the overlapping land allocations from the 2001 Framework, the unclear relationship of “strategies” and “standards and guidelines,” and the confusing incorporation of other planning documents such that the Plan is not a “stand alone” plan.

e. Internal inconsistencies and conflicts concerning fire and treatment methods.

FEIS Table 10 and Table 20 each now state: "13. Use the following tools for fuels reduction, in order of priority: prescribed fire, mechanical treatment, managed wildfire (when available)." This is not consistent with other statements in the Plan. Fire is the dominant management approach: treatment types 77% fire (Plan, p. 78) and decision tree (Plan, p. 81) emphasize using managed fire first. In addition, the Plan is not clear on whether this ordering is mandatory. *See e.g.*, ROD p. 16 listing them in order of fire and mechanical treatment, but saying: “This ordering of management tools in Alternative B will not direct the order in which these tools will be considered or used in site-specific projects.”

As discussed in the Second Rice Declaration filed herewith, these ambiguities draw into question whether the Forest Service is really committed to the use of wildfire and prescribed burning in the first instance. While the discussion of the Decision Tree on pages 80 and 81 of the Plan indicate wildfire, and then prescribed fire would be the treatments of choice over mechanical treatments, there are no incentives for using prescribed fire. Additionally, there are many ways for prescribed fire to be determined as infeasible. Ms. Rice provides several examples of this ambiguity, including:

Table 14, Fuels Treatment by Alternative and Watershed Acres Available for Fuel Management (page 49 of the Fire and Fuels Report) indicates that in Alternative B, twice as many acres are to be treated with mechanical treatments as prescribed fire. Is this a testimony to the preference of mechanical treatments, regardless of the Decision Tree and alluring text in the Plan.

Ms. Rice’s Second Declaration provides numerous additional examples of the many internal conflicts that will limit the ability of the Plan to be implemented. For example:

Tables 10 and 20 of the Plan note that for restoration and fuels management, prescribed fire would be the tool of choice. However, in The Decision Tree for site-specific projects, described on pages 80-81, the Plan states, “The desire to return the Monument to natural cycles and processes, including a natural fire interval, makes managed

wildfire the preferred tool to accomplish ecological restoration and maintenance.” If a wildfire is not available, prescribed fire is to be evaluated for use. This is inconsistent with Tables 10 and 20. Because lightning-caused wildfire rarely visits any one locale, prescribed fire is essentially the default tool. This is consistent with Table 10 and 20 of the plan, but only unofficially so.

This inconsistency is promoted in the standards and guidelines on pages 82-86 of the Plan. While the Decision Tree notes that managed fires is the preferred tool, only in Wilderness areas, in Standard and Guidelines #14, is it mentioned. Does this imply managed wildfire is not the tool of choice? If the intent is that this standard and guideline[]is aimed at limiting wildfires to the planned boundary, how is this different from other areas?

Pages 26 and 38 of the Fire and Fuels report compare the priority of the management tools, which conflicts with the Plan. It states that for Alt B, the priority would be prescribed fire, mechanical treatment, then managed wildfire (when available).

Rice Declaration, pp. 20-21 (Exhibit D).

2. Failure to take a “hard look” at all effects and impacts, and conclusions not supported by the record

An EIS must include an analysis of “direct effects,” which are “caused by the action and occur at the same time and place,” as well as “indirect effects which . . . are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8. An EIS must also consider the cumulative impacts of the proposed federal agency action together with past, present and reasonably foreseeable future actions, including all federal and non-federal activities. 40 C.F.R. § 1508.7. The agency must take a “hard look” at environmental consequences. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n. 21 (1976).

a. General Objections

SFK adopts and incorporates the DEIS comments of the California Attorney General on this subject at FEIS Vol. 2, pp. 688 – 690, including but not limited to objecting to the Forest Service position that there are no direct effects (*see e.g.* FEIS p. 379), the Forest Service’s focus on fuels treatment and the resultant failure to analyze adequately the trade off with habitat protection, the lack of analysis of past management of the Monument, and the lack of adequate climate change analysis.

The FEIS does not consider all direct and many indirect impacts authorized by the Plan. As set forth in SFK's DEIS Comments, the Forest Service did not: a) consider adequately the direct and indirect impacts of the Plan on wildfire risk and Old Forest Dependent Species; b) the indirect and cumulative effects on future snag recruitment from thinning and other forest health treatments on wildlife; c) the specific direct and indirect impacts from thinning to protect communities; d) the impacts on wildlife, especially the Pacific Fisher and California Spotted Owl (Sierra Club Comments pp. 149-155); and the impacts on roadless and wilderness areas (*id.* at 155-56).

b. The FS is acting contrary to the expert opinion and evidence before the agency, and its analysis and choice of Alternative B is not sufficiently explained.

SFK submitted several reports or declarations by forestry and wildlife experts with its comments on the DEIS. Many of their objections and concerns were not addressed or corrected in the FEIS/ROD. These continue, and are explained further in their reports and declarations filed with this appeal. These are incorporated into this appeal as if repeated in full, and are summarized here:

Dr. Dominick DellaSala (Exhibit A): Dr. DellaSala is the Chief Scientist and President of the Geos Institute in Ashland, Oregon. Based on his review of the FEIS and the methodology set forth in his report, he notes 4 categories of inconsistencies with Proclamation which also bear on adequacy of NEPA analysis: 1) Widespread livestock grazing is occurring without sufficient protection/restoration measures; 2) Extensive fuel reduction treatments (one-fourth of the monument will receive mechanical fuel treatments within a combined 1.5 mile Wildland-Urban Interface zone) will reduce habitat for objects of interest and there is a lack of sufficient ecologically based alternatives; 3) Extensive roads network (822 miles) impacts the monument's hydrology, facilitates the spread of invasive species, increases the probability of human-caused wildlife ignitions, and fragments fish and wildlife habitat, and yet few remedial measures are provided for specific objects of interest; and 4) Combined effects of climate change along with historical and ongoing land-use stressors (logging, roads, livestock) present unprecedented threats to the objects of interest. *Scientific Evaluation of the Giant Sequoia National Monument Management Plan and Final Environmental Impact Statement* (the "DellaSala Report" filed herewith) pp.3-4.

Dr. Edwin Royce (Exhibit B): Dr. Royce holds a PhD in botany with a specialization in forest plant ecology, and is a professor in the Department of Plant Sciences at the University of California at Davis. In his report he notes that the Plan allows felling of non-Sequoia conifers up to 20" dbh and Sequoias up to 12" dbh in the name of ecosystem restoration and resiliency. However, natural successional processes will be interrupted by that practice. As he explains, "Protection" in the

Proclamation means in large part protection from excessive human manipulation. By contrast, SEKI fells trees up to 8” (but only in a 200-ft zone around buildings and/or from roads to any designated wilderness – as in Yosemite NP) prior to burning to treat ladder fuels and the reduction of standing brush. The managed process proposed in the Plan might be appropriate for a general or commercial forest, where rapid tree growth is the prime objective, but the Proclamation makes clear that a prime objective is the restoration of natural processes. Therefore, re-introduction of fire should not require felling of trees greater than 8” dbh. (Royce Report at p. 5-6). Dr. Royce also explains that the TFETA is much wider than necessary and may subject more of the Monument to extreme fuel reduction than is needed. *Id.* at 7.

Monica Bond (Exhibit C): Ms. Bond is a wildlife biologist with considerable experience and expertise in the biology, ecology and behavior of California Spotted Owls – which should be considered “objects” to be protected by the Plan. She explains that logging that is proposed under the preferred Alternative B of the FEIS for the Plan will affect at a minimum dozens of Spotted Owl breeding sites throughout the Monument. Unfortunately, the Wildlife Biological Evaluation’s (BE) analysis of the impacts of logging – what the Monument Plan calls “mechanical treatments” – on the California Spotted Owl fails to properly and thoroughly discuss the vast majority of recent scientific findings readily available in the literature regarding the owl and fire. These findings would largely eliminate the justification for the logging proposed in the preferred Alternative B. Further, after failing to discuss important recent research findings, the BE then makes a broad, sweeping, unsubstantiated conclusion that Alternative B is “not likely to result in a trend toward Federal listing or loss of viability” of the California Spotted Owl. This unsubstantiated conclusion is made despite the fact that nearly one-half (47%) of all Spotted Owl Home Range Core Area (HRCA) acreage is prioritized for logging of trees up to 20 inches diameter within an excessively large ‘Threat Zone,’ and research shows that habitat use and survival of California Spotted Owls is associated with stands dominated by both large (>24 inches diameter) and medium-sized (>11 inches) trees (Chatfield 2005, Seamans 2005).

Other key points from Ms. Bond’s analysis of FEIS are:

1) Excessively Large Threat Zone – The Monument Plan’s preferred Alternative B defines the Wildland Urban Interface ‘Threat Zone’ as extending from one-quarter mile to 1.5 miles away from developed private lands, which would encompass 41 percent of all Monument acres (BE at page 728). The designation of such a large Threat Zone to protect adjacent developed private lands is not supported by empirical evidence.

2) Mischaracterization of Short-term Impacts – The Wildlife BE appears to downplay the adverse impacts of logging on California Spotted Owls. In addition

to failing to provide any discussion of studies that concluded adverse effects of logging on site occupancy (Seamans and Gutiérrez 2007, for example), the BE apparently willfully omitted important contextual information about the longer-term impacts on population viability of owls after habitat reduction.

3) Alternatives C and D – The FEIS for the Monument Plan analyzed two promising alternatives (C and D) that better reflect the current state of the science regarding fire and Spotted Owls, and I ardently recommend the Forest Service reconsider its selection of Alternative B in favor of these alternatives.

