René Voss – Attorney at Law
15 Alderney Road
San Anselmo, CA 94960
Tel: 415-446-9027
renepvoss@gmail.com

June 9, 2014

Sent to:
comments-pacificsouthwest-sequoia@fs.fed.us

Rick Stevens – District Ranger
Western Divide Ranger District
32588 Highway 190
Springville, CA 93265

cc: Ara Marderosian
Stephen Montgomery
Carla Cloer
Joe Fontaine

Subject: Tule River Reservation Protection Project DEIS Comments for Sequoia ForestKeeper & Sierra Club

Sequoia ForestKeeper (SFK), the Kern-Kaweah Chapter, and the Sequoia Task Force of the Sierra Club (the Club) thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Tule River Reservation Protection Project (TRRPP). Both SFK and the Club have provided extensive comments during scoping, prior to issuance of the 2012 Giant Sequoia National Monument Plan. We incorporate those comments herein by reference.

Introduction and Summary of Comments

SFK and the Club would like to thank the District for including a mention of the proposal to eventually close and convert a number of the spur roads within the Black Mtn. Grove to trails. *See* DEIS at 32 ("A proposal is currently being initiated, as a separate project, to decommission or convert some sections of the roads in the TRRP project area to non-motorized trails."). We look forward to working with the District to make that happen. More detail on these roads is provided below.

SFK and the Club urge the Forest Service to adjust the diameter limit of trees proposed for felling down to 8 inches from the current 12 inches. During our field trip last summer, representatives from the Tule River Tribe stated that all their fuel treatments on the adjacent reservation lands were limited to trees 8 inches and smaller, and they didn't find the need to cut trees any larger than that size to achieve their goals. We believe the Forest Service can achieve all the goals of the TRRPP project with this reduced diameter limit, which will also reduce project costs, reduce the amount of activity fuels that increase interim fire risk, and reduce potential air pollution concerns from burning. Given the 8 inch size limit in the adjacent reservation, we believe the Tribe would support this reduction.

Removal of any ladder fuels greater than 8 inches in diameter near large giant sequoias can be averted by limbing high up the trees so flames do not reach into the canopy. This is the protocol in the Boulder Burn project on the Hume Ranger District. It should be followed here rather than felling larger trees.

We also urge the Forest Service to eliminate the shaded fuel breaks along the old road spurs that are planned for future conversion to trails. These proposed fuel breaks along the old logging

spur roads traverse most of the old harvest units, which are now plantations, located in the western part of the Black Mtn. Grove. Instead, we suggest a greater emphasis on reducing the density of the old harvest units, which are currently too dense to safely reintroduce fire. This density reduction should be even more effective in slowing fire through the area than creating shaded fuel breaks along the various spur roads. We would support shaded fuel breaks along the major roads in the project (21S12 and 21S25), but creating fuel breaks along the spur roads (end of 21S25 & 21S25A-D) makes little sense and is likely to be ineffective.

Finally, we also refer you to the DEIS comments submitted separately by Carla Cloer of the Club's Sequoia Task Force and incorporate them herein. Carla's comments include relevant documents about earlier projects to avert fire risk and to restore portions of the Black Mtn. Grove.

Detailed Comments

1. Threats to Black Mtn. Grove have not been adequately addressed, inconsistent with the Mediated Settlement Agreement (MSA).

We believe the biggest threat to the Black Mtn. Sequoia Grove is the potential for large wildfires to move upslope from Highway 190 or upslope from the Tule River Reservation. In fact, the largest recent threats to the grove from fires have come from the reservation side. Since the large 1928 fire that burned upslope from the Middle Fork of the Tule River,

> The next largest fire to burn into the project area occurred in 2008 called the Solo 2 Fire which burned approximately 275 acres in the Monument … [and which] started on the Reservation and burned into the Monument.

DEIS, p. 51. Since records were kept,

> From 1910 to 1999, 103 of 146, or **70.5 percent,** of fires on the Tule River Reservation started down slope of the Black Mountain Grove in the South Fork of the Tule River. One notable fire, the Chololllo Fire, came within ½ mile of the Black Mountain Grove in 1996.

DEIS, p. 52 (emphasis added).

The ultimate management goal for the grove should be restoring natural fire so that surface fuel loading is low enough inside the grove that any fire coming from these external threat areas can be minimized and will not damage the grove and its monarch sequoia trees.

We believe that one of the best ways to protect the grove and the reservation lands is for reconstruction of the old firebreaks at lower elevations of both the Middle Fork and the South Fork of the Tule River. Those on the Monument side were located down around Coffee Camp. The old Stevenson and Black Fire breaks are now overgrown but still visible from the road. Any real fire danger in the area will come from below, just like it did in the McNally Fire. A fire that starts in the lower elevations will likely race up the slope and get a full head of steam before it

reaches the conifer stands. Once it gets into the conifers, it will likely be difficult to control. Additional fire risk will come from campgrounds downslope from the grove. Both the highway and campgrounds need a constant presence from fire personnel during the fire season.

The MSA's intent was to look at the entire grove as a whole prior to taking action to reduce fuels within. The MSA and restoration goals require a grove-wide plan to address threats to the grove. But the TRRPP is not a grove-wide management plan for the Black Mtn. Grove, which the MSA required before further entry. Instead, the TRRPP is a fuel reduction plan, intended to protect the Tule Reservation from fire that may start in the Monument.

As discussed further below, there is the lack of evidence or scientific consensus that the shaded fuel breaks will do much to stop or slow down a fire, and they will do nothing to prevent crown fire. Moreover, activity fuels from thinning will actually increase surface fuels and create an additional threat to the grove and reservation until the slash and debris piles can be burned. The analysis must disclose this risk and the potential for problems associated with this additional fuel loading.

To protect monarch sequoia trees, before cutting and piling for burning anywhere near a large sequoia, the Forest Service should assess the threats to each large tree and do what is needed to protect each tree from fire. Moreover, the Forest Service should do as much as possible to protect smaller sequoias that were planted or grew in on their own after logging in the 1980s.

There is great concern about the large number of acres that will be thinned, not for ecological reasons but allegedly to protect the Tribal forests. We question how the Forest Service can achieve their S&G goal of up to two burns per decade and four burns over 20 years (S&G #5). The analysis should explain how this will be accomplished, given constraints on funding and air quality concerns.

In sum, the DEIS must include an impacts analysis on the effectiveness (or the lack thereof) of shaded fuel breaks.

2. Questions and concerns about the effectiveness of shaded fuel breaks.

There is a great deal of scientific research about the effectiveness of shaded fuel breaks to stop or modify fire behavior. Scientific studies indicate that shaded fuel breaks may not provide the intended protection from fire. *See* Agee et al. (2000) (attached as Exhibit A, and also available at http://svinet2.fs.fed.us/psw/programs/ecology_of_western_forests/publications/publications/2000-02-Ageeetal.pdf)

The effectiveness of fuel breaks remains a subject of debate because of differing fuel break objectives, prescriptions for creation and maintenance, and their placement in landscapes with differing Fire regimes. *See* Fuel Break Presentation (attached as Exhibit B, and also available at http://www.conservation.ca.gov/dlrp/RCD/Documents/Forestry-FireSafety-FuelsManagment/Public_pres-_RCDCommunity_Shaded_Fuel_Break9_04.pdf).

Moreover,

- Fires can burn through the fuel break, although at reduced intensity and rate of spread.
- Effective shaded fuel breaks need to be much wider than firebreaks.
- Need to be retreated approximately every 10 years depending on site productivity.

See Fire Breaks and Shaded Fuel Breaks (attached as Exhibit C, and also available at http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/19402/pnw618achapter4.pdf?sequence=22).

As predicted, mature forest canopy associated species showed the strongest negative responses. Because these treatments were generally designed to reduce tree and shrub cover, and increase the amount of forest edge, researchers predicted that if the treatments were ecologically meaningful, then birds associated with understory shrubs and canopy trees would decline in the initial years post-treatment, which was confirmed. *See* Burnett et al. (Avian Community Response to Mechanical Fuel Treatment in the Sierra Nevada, USA) (attached as Exhibit D, and also available at http://data.prbo.org/apps/snamin/uploads/images/fuels/PRBO%20QLG%20Fuel%20Treatment%20Final%20Report.pdf).

The Rim Fire treatment area was a 15 mile long shaded fuel break with total treatment area estimated at 420 acres. The project was largely completed as of 2012 and was in a maintenance regime where periodic upkeep was needed on a recurring basis. After the Rim fire started on August 17th, it progressed south into the Tuolumne River drainage and by August 19th had come out of the Tuolumne to the south towards Highway 120 and the community of Groveland. Firefighters were able to establish a dozer line within the existing fuel break and were successful in holding the fire along the fuel break, effectively keeping it out of all communities it was designed to protect. *See* RIM FIRE – Preliminary Fuel Treatment Effectiveness Report (attached as Exhibit E, and also available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5436551.pdf).