In sum, Ms. Bond's report shows that that Alternative B allows widespread habitat degradation in the majority of Spotted Owl HRCA acres (in the 'Threat Zone'), but the distance of the Threat Zone proposed under Alternative B is excessively large and thus is not necessary for reducing the risk of fire to private lands. Within the excessively large 'Threat Zone' as designated under Alternative B, nearly one-half of all Spotted Owl HRCA acres (47 percent) would be prioritized for logging of trees up to 20 inches diameter and reduction of tree canopy down to 50 percent to reduce risk of fire. The scientific studies described in her report suggest that management objectives in Alternative B of the Monument Plan's FEIS that include logging of trees over 11 inches and up to 20 inches to 'protect' the forests from future disturbances such as "uncharacteristically severe" fires will certainly degrade current Spotted Owl habitat in order to do so – potentially affecting survival and occupancy, and thus the viability of the local population. Such an outcome is not supported by the best available science and should therefore be rejected.

Dr. Carol Rice (Exhibit D): Ms. Rice's first analysis of the DEIS was filed with SFK's comments. Some of her concerns were addressed by the Forest Service in the FEIS, however many were not, which is explained in her Second Declaration filed herewith. These include:

1. The Fuels and Fire Report is inadequate; it does not contain a landscape analysis, even though the data would enable such. For example, Landfire was used in the vegetation section. The comparison of alternatives is inadequate, and non-quantifiable and does not use the best science. No new analysis was conducted regarding fire and fuels.
2. The WUI is excessively wide to meet the stated goal and objective. Treatments should be prioritized to be in high hazard and risk. Mechanical treatment is emphasized in over half of the monument: in the WUI and the TFETA. A 200 ft. WUI is sufficient to protect structures.

3. The TFETA is excessively wide to meet the stated goal and objective; mechanical treatment is emphasized in over half of the monument: in the WUI and the TFETA.
4. The commitment to prescribed burning and managed use of wildfire is not apparent, because of a lack of staffing and other programs and incentives to promote prescribed burning.
5. Project prioritization is still determined through a new term, “susceptibility,” which is poorly defined. Even the goals of some vegetation types are expressed in this term.
6. The monitoring plan is still vague.
7. The Scientific Consistency Review was too constrained in the fire and fuels section to comment on the scientific validity of the plan.
8. The Plan is not specific enough to guarantee implementation.

Dr. Chad Hanson (Exhibit E): Dr. Chad Hanson is a fire ecologist who focuses his research on the ecology of forest ecosystems in the Sierra Nevada. He provided a declaration in support of SFK’s DEIS Comments, which is provided again with this appeal because most of the concerns outlined in his declaration were not addressed in the FEIS. Concerns raised in his declaration relate to the management effects on wildlife from fire and mechanical treatments, especially as it relates to the deficit of snags, the effect on future snag recruitment, the need for large down logs, and the need for the types of habitats that only fire can create. These impact cavity nesting species, including woodpeckers, and other rare species that either use these same habitat types, including the California spotted owl, the Pacific fisher, and the black-backed woodpecker. As discussed above, Dr. Hanson explains how the tree felling and removal mandates from the Proclamation relate to wildlife needs and why trees, ecologically, are better left in the monument. Moreover, in his comments, he discusses a tree diameter limit for felling as adequate at 8-10 inches or below because scientific literature has concluded that fuel treatments are effective at that limit. Finally, he discusses why larger tree boles are not considered a fire risk, even when felled, and that the smaller limbs, slash, and tops of trees are what the Forest Service need to be treated for fuel reduction and to reduce fire severity risk.

Dr. Reginald H. Barrett (Exhibit F): Dr. Barrett was an expert witness on the Pacific fisher for Plaintiffs in the litigation in which the prior Monument Plan was vacated. *Sierra Club v. Bosworth*, 465 F.Supp.2d 931 (N.D. Calif. 2006). Filed herewith is a declaration by Dr. Barrett on the FEIS and GSNM Plan. He describes the need to set specific habitat standards and guidelines for the fisher, including

higher snag density requirements, larger down woody material requirements, and greater canopy cover requirements across the GSNM. He also describes the need for a standard and guidelines for monitoring and documenting all fisher den sites, and a full scale telemetry study to identify natal den trees. As noted therein, the Forest Service has also overlooked a serious aspect of the problem in not addressing the role of rodenticides on fishers from ongoing illegal marijuana growing operation in the GSNM.

c. Failure to Disclose or Analyze Direct & Indirect Effects from Recreation & Transportation Authorized in the Plan:

(1) Effects from recreation, such as mountain bike use and outfitter, as authorized in the plan are not discussed in the FEIS.

The Forest Service asserts that it does not have to disclose these effects because they have previously been disclosed:

The effects from existing activities represent a baseline and are carried forward through the range of alternatives. These activities have been approved in prior environmental analyses, including the existing Forest Plan. The programmatic effects described for each of the other alternatives include the effects of ongoing activities.

FEIS, p. 555 (emphasis added). But there is no such prior analysis in the existing plan or prior analyses, which was never addressed for mountain bikes (and likely no discussion of effects from outfitters). In the FEIS Response to Comments, the FS dodges the issue of impacts and user conflicts from mountain bikes and puts this off for future review, as needed. See e.g. FEIS, Appx. L at 668-69 (response to PC #365). Moreover, there is no direction in the Plan about mountain bikes, other than to say that all trails are open to bikes unless designated closed. However, the plan does not list those closed trails.

Further, the Proclamation requires that recreation shall be permitted only when it is consistent with the Monument's purpose of protecting the objects. "The plan will provide for and encourage continued public and recreational access and use consistent with the purposes of the monument." How can recreation be consistent if the FEIS fails to provide an environmental impact analysis of the proposed recreation?

The Scientific Advisory Board (SAB) issued Advisory X in direct response to the potential for increased visitation to impact the Monument's watersheds and water quality. It stated:

Recreational activity and associated infrastructure can alter water quality and watershed functions (Kattelman 1996, Moyle and Randall 1996). Areas of more intensive recreational use and development have the greatest potential for impairing water quality. The sources of such change include roads, trails, intensive use of riparian areas, septic systems, and antiquated infrastructure, among others (Kattelman 1996).

SAB Advisories, p. 17 (Exhibit K). It advised GSNM planners to:

Use the CWE analytical framework as a basis for predicting the effects of recreation on watersheds. The current CWE analytical tools will need to be expanded beyond consideration of sediment transport in order to allow the flexibility to address chemical water quality and water use as appropriate. Consider restoration of existing water quality impairment in conjunction with management plans for expanded recreational use. The scale of watershed under analysis may need to be expanded from the current approach depending upon the extent of the proposed actions.

Id. at 18. Clearly there are effects from recreational activities and associated infrastructure (read “roads” and “trails”), which are immediately authorized for use by the GSNM Plan ROD. No further project decision need take place to authorize recreation, road, or trail use, so the effects from recreation and associated infrastructure is a “direct” effect of the issuance of the GSNM Plan. *See Ohio Forestry Assn. v. Sierra Club*, 523 U.S. 726, 739 (1998) (“at oral argument, the Solicitor General agreed that if the Sierra Club’s claim was that the [forest] ‘plan was allowing motorcycles into a bird-watching area or something [like that], that would be immediately justiciable.’”). As the 6th Circuit Court of appeals explains:

Unlike logging, the activities about which Meister complains—gun hunting and snowmobile use—do not require further action by the Service before they can occur. To the contrary, they have in fact occurred ever since the Plan’s issuance, with the resultant harms that Meister now alleges. Thus, the Plan itself has harmed him in concrete ways. His claims are ripe.

Meister v. U.S. Dept. of Agriculture, 623 F.3d 363, 370 (6th Cir. 2010).

The same failure to analyze recreational impacts applies to the lack of effects discussion from the use of the GSNM by outfitters. The only impact analyzed in the Plan with respect to outfitters is the effect of the plan on outfitters rather than the effects from outfitters on the GSNM:

Outfitter-guides are expected to continue to have opportunities to serve visitors in all alternatives, although limitations may be placed on where they can provide services and what kinds of activities they can offer. For example, mountain bike rentals or guided trips are expected to be limited in Alternative C, due to the prohibition of mountain bikes on trails. Alternative D is expected to have fewer trails designated for mountain bike use than Alternatives A, B, E, and F, which is also expected to result in fewer opportunities for mountain bike outfitter-guides.

FEIS, p. 562. SFK pointed out the particular concern it had about the effects from mountain bikes on other trail users and on giant sequoia groves in its DEIS Comments, which included a photographic exhibit and examples of direct conflicts between users. *See* Sierra Club DEIS Comments, pp. 20-21 & Photo Exhibit attached thereto. In response to this issue, the Forest Service never states that it has studied the effects from bikes on other users of trails or other resources, such as groves. It's only responses are:

The Clinton proclamation that created the Monument restricted the use of non-motorized mechanized vehicles (mountain bikes) to designated National Forest System roads and trails; no amount of mileage is specified for that designation. The alternatives analyze a range of management strategies that include the restriction of mountain bikes to designated National Forest System roads only (no trails) and a reduced number of roads/ trails. Other alternatives include use of the National Forest System roads and trails that are currently designated.

FEIS, Appx. L, p. 656. While the Forest Service responds to another comment, listing all of the effects on Recreation (*see id.*, pp. 655-56), it never points to anywhere in the FEIS where it now or in the previously Dec. 31, 2000 designation of roads open to mountain bikes ever disclosed the environmental effects from mountain biking. It's just not there or anywhere else.