On the other hand, the effectiveness of fuel breaks remains a subject of debate within and outside of the fire management community. There are many reasons for this broad range of opinion, among them that objectives can vary widely, fuel break prescriptions (width, amount of fuel reduction, maintenance standards) may also vary, they can be placed in many different fuel conditions, and may be approached by wildland fires under a variety of normal to extreme weather conditions. Furthermore, fuel breaks are never designed to stop fires but to allow suppression forces a higher probability of successfully attacking a wildland fire. The amount of technology directed at the fire, and the requirement for firefighter safety, both affect the efficacy of fuel breaks in the suppression effort. *See* Agee et al. (2000) (attached as Exhibit A).

Citizens have actively opposed fuel break projects out of fears that the breaks will fragment forests and degrade wildlife habitat, destroy scenic resources and look like industrial logging sites, or open up areas to unauthorized off – road vehicle use (Arno and Allison - Bunnel 2002). Fire scientists have also raised concerns that traditional linear fuel breaks may not effectively function as wildfire containment lines during extreme weather conditions (Omi 1977a, Finney 2001). Increasingly, critiques have centered on the effects of fuel break projects on fire

ecological processes, charging that fuel breaks aid and abet fire exclusion, or, ironically, that fuel breaks may actually increase fire spread and fire intensity. *See* Ingalsbee (2005) (attached as Exhibit F, and also available at http://www.incendies-de-foret.org/recherche/1998-1/pif2002-06.pdf).

Thirty one fuel-break segments were assessed in contrasting woodland and shrubland stands under different fuel-break configurations. Dimensions of the fuel-break, vegetation composition and structure, fire suppression infrastructure and topography of each segment and of the nearby un-treated stand were described according to methods detailed by Cohen et al. (submitted). The most discriminating criteria were fuel-break width, shrub volume and tree cover. An important conclusion was that the treatment of the tree component was extremely important; a finding that contrasts with the previously held belief that fuel-break construction should focus mostly on control of the shrub layer.

In another study, many fuel breaks never intersected fires, but others intersected several, primarily in historically fire-prone areas. Fires stopped at fuel breaks 46% of the time, almost invariably owing to fire suppression activities. Firefighter access to treatments, smaller fires and longer fuel breaks were significant direct influences, and younger vegetation and fuel break maintenance indirectly improved the outcome by facilitating firefighter access. This study illustrates the importance of strategic location of fuel breaks because they have been most effective where they provided access for firefighting activities. *See* Syphard et al. (2011) (attached as Exhibit G, and also available at http://www.researchgate.net/publication/233400852_Factors_affecting_fuel_break_effectiveness_in_the_control_of_large_fires_on_the_Los_Padres_National_Forest_California).

Finally, in their synthesis of scientific studies, the National Community Forestry Center found that

- Although the assertion is frequently made that simply reducing tree density can reduce wildfire hazard, the scientific literature provides tenuous support for this hypothesis.
- The literature leaves little doubt, however, that fuel treatments can modify fire behavior. Thus, factors other than tree density, such as the distance from the ground to the base of the tree crown, surface vegetation and dead materials play a key role. Research has not yet fully developed the relationship among these factors in changing fire behavior.
- The specifics of how treatments are to be carried out and the relative effectiveness of alternative prescriptions in changing wildfire behavior are not supported by a significant consensus of scientific research at this point in time.
- Substantial evidence supports the effectiveness of prescribed fire, a treatment that addresses all of the factors mentioned above. Significantly, several empirical Studies demonstrated the effectiveness of prescribed fire in altering wildfire behavior.
- By contrast, we found a limited number of papers on the effects of mechanical thinning alone on wildfire behavior. The most extensive research involved mathematical simulation of the impact of mechanical thinning on wildfire behavior. However, the results of this research are highly variable.
- A more limited number of studies addressed the effectiveness of a combination of thinning and burning in moderating wildfire behavior. The impacts varied, depending on the treatment of thinning slash prior to burning. Again, crown base height appeared as

important a factor as tree density. The research community is still building a scientific basis for this combination of treatments.

- The proposal that commercial logging can reduce the incidence of canopy fire was untested in the scientific literature. Commercial logging focuses on large diameter trees and does not address crown base height – the branches, seedlings and saplings which contribute so significantly to the "ladder effect" in wildfire behavior.
- Much of the research on the effectiveness of fuel treatments uses dramatically different methodology, making a comparison of results difficult. To provide a basis for analysis, we structured our review of the literature into four general groupings: observations, case studies, simulation models and empirical studies. Empirical studies provide the strongest basis for evaluating treatments whereas personal observations are the least reliable.
- We found the fewest studies in the most reliable class – empirical research. We found the greatest number of studies in the least reliable class of research – reports of personal observation. Several other reviews of the literature confirm this finding, stating that the evidence of the efficacy of fuel treatment for reducing wildfire damage is largely anecdotal.
- The results of simulation studies are highly variable, in terms of such factors as fire spread, intensity and the occurrence of spotting and crowning.
- Scientists recognize that large scale prescribed burning and mechanical thinning are still experimental and may yet reveal unanticipated effects on biodiversity, wildlife populations and ecosystem function.

See Carey & Schumann (2003) (attached as Exhibit H, and also available at http://www.sierraforestlegacy.org/Resources/Conservation/FireForestEcology/FireScienceResearch/FuelsManagement/FM-Carey03.pdf).

In sum, the effectiveness of shaded fuel breaks and thinning treatments is highly variable, and it may be more effective to simply increase crown base height, especially in areas outside the old harvest units/plantations.

3. Diameter limits should be lowered from 12 to 8 inches.

Diameter limits should be lowered to 8 inches, similar to implementation on the Tule River Reservation, directly adjacent to the TRRPP. Eight inch trees are the maximum size the Tribe felled on its side of the Monument boundary, which the Tribe found to be effective in treating fuels. Similarly, 8 inches should be the maximum size the Forest Service should fell on the Monument side, consistent with the Tribe's adjacent management regime. Reducing the size of the trees will not only mitigate impacts to the grove, it will also reduce activity fuels and greatly reduce air quality impacts during burning of slash piles and debris. It is reasonable that since this project is being implemented at the request of the Tribe then the Forest Service should cause no more damage to forests in the Monument in the name of protection of tribal lands than the Tribe is doing itself on their reservation. At last year's field trip, tribal representatives had no problem with this approach.

When asked, Forest Service representatives on last summer's field trip could not answer how they were going to hand carry 12-inch trees to burn piles, since all management actions are

proposed as hand-only treatments. The tribal crew said it was even difficult and slow to treat trees up to 8-inches. Therefore, it would be much more difficult to deal with trees up to 12 inches in diameter. Any fire risk from standing trees over 8 inches can be averted by limbing them up to a prescribed distance to increase crown base height so they no longer pose a risk as fire ladders.

4. The cumulative effects analysis must include specifics about the actions on the adjacent Tule River Reservation, effects from related or similar fuel reduction/modification projects, and the effects from two significant past logging projects.

The DEIS should have included information about what is planned in the part of the Black Mtn. Grove grove inside the Tule River Reservation. Even if the tribe has not worked that out in detail, the DEIS should at least include what information is available. NEPA requires that cumulative impacts be analyzed, whether or not the agency has any authority on the lands where other impacts are occurring. This would be true of impacts on forest, wildlife, and watershed from tribal activities.

The analysis must also discuss the cumulative impacts of related or connected projects in the same geographical area with the same purpose as the TRRPP: fire protection/modification for the Monument, Upper Tule communities, groves and the reservation, such as the Nelson Project and the Ponderosa Project, and how they are connected, including firebreaks and/or fuel breaks anywhere in the sub watersheds of the Tule River. The analysis should include a map showing the location of these past, present, and foreseeable fuel breaks/firebreaks in the District, whether maintained or needing maintenance. The analysis should also include a disclosure of their width and their likely effectiveness. Any discussion must include whether or not these features will be maintained in the future and how long these thinned swaths could remain effective.

If these features are NOT maintained, this begs the question about the future of any thinned fuel breaks in this current project and whether the Forest Service has or will request funds for their maintenance. If the Forest Service cannot maintain the existing treatments, how will it be able to maintain new fuelbreaks?

There are other projects that should be considered. For example, the District previously proposed and then implemented the Black Mtn. Vegetation/Burn Project, in which two units directly north and down-slope of the TRRPP were burned as vegetation treatments. *See* Attached as Exhibit I (includes maps of burn implementation @ PDF pp. 3, 6, & 8). What was the effect from these burns, and how will the information help inform whether either reservation lands or the Black Mtn. Grove will be protected?

These cumulative effects must be addressed in the current analysis, since the Forest Service has not discussed them elsewhere, including the GSNM Plan FEIS. The GSNM Plan did not disclose these effects and deferred this cumulative impacts analysis to the project level. Other smaller projects have never looking at these cumulative impacts, so the TRRPP must look at the cumulative effects of all of these past, current, and future fire protection/modification projects.