Because there is no discussion about the direct or indirect impacts from recreation on the Monument objects, safety, or conflict with other users in the FEIS or in the previous planning documents, the decision violates NEPA.

(2) Effects from Transportation, as authorized in the Transportation Plan are not discussed in the FEIS.

The FEIS continues to assert that

No direct effects would occur from the alternatives analyzed in this programmatic level document because no site-specific decisions are

being made. The ongoing effects from current usage of the existing transportation system are discussed in Chapter 4 of the FEIS (FEIS, Volume 1, Chapter 4, Effects on the Transportation System, Indirect Effects, Transportation System, Alternative A).

Effects from the transportation system on other resources can be found in Chapter 4 of the FEIS where the effects on those resources are analyzed (e.g., Effects on Fire and Fuels, Effects on Wildlife and Plant Habitat, Effects on Hydrological Resources, and Effects on Groundwater).

FEIS, Appx. L, p. 666.

The Forest Service also asserts there are no effects from roads because ongoing effects were discussed in the 1988 Plan analysis or other analysis. But that is not an adequate analysis of roads for NEPA purposes. *See e.g.* DellaSala Report herewith, at pp. 36-42.

Finally, SAB Advisory XVII. p. 37 (Exhibit K) discusses the need to develop alternatives for the Transportation Plan. But the Forest Service has not done so, nor has it not developed a Transportation Plan within the meaning of the Proclamation or disclosed the effects from this plan on the GSNM and its objects of interest.

d. Failure to disclose the effects of eliminating the previous standard for species viability and converting it instead into an ambiguous “strategy”

The previous plan standards for the Sequoia National Forest included the standard: “Maintain habitat to insure all native fish, wildlife, and plant species have adequate population levels and distribution to provide for their continued existence throughout their current range.” 1988 LRMP, p. 4.27 (under S&Gs). The GSNM plan, however, only refers to this “viability” requirement as a “vision” (p. 24) or “strategy” (p. 51), “design criteria” (p. 69-70). But there are no longer any binding S&Gs for species viability in the plan. The environmental effects of this change in approach has not been disclosed in the analysis, in violation of NEPA.

3. Failure to conduct an adequate cumulative impacts analysis

Cumulative impact is defined in NEPA’s implementing regulations as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7; *see also Muckleshoot*

Indian Tribe v. United States Forest Serv., 177 F.3d 800, 809 (9th Cir.1999) (per curiam) (quoting 40 C.F.R. § 1508.7).

SFK addressed most of these issues in Sierra Club DEIS Comments, pp. 31-34; however, the Forest Service has not provided any further analysis of cumulative effects in response.

a. The Impacts of the Saddle, White River, Ice Helicopter, and adjacent Frog Logging Project Effects are Not Disclosed.

The Forest Service does not address the impacts of these projects and how this relates to the alternative chosen. This violates NEPA and the APA. *See, e.g., Blue Mountain Biodiversity Project v. Blackwood*, 161 F.3d 1208 (9th Cir. 1998) (environmental assessment for timber sale must address cumulative effects of other reasonably foreseeable timber sales in the forest). The only treatment of these projects by the Forest Service is:

The timber sales grandfathered by the Clinton proclamation that were enjoined are current legal contracts. The proclamation acknowledged the need to honor the legal contracts. Although these sales were prepared before timber production objectives were prohibited in the Monument, the major purposes of these enjoined sales include fuels and stand density reduction, which are consistent with ecological restoration and promoting stand resiliency.

FEIS, Appx. L, p. 568 (response to comments). The timber sales are not “current legal contracts” since the termination or expiration dates were changed after the Proclamation, but in any event this response to comments is not an analysis of their impacts, cumulative or otherwise.

b. Tule River Reservation Protection Project (project in Black Mtn. grove) is not considered.

This project is reasonably foreseeable on the Forest Service’s Schedule of Proposed Actions (SOPA), but is not included in cumulative impact analysis.

c. Cumulative effects from mechanical treatments on California Spotted Owls are not adequately considered.

For discussion on this point, see Bond Declaration, pp. 1-10 (Exhibit C) filed herewith and Sierra DEIS Comments pp. 33-34.

d. The impacts of climate change, and how these work cumulatively with the chosen Alternative are not considered.

For discussion this point see the DellaSala Report, pp. 50-56 (Exhibit A) filed herewith; Sierra Club DEIS Comments p. 33; and the California Attorney General DEIS Comments. *See* FEIS, Appx. L, p. 690.

4. Inadequate Treatment of Alternatives

NEPA requires an EIS to consider “alternatives to the proposed action.” 42 U.S.C. § 4332(2)(C)(iii); *see also* 42 U.S.C. § 4332(2)(E). The alternatives analysis is the “heart of the environmental impact statement.” 40 C.F.R. § 1502.14. NEPA’s regulations require an agency “to rigorously explore and objectively evaluate all reasonable alternatives.” 40 C.F.R. § 1502.14. In its alternatives analysis, “[a]n agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action.” *Northwest Environmental Defense Center v. Bonneville Power Admin.*, 117 F.3d 1520, 1538 (9th Cir.1997) (quotations omitted). “The existence of a viable but unexamined alternative renders an environmental impact statement inadequate.” *Morongo*, 161 F.3d at 575 (internal quotations and citations omitted); *see also Resources Ltd. v. Robertson*, 35 F.3d 1300, 1307 (9th Cir.1994) (*quoting Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1519 (9th Cir.1992)).

a. Conclusory Nature of the Alternatives Analysis

As explained in the Second Declaration of Carol Rice (Exhibit D), pp. 4-5, the analysis of alternatives is superficial; and most of the text explains the action but does not provide analysis. For example, page 35 of the Fire & Fuels Specialist Report indicates the indirect effects of the Alternative B in two sentences: “The proposed activities are expected to modify fire behavior and reduce the threat of severe wildfire to human communities. Safe firefighter access in the event of a fire will be enhanced as surface and ladder fuel levels are reduced.” No statement of indirect effects was included for Alternative C, D, or E. The analysis of the TFETA is similarly comprised of two sentences: “The addition of the TFETA in Alternatives B and F is expected to provide a reduction in surface and ladder fuels, modifying fire behavior and decreasing the threat of severe wildfire to the Tule River Indian Reservation, its watersheds and also to the objects of interest and watershed in the Monument. Safe firefighter access in the event of a fire would be enhanced as fuel levels are reduced.”

Although there is a comparison of alternatives in the FEIS, the ROD’s choice of Alternative B over the other alternatives, and the ROD’s rejection of the other alternatives, are also conclusory and not explained.

b. The Range of Alternatives Considered is Unreasonable.

An EIS must “rigorously explore and objectively evaluate all reasonable alternatives” to the proposed project. 40 C.F.R. § 1502.14(a).

As set forth in the California Attorney General DEIS comments at FEIS Vol. 2, pp. 690-92, the range of alternatives considered was inadequate. This includes but is not limited to the fact that the desired conditions and objectives and land allocations vary little if at all by alternative, alternatives C and E were stated such that they were inconsistent with the Proclamation and thus were not seriously developed as alternatives, and the Forest Service did not consider alternatives to selling “biomass” to raise funds to treat the desired number of acres, i.e. did not consider obtaining funds from other sources. This is the NEPA deficiency that the Court found present in the 2004 Framework SFEIS. Also, the alternatives that the Forest Service failed to consider in connection with the 2004 Framework should have been evaluated here. *People of State of California v. U.S. Dept. of Agriculture*, 2008 WL 3863479 at *28 (E.D. Calif. Aug. 19, 2008).

SFK’s comments on the DEIS further establish that the Forest Service did not consider a reasonable range of alternatives. The issues raised in our comments were not resolved fully in the FEIS:

First, under the Proclamation and the Antiquities Act, all of the alternatives considered must conserve Monument resources first (and in particular, those resources that are “objects of interest”), and then make other management decisions that do not interfere with the conservation of Monument resources. Thus, in order to comply with these requirements, the range of alternatives cannot include management decisions that will undermine protection of Monument objects in favor of other resources or uses, such as protecting structures in the WUI or adjacent tribal lands, based upon political considerations. None of the alternatives conserve the Monument’s objects of interests above other resources.

Second, all of the action alternatives take a myopic “manage-to-prevent-fire-only” approach that revolves around tree removal. The Proclamation incorporates a strong presumption against the use of logging as a management tool in the Monument area: “[r]emoval of trees, except for personal use fuel wood, from within the Monument area may take place only if clearly needed for ecological restoration and maintenance or public safety.” Given the “clearly needed” stricture in the Proclamation, the Forest Service should have considered an alternative that would meet its goals (desired future conditions) while also limiting tree removal to only what is minimally necessary.

As explained in SFK’s DEIS Comments, Dr. Jack Cohen of the Forest Service’s Fire Sciences Lab (www.firelab.org) advises that the only effective way to protect homes is by clearing brush and small trees within 100-200 feet of individual structures, and that logging at further distances (e.g., 0.25 -1.25 miles) is both ineffective and unnecessary to manage fire risk. *See, e.g., Reducing the Wildland*

Fire Threat to Homes: Where and How Much?, Jack D. Cohen, U.S. Forest Service, Research Physical Scientist, Fire Sciences Laboratory, Rocky Mountain Research Station, 1999. Paper presented at the Fire Economics Symposium, San Diego, CA April 12, 1999 (Cohen (1999)); *see* Cohen (2000); Cohen (2008); *see also* Denny Truesdale, 2000. USDA Forest Service Fire Specialist (As quoted in an August 10, 2000 interview on the C-SPAN program “Washington Journal” that mature trees should not be removed to reduce fire risk.). *Therefore, the Forest Service should have considered an alternative that protects homes and structures by reducing the flammability of the structure itself and reducing vegetation within 100-200 feet of a structure.* This alternative would meet the goals of the Management Plan while staying within the confines of the Proclamation.

Although the Forest Service did consider Alternative D, which included a 200 ft. WUI, that alternative was not a sufficient to address the 200 ft structure protection area. Alternative D is not the same as what Plaintiffs asked for and the record supports. Alternative D creates a 200ft WUI around landline boundaries adjacent to some of the parcels of private lands and other areas with structures, but does nothing to deal with reducing the flammability of the structures themselves or reducing vegetation within the 100-200 feet area around structures. *See* FEIS, p. 87, *see also* FEIS, Map H (WUI for Alt. D).

Third, Alternative C would manage the Monument similar to the adjacent Sequoia and Kings Canyon National Park (SEKI). Highlights of this alternative include limited mechanical treatment, smaller diameter limits (8 inches) and a recreation niche setting. (FEIS p. 83). Unlike the DEIS, the Forest Service appears to have removed the TFETA from Alternative C for the FEIS. However, the FEIS is still lacking analysis of how the National Park Service has fared in meetings its objectives, including fuel management, on the Giant Sequoia National Park. Without this analysis, the Forest Service’s comparison of Alternative C to other alternatives, and the rejection of Alternative C in favor of Alternative B, is inadequate and incomplete.¹³

Fourth, the Forest Service’s range of alternative was too narrow because none of its alternatives focus on protecting the objects of interest listed in the Proclamation. For example, the FS should have included an alternative that prioritizes the increase of protection of rare and endangered plant and animal

¹³ The DEIS noted the 8 inch limit “has proven effective in fuels reduction in the [Sequoia-Kings Canyon National Park].” Vol 1 p. 90. We are unable to find this in the discussion of Alternative C in the FEIS (although the California Attorney General raised it in DEIS comments. *See* FEIS Vol. 2 p. 683). In any event, the success of this limit in the National Park demonstrates that cutting up to 20 inches in the Monument is unnecessary to meet fuel reduction goals, and the 20 inch standard is contrary to the evidence before the agency.

species within the Monument, especially species that depend on old forests such as the Pacific fisher, Great gray owl, American marten, northern goshawk, peregrine falcon, and spotted owl. In fact, all of the alternatives considered should have prioritized protection of the listed “objects of interest.”

Fifth, since the Proclamation mandates that the Forest Service develop the initial management plan with the guidance of the Science Advisory Board (“SAB”), the Forest Service should have included alternatives that implemented the restoration activities outlined by the Scientific Advisory Board. *See* 65 Fed. Reg. 24,095, 24,098 (Apr. 15, 2000), Pres. Proc. No. 7295 (“Secretary, in consultation with the National Academy of Sciences, shall appoint a Scientific Advisory Board to provide scientific guidance during the development of the initial management plan.”). For instance, the DEIS should discuss an alternative for watershed protection and restoration within the Monument that conforms to Advisory X, “Impairment of watershed functions.”¹⁴ *See* Advisory X, p. 17-18 (Exhibit K). Also, the agency should have included alternatives for its Transportation Plan, as advised by the SAB in Advisory XVIII, p. 38 (Exhibit K) (“The range of alternatives in developing the transportation component of the management plan should include a public transportation alternative for the most heavily used areas of the Monument.”). The agency should have also developed an alternative that established clear standards grounded in ecological consequences for when it could use mechanical treatment instead of fire.¹⁵

Sixth, all of the alternatives considered by the Forest Service should have synthesized the principles of ecosystem management specified in the 1990 Mediated Settlement Agreement (“MSA”), a legally binding contract entered into by the Forest Service, that were not modified by the Clinton Proclamation. *See* discussion *infra* regarding applicability of MSA.

Seventh, there is hardly a difference in the existing alternatives that will ‘sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public.’” *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1120 (9th Cir. 2002) (quoting 40 C.F.R. § 1502.14(a)). For one thing, the

¹⁴ Please note that consideration of restoration activities outlined by the SAB in the alternatives analysis is not sufficient to comply with the Proclamation. Rather, the agency should have empanelled a new Scientific Advisory Board. This legal requirement is discussed elsewhere.

¹⁵ The Scientific Advisory Board also found that the invalidated Monument Plan favored logging over prescribed fire, even when the differences in reducing fire risk were “ecologically inconsequential.” Scientific Advisory Board Final Report and Advisories at C-54. The SAB thus recommended that the agency “thoroughly compare and contrast the ecological tradeoffs between prescribed fire and mechanical thinning” in a stand-alone section of the final EIS. *Id.* at C-56; *see also* SAB Advisory XXIV, p. 51-52. This was not done. *See* FEIS pp. 173-181.

desired conditions are identical for all alternatives. Moreover, the objectives, strategies, and standards and guidelines are nearly identical for each of the alternatives. The identical “desired conditions” and nearly identical “objectives” are a fatal flaw because they constrain the decision-makers from considering a clear basis for reasoned choices among options. Our suggested Citizen’s Park Alternative presents different “desired conditions” and “objectives” that are not identical to those in the DEIS, but that still meet the purpose and need for a Monument Plan, and they are supported by the most authoritative scientific study published for managing giant sequoias. *See* Stephenson (1996).

There is also no difference between alternatives with respect to grazing, the amount of grazing, the number of animals, the amount of time an animal can stay in an area, the size and number of areas where animals would be excluded, or any other characteristic of grazing, so there were essentially no grazing alternatives considered, which is a violation of NEPA.

Finally, the range of alternatives considered is inadequate because the Forest Service failed to properly set forth the reasons why certain alternatives were eliminated. *See, e.g., City of Sausalito v. O’Neil*, 386 F.3d 1186 (9th Cir. 2004). For instance, the agency eliminated an alternative that had a 12” diameter limit and retained downed trees as woody debris. The Forest Service eliminated this alternative because it claims that such an alternative would not protect the objects of interest because of fuel buildup. However, the agency provides no citations to support this conclusion. FEIS p. 140. Although there is a comparison of alternatives in the FEIS, the ROD is also very conclusory in regards to why Alternative B was chosen over the other alternatives, which is not a sufficient explanation or rationale for why the Forest Service decided on Alternative B in the end.

c. The Existing Alternatives are Unreasonable.

Alternatives B and F are really identical, except that F eliminates the diameter limit on tree removal. Both alternatives are unreasonable because their focus is really on mechanical treatment (even though the Decision Tree appears to say otherwise), which would result in tree removal as the primary outcome—the opposite of the Proclamation’s proscription that trees can be removed only if clearly needed for ecological restoration and maintenance or public safety. This approach is therefore unreasonable and cannot withstand legal scrutiny.

In essence, Alternative C is unreasonable because it includes provisions that make it impossible to be considered. Alternative C directly conflicts with the Proclamation because it would severely limit recreational access by eliminating dispersed recreation in the Monument. Moreover, it does not include any special provisions to protect objects of interest or restore at-risk species.

Alternative E contains many outdated provisions that would be illegal to implement because they are based only on provisions of the MSA. Because many of these provisions are either inconsistent with the Proclamation or do not consider the best available science Alternative E is also unreasonable. Moreover, this alternative makes no sense on its own. The Forest Service should have incorporated those provisions of the MSA that are compatible with the Proclamation in each of the Alternatives because of its contractual obligations. For example, the provision to recommend the Moses IRA as Wilderness is not an option for just one alternative, but a legal obligation by the Regional Forester.

Alternative D is also unreasonable because it would rely only on naturally-occurring fire and eliminate managed fire and any pre-treatments as options for ecological restoration, which even the National Park Service in the adjacent Sequoia and Kings Canyon National Parks have shown to be effective in restoring giant sequoia groves. While this alternative may be “compliant with the Clinton Proclamation” it could have significant risks and could potentially diminish the protection of Objects of Interest such as the Pacific fisher.

d. The chosen WUI and TFETA zones and rejection of 200 ft. WUI, were arbitrary and capricious.

The Forest Service chose the alternative with the greatest number of acres in the Wildland Urban Intermix (WUI) defense zone of any alternative considered (45,340 acres). The Forest Service chose the alternative with the greatest number of acres in the WUI threat zone of any alternative considered (145,520 acres). The Forest Service chose the alternative with the greatest number of acres in the Tribal Fuels Emphasis Treatment Area (TFETA) of any alternative considered (56,640 acres). The Forest Service also chose the alternative with the greatest width of WUI zones (1.5 miles). FEIS Vol. 1 pp. 145-46.

The Forest Service’s WUI zone is not supported by the FEIS/ROD. It is unnecessarily large, and the treatment placement is not discussed. For instance, chosen Alt. B has a WUI made up of huge defense zone and threat zone (e.g. FEIS Map F for Alt. A, B, E and F). These objectives indicate that treatments in the WUI defense zone, certain TFETA areas, and the WUI Threat Zone together comprise over half the Monument. *See* Rice Declaration, pp. 5-7 (Exhibit D); and California Attorney General DEIS comments at FEIS Vol. 2 pp. 683-84, n. 6.

The width of 1.5 miles designated as WUI in Alternatives B, C, and D is excessive, and not defensible considering the best available science and comparison to SEKI, which is “300 feet out from developed private land.” (FEIS p. 84). Even the 300 ft. zone referenced there is excessive since treatments should be measured from structures, not private property boundaries, if the ostensible interest is protecting

the structures. Also, only a 200 ft. zone is necessary to protect structures. This is evident from the Jack Cohen research discussed above, the additional Cohen studies filed herewith, the First Rice Declaration filed with SFK's DEIS Comments, the Second Rice Declaration (Exhibit D), the Bond Declaration, p. 9 (Exhibit C), the DellaSala Report, p. 36 (Exhibit A), and with the authorities cited therein.

In addition, the designation of the TFETA is arbitrary. The Monument should be managed to protect the Monument and objects of interest within, not adjacent lands. Nonetheless, the selected alternative [Alt B] includes treatment to the TFETA, and page 44 of the FEIS indicates that the land allocation was designed to "*protect the reservation, and its watersheds, but also its objects of interest and watersheds in the Monument from fires spread from one to the other.*" On Map 3 on p. 49 of the current GSNM Management Plan the TFETA is shown to extend as much as 5 miles from the Tule Reservation boundary.

The unnecessary and undesirable nature of the WUI and TFETA in Alternative B is discussed in the First Rice Declaration and Sierra Club's DEIS Comments at pp. 84-95. To recap: a) the size of the Wild Urban Intermix is not scientifically defensible; b) the Forest Service should measure treatments from structures, not private property boundaries; c) the Forest Service unlawfully places protection of WUI above objects of interest; d) the EIS contains no scientific justification for a Tribal Fuels Emphasis Treatment Area; and e) the Forest Service unreasonably focuses on low intensity fires in its desired conditions.

These problems were not fixed in the FEIS, as is explained in Rice's Second Declaration (Exhibit D). To summarize, the width of the WUI (both Threat and Defense) land allocation is excessively wide. This important because fuel treatments trump all other Dominant Management Directions, as seen on Table 3 of the GSNM Plan (page 33). And yet, with this excessive width, page 31 of the Fire and Fuels Report states that an assumption is "Fuels reduction, as proposed to protect communities and objects of interest in the Monument, may not be effective in terms of how much is treated and the kinds of treatments used." This despite treatments throughout a 1.5 wide area.

The Second Rice Declaration, pp. 14-15 (Exhibit D) also describes how in the FEIS the width of the TFETA land allocation is excessively wide. We do not know whether the Tule River Indian Reservation (TRIR) has a threat of severe wildfire since no data/maps are presented. According to CalFire's VHFHSZ map the extent and location of Very High Fire Hazard Severity Zones in state-responsibility lands is limited and localized, but this information is not included in the Plan or DEIS. The only unit of measure is acres in the TFETA, which is not a realistic indication of likelihood of a fire spreading between the Monument and the TRIR and to objects of interest. As above, treatment width does not equate to effectiveness of management to reduce the potential for fire spread to the Reservation.

The Forest Service's action is also contrary to the science advisories from the SAB. For example, that states: "Contrary to one possible interpretation of the DEIS, limiting mechanical fuels treatments to relatively narrow zones around communities does not in itself automatically result in sub-standard defense and threat zones, and therefore greater risks to communities. This is because mechanical treatments aren't the only available means to reduce fuels. Zones of mechanical fuels reduction, sometimes relatively narrow (depending on local conditions), can be used as anchor points for prescribed fires, and prescribed fires are capable of creating forest conditions that meet the Framework's standards for defense and threat zones. In fact, unless mechanical treatments are followed by thorough treatment of surface fuels (such as through a prescribed fire), prescribed fire may result in fuels conditions that better protect communities." Advisory XXIII., p. 48 (Exhibit K).

e. The chosen diameter limits for mechanical treatment and rejection of smaller diameter limits were arbitrary and capricious.

SFK suggested 8 inches dbh as the maximum for mechanical treatment, based on the declarations and science submitted with our comments on the DEIS. Under the Citizen's Park Alternative, the agency would leave trees over 8" in diameter in the monument because they generally are not the type of material that increases fire risk and are needed for wildlife as downed logs. The agency would focus on removing small diameter material, which is the type of material that could increase fire risk (a public safety concern). Alternative C had a similar 8 inch diameter limit. FEIS Vol. 1 p. 85. The Forest Service's rejection of this in favor of the 20" limit in Alternative B is not sufficiently explained.

The propriety of a smaller diameter limit than the 20 inches chosen by the Forest Service is set forth in Sierra Club's comments, e.g. at 60-61. The Forest Service's own science clearly concludes that large logs (defined by the 2001 Sierra Nevada Forest Plan Amendment as being over 12 inches in diameter) are essentially irrelevant to fire behavior. The Forest Service's primary study on this topic is by Brown et al. (2003) (exhibit attached to SC Comments), a U.S. Forest Service General Technical Report. This study found that the woody material relevant to fire hazard is primarily less than 3 inches in diameter, and secondarily 3-10 inches in diameter (Brown et al. (2003), pp. 4-5, 8). This is consistent with another seminal Forest Service study, Rothermel (1991) (relevant excerpts attached to SC Comments), which found that pieces of coarse woody debris over 6 inches in diameter did not contribute to a significant increase in fire intensity even where a large amount (30 tons per acre) of such material was added. In short, tree boles over 10-12 inches in diameter that the agency needs to fell for ecological restoration (or to avert a public safety hazard) would not create any significant fire hazard. But they would clearly benefit wildlife, soils, and ecosystem processes.

Nonetheless, the Forest Service did not fairly address SFK's comments on this subject. In the Response to Comments the Forest Service notes an 8 inch limit was considered, but does not give a reason for its rejection. FEIS Vol. 2 at 599. It notes Alternative C and SEKI have no diameter limits, although according to SEKI personnel "there is rarely a need to cut a tree over 8 inches." *Id.* In reality, the Park Service cuts far less than the 20 inches proposed by the Forest Service for the Monument.¹⁶

f. Inadequate consideration and rejection of the Citizen's Park Alternative

The Forest Service violated NEPA by rejecting a reasonable and more protective alternative, namely the Citizen's Park Alternative that was submitted with SFK's comments on the DEIS. The Citizen's Park Alternative meets the letter and intent of the Monument Proclamation and Purpose and Need. It provides a more realistic park-like management scenario for ecological restoration and maintenance while also allowing dispersed recreation, as intended by the Monument Proclamation, so long as it is consistent with the protection of Objects of Interest. It includes all the components and necessary details for a plan alternative, similar to those that were already contained in the DEIS, including Management Direction, Desired Conditions (different from those in the DEIS), Strategies, Objectives, and Standards and Guidelines.

This alternative manages the Monument's giant sequoias groves and forest ecosystem in the same manner as Sequoia and Kings Canyon National Parks by establishing fire as the preferred method of ecosystem restoration and fuel reduction treatment; allowing mechanical thinning for fuel reduction only in areas directly adjacent to structures, public use areas, or administrative sites; and prioritizing the protection and restoration of sensitive wildlife habitats, including fisher, martens, owls, and goshawks. Tree removal would be prohibited unless absolutely necessary and scientifically justified for ecosystem restoration and maintenance or public safety. This plan includes criteria that will result in the removal of fewer trees. In addition, the agency would limit cutting to 8 inches in diameter and will expressly prohibit salvage logging as it is only done for commercial purposes and thus prohibited by the Proclamation.

¹⁶ Nor does the FEIS address the science on the diameter limit. *See e.g.*, the DellaSala report filed herewith at pp. 31-34 explaining problems with the Forest Service's fire return interval departure (FRID) concept as a basis for the 20 inch limit; and that the agency's preferred alternative needs improvement on diameter limits in order to be based on the best science of sequoia regeneration and fire history in the area. As he explains, a smaller tree removal cap would better meet the intent of the proclamation.

The Forest Service did not consider this as an alternative in the FEIS. Instead, the Forest Service addresses it in the Response to Comments, arguing essentially that “each element” of this alternative was “fully analyzed in the existing action alternatives, particularly Alternatives C and D.” (FEIS Vol. 2 p . 540). In other words, the Forest Service states it considered aspects of this alternative separately and piecemeal throughout the FEIS under other alternatives. This crazy-quilt approach to treatment of an alternative is insufficient, as it was not considered as a unified viable alternative for comparison to the other alternatives. Moreover, the Response to Comments do not address all aspects of the Citizens’ Park Alternative. For example, the alternative includes desired future conditions that are fundamentally different than any other alternative considered, which were the same for each alternative considered by the Forest Service. This alternative also asked for a hierarchy, e.g. a decision-tree, for tree removal and jettisoned the Forest Service’s numbers or percentage concept for early successional habitat and opening the canopy, in favor of restoring the natural processes so fire is the main management means for the Monument. *See* Stephenson (1996).

5. Failure to Ensure Scientific Accuracy and Integrity, and Failure to Disclose Data and Methodologies

The FEIS fails to ensure the necessary scientific accuracy and integrity of the analysis and conclusions because many of its statements, conclusions, and opinions are not supported by science or other sources. And just like in the DEIS, in the FEIS the Forest Service has failed to support many of its conclusions with data or methodologies. It has also provided inaccurate or misleading data, and has misrepresented the data provided.

NEPA requires that “[a]gencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.” 40 C.F.R. § 1502.24 (“Methodology and scientific accuracy”). “NEPA’s implementing regulations require agencies to ‘identify any methodologies used and [] make explicit reference by footnote to the scientific and other sources relied upon for conclusions’ used in any EIS statement.” *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150 (9th Cir. 1998) (quoting 40 C.F.R. § 1502.24). NEPA does not permit an agency to rely on its expert’s conclusions and opinions without providing both supporting analysis and data to the public. *Id.*

If the Forest Service provides inaccurate or highly misleading scientific data or misrepresents the data provided, then it violates NEPA. *Earth Island Inst. v. U.S. Forest Serv.*, 442 F.3d 1147, 1166-1167 (9th Cir. 2006). If an agency has failed to make a reasoned decision based on an evaluation of the evidence, the Court may properly conclude that an agency had acted arbitrarily and capriciously. *Earth Island Inst. v. Morse*, No. 08-01897, 2009 WL 2423478 (E.D.Cal.2009) (holding that the Forest Service failed insure the professional integrity, including scientific

integrity of the analysis when it misrepresented the findings and data in a scientific study); *see also Earth Island Institute*, 442 F.3d at 1167 (holding that either misunderstanding the data from a study or misrepresenting the data violated NEPA's requirements).

a. Failure to provide sufficient references to scientific literature, data sources, or methodologies, as pointed out by SCR panel for FEIS.

While improved, each individual commenter on the Science Consistency Review panel continued to critique the FEIS about its lack of scientific citations in support of the many conclusions in the analysis. See FEIS, Appx. F, p. 371 ("Though improved from first review, there is still a lack of citations (the link to scientific information to support many statements made in the FEIS . . . All reviewers noted a general lack of citations to support statements made in the FEIS."). As we pointed out in our DEIS Comments, p. 34-38, these references are not academic, optional, or a matter of "style". The Forest Service must support each conclusion or opinion in the FEIS as a matter of law.

b. Failure to provide scientific support, data, or methodologies for desired future conditions to create canopy gaps and spacing in sequoia groves and other forest stands

As discussed in Section IV.A.10 above, The Forest Service has arbitrarily created numeric goals for its desired future conditions to create canopy gaps and spacing. But it has failed to provide bases for desired conditions to create 10 to 20 % early seral habitat in various forest types (FEIS, p. 102-104) & for objectives to increase specific % to early seral stage in the first 10 years (FEIS, p. 106-108). Moreover, it has failed provide bases to support % of increase in tree growing space for each decade (FEIS, p. 107-108), which will result in increase canopy spacing.

In fact, as we have provided above, these canopy gaps contradict the scientific advice supported by most SAB members. The Forest Service's reliance on the Piirto & Rogers (1999) report with respect to canopy gaps and other desired conditions is unjustified because it is based on data from only one sequoia grove. Instead of abandoning the desired conditions for gap and patch frequency, criticized by Dr. Nate Stephenson and supported by all but one SAB member, the Forest Service continues to cling to recommendations in a scientific study without accuracy or integrity.

c. Failure to provide scientific support for the need to cut trees over 8-10 inches in diameter for fire risk reduction, including ladder fuels

As discussed in Section IV.A.3.a. & b. above, there is no scientific justification for felling or removing ladders fuels over 8-10 inches in diameter to provide effective fuel reduction treatments. *See* Royce Decl, p. 2 (Exhibit B), DellaSala Decl., p. 33 (Exhibit A), Hanson DEIS Comments, p. 8; Bond Decl. p. 10 (Exhibit C).

d. Failure to provide scientific support for the need to cut trees up to 20 inches for ecological restoration, resiliency, or heterogeneity

As discussed in Section IV.A.3.c. above, there is no scientific justification for felling or removing trees up to 20 inches in diameter for fuel reduction, ecological restoration, resiliency, or heterogeneity. *See* Royce Report, p. 6 (Exhibit B); DellaSala Report, p. 4 (Exhibit A); Bond Decl., p. 10 (Exhibit C).

There is nothing anywhere in the plan that describes why trees between 8 and 20 inches must be felled or removed for restoration, fuel reduction, resiliency, or heterogeneity.

e. Failure to provide scientific support for the need to create the large size of the WUI & TFETA

Finally, as discussed in Section IV.A.6 above, there is no scientific justification for the large WUI and TFETA areas designated in the GSNM Plan. First Rice Declaration filed with SFK's DEIS Comments, the Second Rice Declaration, pp. 14-15 (Exhibit D), Bond Declaration, p. 9 (Exhibit C), the DellaSala Report, p. 36 (Exhibit A).

f. Failure to provide reference conditions (from SEKI or other intact forest areas) for early seral habitat needs or "increased tree spacing"

In addition to a failure to provide scientific integrity, and data and methodologies, if the data is incomplete and "the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the [EIS]." 40 C.F.R. § 1502.22(a).

The information needed to provide bases for desired future conditions for vegetation is highly relevant to in the Forest Service's need to assess the adverse impacts that could inform the choice of alternatives. 40 C.F.R. § 1502.22(a). The adjacent Sequoia and Kings Canyon National Parks (SEKI) have been managed for the last 30-40 years for the primary purpose of restoring the ecological balance from fire preclusion by re-introducing fire into the forest ecosystem. This management provides an ideal place to provide baseline conditions that existed in the forest, similar to the "pre-1875" conditions identified by the Science Advisory Board. These represent the necessary bases for the desired future conditions the Forest Service

should have attained as reference conditions to inform the GSNM Plan analysis. This in turn would inform the significant issue about how much and where management should be done, and whether it can be done as envisioned by the chosen Alt. B for the GSNM Plan. This information should either be readily available from the National Park Service or the “costs of obtaining it” should not be “exorbitant,” and therefore it should have been gathered and included in the FEIS. *See id.*

Moreover, as discussed above, the Science Advisory Board framed the question of the size of gap creation in its Advisory XXIV, pp. 50-52 (Exhibit K). There, the controversy over the use of gap and patch frequency suggested in both Advisory XXIV and Draft Advisory A (Exhibit L), submitted by Dr. Nathan Stephenson, should also have been a reason to further gather data in support of this significant and highly relevant issue.

6. Failure to Disclose Risks and Uncertainties

The regulations implementing NEPA also require that “[w]hen an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an [EIS] and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.” 40 C.F.R. § 1502.22. “If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the [EIS].” 40 C.F.R. § 1502.22(a). Where incomplete information cannot be reasonably obtained, the EIS must at least include “[a] statement that such information is incomplete or unavailable; [and] . . . a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment” 40 C.F.R. § 1502.22(b)(1), (2).

As explained further by the Ninth Circuit Court of Appeals, the Forest Service must “deal with uncertainties by including within the EIS ‘a summary of existing credible scientific evidence which is relevant to evaluating the reasonable foreseeable significant adverse impacts on the human environment, and . . . the agency’s evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.’ 40 C.F.R. §§ 1502.22(b)(3), (4).” *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1033 (9th Cir. 2006).

a. Failure to disclose uncertainties, risk, and incomplete information regarding effects from vegetation management

According to Kevin O'Hara of the Science Review Panel, there are undisclosed risks and uncertain related to vegetation management, which the Forest Service has not disclosed:

Compared to the DEIS, there is substantially less detail provided in the FEIS related to risks and uncertainties related to silviculture and vegetation management. Perhaps this was the intention, but the lack of specifics on this important aspect of management of the GSNM makes it very difficult to assess the actual stand management that will occur.

FEIS, Appx. F – Science Review Panel Report, p. 375 (Kevin O'Hara). The Forest Service provides no response to this concern. In fact, the Final Silvicultural Report (now titled the "Vegetation Report") has eliminated much of the analysis provided in the draft, without explanation.

As Dr. Stephenson keenly observed about desired future conditions and reference conditions:

In general, numerous factors confound our ability to precisely define forest reference conditions before 1875 (see Stephenson 1999), suggesting that management must cope with intrinsic uncertainty.

Draft Advisory A, PDF p. 2 (Exhibit L).

Even assuming that the Forest Service could or could not attain the reference conditions, it should have disclosed the uncertainty related to the desired future conditions, and the uncertainties and risks associated with vegetation management, as suggested by Kevin O'Hara. By failing to do so, the FEIS violates NEPA.

b. Failure to disclose uncertainties regarding the tradeoffs between using mechanical treatments and prescribed fire

Similarly, as Advisory XXIV, p. 51 (Exhibit K), states "An additional factor that should be considered is uncertainty. We do not yet know the answers to several of the questions posed above. In the absence of these answers, should extra weight be given toward favoring either prescribed fire or mechanical thinning?"

The Forest Service never took the advice from the SAB in this Advisory to either clear up or even disclose the uncertainties, which remains to this day. The advice was:

In a single, stand-alone section of the EIS, thoroughly compare and contrast the ecological tradeoffs between prescribed fire and mechanical thinning (including hand treatments).

With reference to this stand-alone section, make evident which ecological tradeoffs between prescribed fire and mechanical thinning were considered important in weighing the alternatives. Deemphasize those that are of little or no ecological consequence, such as precision in gap formation, and emphasize those that might have important ecological consequences, such as invasive species, native species, soils, and pathogens, while considering uncertainty (see above). Reevaluate the Alternatives in this light.

Id., pp. 51-52. This question really goes to the heart of the management now being debated for the monument, and made controversial by the decisions to prioritize prescribed fire, wildland use fire, or mechanical thinning. Without this disclosure of the uncertainty and lack of data to inform the alternatives, the FEIS is in violation of NEPA.

c. Failure to disclose uncertainties and incomplete information regarding the “susceptibility” criteria to prioritize fuel treatments

In her declaration, Dr. Carol Rice that “[a] major criteria for treatment is poorly defined, leaving vast areas of uncertainty in the plan to reduce fire hazards and threats.” That criteria is the Forest Service’s ill-defined term of “susceptibility.” See Rice Dec., p. 17 (Exhibit D).

The term “susceptibility” is the metric for determining treatment priority and monitoring results, yet is not defined, mapped, or otherwise described with adequate detail. We do not know what fire susceptibility is, much less how the Forest Service measures it, and what the desired condition would be. If susceptibility is to be used as a monitoring element, it needs to have been included as a desired condition, be fully described and justified.

The Fire and Fuels analysis based on “susceptibility” is obscure and not defined. There is no map of where different levels of susceptibility occur, no discussion of quantifiable inputs to this metric. This is particularly important because the level of susceptibility is used to prioritize treatments on ½ or more of the Monument on most alternatives.

Id.

d. Failure to disclose uncertainties and incomplete information regarding the effects of mechanical treatments on fishers

As discussed in Section IV.A.5., while the Forest Service has prioritized mechanical treatments in fisher habitat over prescribed fire due to “uncertainty” of the effects, Daniel Gammans of the National Park Service points out that the effects from mechanical treatments are equally uncertain and most likely worse. Therefore, based on the lack of information about mechanical treatments on fishers and, the Forest Service was obligated to disclose this uncertainty. Failure to do so in the FEIS violated NEPA.

7. Failure to adequately analyze climate change impacts and alternatives

As set forth in Sierra Club’s DEIS Comments pp. 121-130, 143-49, the DEIS did not analyze adequately the impacts of climate change on the Monument, develop adaptive mitigation measures to deal with it, or conduct an adequate carbon sequestration analysis. These deficiencies continue in the FEIS. The effects of climate change and how this affects the range of alternatives and choice among the alternatives is not addressed in the FEIS.

Fisher and Marten future affects from climate change are discussed at FEIS, p. 190 and other species at FEIS, p. 443, stating: “Climate change will cause changes in the distribution of individual species and of forest and rangeland ecosystems. *The precise effects of climate change on individual species are difficult to predict and will not be addressed in the effects analysis.* For a more detailed description of how climate change may affect the Monument, see the Trends in Climate Change section in Volume 2, Appendix C.” (Emphasis added.) While Appendix C does contain general information on climate change trends in the Monument, it is not related to any alternative or the choice of alternatives, much less any particular wildlife species. This simply does not comply with NEPA and Forest Service climate change policies. See in this regard the DellaSala Report, pp. 50-55 (Exhibit A).

8. Failure to develop adequate mitigation measures

40 CFR §1505.2(c) requires the ROD to “[s]tate whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. An enforcement program shall be adopted and summarized where applicable for any mitigation.” 40 CFR §1505.3 states that “[m]itigation (1505.2(c)) ... shall be implemented by the lead agency . . .” 40 CFR §1508.20 defines “mitigation.” Essentially these are measures to avoid, minimize, rectify, reduce, eliminate or compensate for impacts. *Id.* Listing mitigation measures without analysis in the FEIS does not comply with NEPA. *Blue Mountain Biodiversity Project v. Blackwood*, 161 F.3d 1208 (9th Cir. 1998). However, in this case neither the FEIS nor the ROD contain the findings required by the regulations.

SFK's DEIS Comments contained numerous recommendations for mitigation measures that were not adopted, considered or explained as to why they were not adopted. See e.g. Sierra Club comments pp. 103-106 (monitoring plan); 109-121 (tree removal standards); and 121-149 (climate change adaptation strategies).

As explained in the DellaSalla Report, pp. 5-6 (Exhibit A), the Forest Service should adopt four mitigation measures to improve the monument's management compliance: 1) Conduct road-specific and cumulative impacts analysis of the road network; 2) Provide more detailed analysis of impacts of fuel treatments on objects of interest; 3) Tighten restrictions on livestock grazing to reduce impacts to the objects of interest; and 4) Prepare the objects of interest for combined effects of climate change and land-use stressors.

The lack of adequate wildlife monitoring is also a missing mitigation measure. Monitoring for wildlife under the Plan is very general, and the inadequacies of the monitoring plan set forth in the Sierra Club comments at pp. 103 et. seq. have not been addressed. Only fisher and WIFL are specifically named and all others referred to as "wildlife." Marten and spotted owl are not mentioned at all. It is not clear how this weak monitoring plan will protect the "objects." There is no indication what other species they are covering in this forest plan.

In addition, the Fisher should be considered an "object" for protection and monitoring. There is a lack of survey requirements to detect the location of fisher dens. *See* Barrett Declaration (Exhibit F). Denning habitat is not specifically identified as a feature needing conservation measures. In this instance, the 20" dbh limit is not sufficient since fishers like both large trees and small dense understory. Removal of understory can render denning habitat unsuitable. The Forest Service mitigation measures should involve den modeling or other planning tools to ensure protection of potential denning habitat and den sites. As stated in the Barrett Declaration, adequate fisher mitigation measures would involve: a) identifying all fisher natal den sites, with a study on the scale of the Kings River study or the SNAMP study on the Sierra National Forest to locate the natal and maternal den trees, with a full scale telemetry study, and b) addressing and limiting rodenticide.

The Forest Service's reliance on measures from the Frameworks is not sufficient. For example, the 2004 Framework standards for meadows and grazing do not protect the objects (i.e., meadows). The current status and trends of "key area meadows" (FEIS, p. 230) has only a few areas in late seral condition (most desirable). The other key area meadow in low and mid seral condition requires standards to ensure their movement to late seral condition. The Forest Service should have considered an alternative and/or mitigation measures that would prevent livestock impacts and restore impacted riparian areas and meadows by resting those areas from grazing.

Regarding the Sequoia Monument Watershed Improvement Needs Inventory (WINI) of every stream, road, etc. that needs fixing (from logging damage), the Plan says the Forest Service will have one written in 2 years. However, the 1988 Plan said the Forest Service would have one and then the MSA promised it would have one. That should have been completed and it should be used to show the condition of the Monument and all the damage that needs to be repaired.

In sum, the mitigation measures described above and in the SC Comments, and the measures which are discussed further in the additional reports filed herewith, are “practicable means to avoid or minimize environmental harm from the alternative selected,” however the ROD does not state that they were adopted or explain why they were not adopted. This violates 40 CFR §1505.2(c).

9. Failure to comply with *Lockyer* and/or *Sierra Club v. Bosworth*

The court in *Lockyer* and *Bosworth* essentially remanded the Plan to the Forest Service with instructions to correct numerous deficiencies in the Plan. As discussed above, the Forest Service has repeated or not corrected many of these deficiencies. For example, the Plan is not one comprehensible, unified document. It does not analyze wildfire management as a separate and distinct concept from fire and fuels treatment. And it is not fully consistent with the MSA. The court also directed the Forest Service to use the 2001 Framework; therefore using either the 2004 Framework or the 2007 MIS Amendment for managing monument is not allowed under the court order. *Sierra Club DEIS Comments pp. 73 et. seq.*

10. Improper Reliance on 2001 and 2004 Framework Standards

As the California Attorney General points out, the Monument Plan should not be based on the 2001 Framework because, like the 2004 Framework, it was not meant to meet the objectives of the Proclamation. Rather, standards and guidelines specific to the Monument would have to be developed. FEIS Vol. 2 p. 684. In spite of this, the FEIS/ROD for the Plan continue to adopt the standards and guidelines from the Framework(s), without any further analysis. *Id.* And, there does not appear to be a detailed explanation or any scientific justification as to how the WUI zones were delineated, other than that they were based on the 2001 Framework. *Id.* at n. 6; *see also* Section IV.A.6 above.

11. Failure to adequately respond to comments

NEPA regulations require the Forest Service to consider and make a reasoned respond to comments. 40 C.F.R. §1503.4; *Center for Biological Diversity v. U.S. Forest Service*, 349 F.3d 1157 (9th Cir. 2003). The Forest Service notes there were 79,088 responses and 1,280 comments on the Plan. FEIS App. L. However, the comments are not identified by name, instead they are given numbers with no

index, which makes it impossible to tell if the Forest Service complied with this regulation. The numbering in the Response to Comments indicates that the Forest Service responded to far less than 1,280 comments.

C. VIOLATIONS OF OTHER LAWS

The legal background, facts, science and discussion under the GSNM Proclamation and NEPA sections above and the exhibits filed with this appeal indicate not only violations of the Proclamation and NEPA but violations of contractual rights under the MSA and the NFMA, its implementing regulations and the APA as well. SFK incorporates those sections and exhibits into this section.

1. Violations of the MSA

The Mediated Settlement Agreement (MSA) is a “valid existing right.” *Lockyer*, 465 F.Supp.2d at 929. Compliance with the MSA is mandatory. *Id.* and Sierra Club DEIS Comments at 67. Thus, Alternative B (the chosen alternative) is invalid where it does not account for MSA provisions. As the California Attorney General DEIS comments explain, Alt. B does not account for MSA provisions, and Alt. E was not a valid alternative because many of the MSA provisions were superseded by the Proclamation. Therefore, the Forest Service has not sufficiently analyzed or complied with the MSA.

The SFK’s DEIS Comments also describe the Forest Service’s non-compliance with or proper consideration of the MSA. Sierra Club DEIS Comments, pp. 67- 71. Although the FEIS/ROD is better than the draft, e.g. in recommending wilderness designation for the Moses IRA and treating the Belknap grove as one large grove, it appears that the Forest Service is still not complying fully with the MSA. For example, there is not a 500 ft. no logging, restricted mechanical entry zone around groves; and the MSA requirement to make “every reasonable effort” to protect sequoias outside grove boundaries is not complied with. Sierra Club DEIS Comments, pp. 69-70.

2. Violations of the NFMA

a. The GSNM Plan Reduces Protective Standards from Those in the 2001 SNFPA

The Plan adopts several standards from the 2004 SNFPA that are less protective, in contravention of the 2004 SNFPA’s restriction to do so, even though the ROD for the 2004 Framework stated clearly that its decision does not apply to the GSNM: “This decision does not affect the direction in the following plans and projects: . . . Giant Sequoia National Monument Plan” 2004 Framework ROD, p. 15 (“All standards and guidelines from the 2001 SNFPA ROD are replaced by the

standards and guidelines in Appendix A. This decision does not affect the direction in the following plans and projects: . . . Giant Sequoia National Monument Plan”).

These restrictions include changes in Riparian Conservation Objectives (RCOs) and the definitions of the WUI threat and defense zones, including changes in management direction (RCOs) for grazing in Great Grey Owl and Willow Flycatcher habitat from the 2001 to 2004 S&Gs. *See* Plan, p. 51, Table 23, Item 7 (“Manage wetlands and meadow habitat for willow flycatchers and other species following the standards and guidelines from the 1988 Forest Plan, as modified by the 1990 MSA and the 2004 SNFPA.”).

The GSNM FEIS and Plan also does not define the WUI, Threat Zone, or Defense Zone. Instead, they rely on the 2001 & 2004 Frameworks for these definitions. *See* FEIS Glossary at 671, 682, 683-84.

As explained in the FEIS,

Alternative B continues to use the WUI defense zone width of generally 1/4 mile (45,340 acres) and the threat zone width of 1 1/4 mile (145,520 acres) (see Map Packet, Wildland Urban Intermix for Alternatives A, B, E, and F). The actual boundaries of the WUI are determined locally, based on the distribution of structures and communities adjacent to or intermixed with national forest lands. Strategic landscape features such as roads, fuel types, and topography are used in delineating the physical boundary of the WUI (2001 SNFPA).

FEIS, p. 412.

While relying on the 2001 and 2004 Frameworks alone, the FEIS and Plan fail to provide scientific evidence to justify WUI treatments up to 1.5 miles from structures when USFS fire science research by Jack Cohen indicates that structures can be protected by less impactful treatments of only 200 feet surrounding structures. *See* full discussion in Section IV.A.6 above.

b. The Plan applies the less restrictive 2007 SNF MIS Amendment, which eliminates monitoring protocols to ensure viability for MIS and Sensitive Species.

Because the 2007 MIS Amendment fundamentally changes the monitoring and inventory provisions of the 2001 Framework, which arguably only weaken protections for Monument values, this modification cannot be applied to the direction provided in the 2001 Framework.

The 2007 MIS Amendment changes Appendix E monitoring and inventory requirements that explicitly mandate that population data must be collected for MIS. And therefore this amendment, which alters the monitoring and inventory requirements of the 2001 Framework, does not modify the directives in the 2001 Framework “to protect the values for which the monument was created.”

c. Failure to Consider the Best Available Scientific Information

The Forest Service states that it prepared the Plan pursuant to the Transition Provision of the 2000 regulations. Therefore, the best available science standard of that provision applies. However, as set forth above and in the declarations and reports filed herewith, the Forest Service did not use the best available science.

d. Failure to Ensure the Diversity and Viability of Pacific Fishers and CA Spotted Owls

Although the Forest Service may assert otherwise, it is still under an obligation to ensure species diversity and viability under the NFMA, its implementing regulations, the Sierra Nevada framework, and its 1988 LRMP. The GSNM Plan, however, make the Conclusory assertion that it will “not likely to result in a trend toward Federal listing or loss of viability” of the California spotted owl. But as stated by Monica Bond,

This unsubstantiated conclusion is made despite the fact that nearly one-half (47%) of all Spotted Owl Home Range Core Area (HRCA) acreage is prioritized for logging of trees up to 20 inches diameter within an excessively large ‘Threat Zone,’ and research shows that habitat use and survival of California Spotted Owls is associated with stands dominated by both large (>24 inches diameter) and medium-sized (>11 inches) trees (Chatfield 2005, Seamans 2005).

Bond Decl., p. 2, (Exhibit C).

Moreover, the FEIS states that “All Alternatives: may affect individuals, not likely to contribute toward a further downward trend or a loss of viability” of the Pacific fisher. But, as discussed in Section VI.A.7. above, fisher expert Dr. Reginald Barrett states:

I respectfully disagree with the statement regarding Pacific fisher that “All Alternatives: may affect individuals, not likely to contribute toward a further downward trend or a loss of viability.” (FEIS, Appendix M, Volume 2 Page 722). Instead, it is my opinion that the GSNM plan would degrade fisher habitat and threaten the viability of the fisher.

Barrett Declaration, ¶ 4 (Exhibit F).

The GSNM Plan represents a significant potential adverse impact on Pacific fishers because: a) it does not require any surveys to determine the location of fisher den sites, or rest sites, prior to planning and implementing thinning or mechanical treatment activities; b) the Management Plan eliminated the previous forest plan standard prohibiting the Forest Service from undertaking forest management activities that threaten the population viability of the Pacific fisher, converting it instead into an ambiguous “strategies” (see GSNM Plan Appendix A, pages 171, Table 51 (see “furbearers”) and 170, Table 50; see also GSNM Plan, p. 51); and c) the GSNM FEIS does not include any analysis of the adverse impacts of eliminating the viability requirement for fishers, and does not provide any analytical or scientifically credible basis for the conclusion in the FEIS and ROD that Alternative B will not threaten the viability of fisher populations. Given the potential for widespread loss and degradation of suitable fisher habitat due to thinning and mechanical treatments allowed under the GSNM Plan, as discussed above, the conclusion in the FEIS and ROD that the chosen alternative (Alt. B) will not threaten the viability of the Pacific fisher simply cannot be credibly made without knowing the location of fisher den sites, as well as rest sites, without an enforceable forest-wide standard requiring surveys at a level and intensity that would allow the Forest Service to credibly know such locations.

Barrett Declaration, ¶ 7 (Exhibit F).

V. REQUEST FOR RELIEF

A. The Forest Service Must Issue Errata for Consistency and to Comply With Monument Mandates

- Correct references from the “Silvicultural Report” to the “Vegetation Report.”
- Delete references in Plan Standards that consider OHV use as appropriate on future Monument trails. GSNM Plan, p. 89, Item 24; p. 91, Item 53; and p. 92, Item 58.
- Delete the words “surface fuels” from GSNM Plan, S&Gs, p. 85, Item 9; and p. 86, Items 17, 20, and 25.

- Communication sites and utility corridors cannot be located in Wilderness and are illegal under the Wilderness Act of 1964. Table 4. of the GSNM Plan at p. 39 continues to allow these incompatible uses in “Designated Areas” within Wilderness. These entries must be changed to “Not Suitable.”

B. Substantive Relief Requested

- Immediately cancel, void, or let the Saddle, Ice, and White River Helicopter contracts expire.
- Until appeals are resolved, restrict vegetation management to prescribed fire or wildland fire use management only, such as is proposed in the Boulder Burn project.
- Travel Management Planning and Logging – Until the Forest Service has completed Subpart A of Travel Management Planning under 36 C.F.R. § 212, any projects in the monument should preclude mechanical treatments.
- Mechanical treatments and tree removal should be restricted to the 200 foot structure protection zone immediately surrounding structures, and the plan should be amended to preclude the use of mechanical equipment outside that zone.
- All vegetation treatments outside the 200 foot structure protection zone or in Giant Sequoia groves should be restricted to manual pre-treatments to prepare area for the reintroduction of fire.
- Prohibit manual pre-treatments in groves until grove-specific treatment plans have been finalized with public input, in compliance with the Mediated Settlement Agreement.
- Diameter Limits for tree felling should be lowered to a scientifically-defensible 8 inches or smaller for ecological restoration or fuel reduction treatments, to match the management practices in the adjacent Sequoia-Kings Canyon National Parks.
- Tree felling and removal protocols should be adjusted to create a hierarchy for when to fell trees and what to do with felled material, with a priority given to retaining vegetation in the Monument for ecological restoration.

- Prohibit the removal of the boles of hazard trees in order to provide adequate large snags and down woody material to benefit wildlife species and nutrient cycling in other parts of the Monument.
- Prohibit mechanized transportation (mountain bikes) from all trails through Giant Sequoia Groves, and restrict mechanized transportation (mountain bikes) from all Monument trails until, through public involvement and NEPA analysis, the Forest Service has determined that mountain bikes are compatible with other users and consistent with the protection of Monument objects.

C. Procedural Relief Requested

- Vacate the ROD and remand the Management Plan decision and FEIS for corrected, supplemental analysis under NEPA; and reconsider and revise the impacts analysis, alternatives analysis, the choice of alternatives, mitigation measures and other features of the FEIS/ROD consistent with the NEPA section above.
- Reconstitute the Science Advisory Board to inform the rewrite of the Management Plan based on the requirements of the Proclamation.
- Remand the Management Plan so it no longer refers to any provisions in the 2001, 2004, or 2007 Amendments to the SNFPA.
- Remand the Management Plan for preparation of travel analysis under Part A of the Travel Management Rule to determine the minimum road system.
- Remand the Management Plan to consider the best available science, insure scientific accuracy and integrity, and use of scientific data and methodologies to support all conclusions and management direction.
- Remand the Management Plan to consider all climate-related research and planning tools, the incorporation of scientifically-supported climate adaptation strategies, and the analysis of carbon sequestration.
- Remand the Management Plan to determine the appropriate level and location of grazing, if any, that is compatible with the protection of Monument objects, such as meadows, riparian areas, giant sequoia groves, and sensitive species.
- Stay any projects that would implement this plan.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Voss', with a long horizontal flourish extending to the right.

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