Further, the DEIS mentions but fails to include in the cumulative impacts analysis the effects from the Gauntlet and Solo Timber Sales that led to the current altered state in the Black Mountain Grove and which is now causing much of the fire risk concerns the TRRPP is meant to address. We have included an exhibit that provides all the relevant cutting units and plantations from those sales. *See* Exhibit J (maps of cutting units, plantations, and timber sales).

While the DEIS need not include a chronological list of all human actions that led to the current altered state in the Black Mountain Grove, it must analyze those most significant actions, which created the dense fuel conditions in the harvest units and planted stands. This should include detail about the road construction from those sales on watershed effects and fragmentation and the effects from overstory removal and tree planting.

To assist with this latter proposal, we offer the Gauntlet EA and Solo Timber Sale documents that we have in our possession. *See* Exhibit K (Gauntlet EA & Silviculture Prescriptions); Exhibit L (Gauntlet TS Map); Exhibit M (Solo Timber Sale Bid Prospectus and Map). Moreover, any additional documents provided by Carla Cloer should also be analyzed for their cumulative effects.

5. <u>New studies suggest that Pacific fishers avoid thinned areas, and these studies and their conclusions must be analyzed in the DEIS.</u>

Recent scientific reports provide compelling evidence that thinning causes significant adverse effects on Pacific fisher resting habitat, finding that Pacific fisher avoid thinned areas, including treatments focused on fuel reduction, making these thinned areas unsuitable for Pacific fisher. These effects may also apply to shaded fuel breaks and plantation thinning, and these studies should be analyzed in that context. These studies may provide additional support for reducing the diameter limits from 12 to 8 inches:

- **Truex and Zielinski (2013)** – Short-term effects of fuel treatments on fisher habitat in the Sierra Nevada, California; Forest Ecology and Management 293 (2013) 85–91 (attached as Exhibit N)
- **Garner (2013)** – Selection of Disturbed Habitat by Fishers (*Martes Pennanti*) in the Sierra National Forest; A Thesis Presented to the Faculty of Humboldt State University in Partial Fulfillment of the Requirements for the Degree Master of Science in Natural Resources: Environmental and Natural Resource Sciences *by* James D. Garner (attached as Exhibit O)

The findings in these studies have not yet been considered or analyzed in the TRRPP. While the DEIS references Truex and Zielinski (2005), which has a title similar to the 2013 version, the analysis must be updated with the 2013 version of this study, which references more recent scientific evidence that may shed light on adjusting the project's management activities to reduce adverse effects on fisher habitat.

The Garner (2013) thesis, however, has not been discussed or analyzed in the project, the DEIS, or the Biological Evaluation, and must be addressed. Garner's research "draws upon Sierra National Forest management records and data collected by the Kings River Fisher Project to

investigate the long-term effects of past management actions on fisher habitat." Exhibit O, p. ii. Garner used actual "location data for 36 individual fishers (27 female, 9 male) to study second-order (home range and core-use area) and third-order habitat selection (resting and foraging sites) of national forest lands treated with management activities between 1992 and 2006." *Id.*

He found that "when selecting microsites within their home ranges, fishers tend to avoid using sites within 200 meters of a treated [thinned] area." *Id.* Garner found that "as fishers are selecting foraging and resting sites within their home ranges (third-order selection), they tended to avoid treated areas in favor of sites within untreated forest, corroborating previous findings (Truex and Zielinski 2013)." *Id.*, p. 41.

"[T]he significance of third-order selection within 200 meters of a fisher location is a strong indication that there are structural differences between treated and untreated relevant to fishers.…[as the] data shows that there is less canopy cover in treated areas across all forest types. …[and a] decrease of three-dimensional structural complexity in treated areas of most forest types, represented by the lower understory and ground cover density, as well as a lower distribution of the vegetation in the vertical profile (increased skewness)." *Id.*

While the third-order selection in Montane Hardwood-Conifer and Montane Hardwood forests was not significant, "in the conifer forests, the harvest of intermediate and large sized conifers (>50 cm [20 inches] dbh) during treatment activities likely decreased the availability of what were already less common structures in those forest types." *Id.* at 43.

> These findings suggest that the Kings River Sustainable Forest Ecosystems Project, and the management actions that followed, have had a negative net impact on fisher habitat. This impact is most apparent within coniferous forest habitat, where the reduced canopy cover and loss of three-dimensional structure is sufficient to influence fisher selection preference. *These findings indicate that the short term negative impacts of management action reported by Truex and Zielinski (2013) continue to have lingering effects on habitat quality beyond the one year term reported in their study.*

Id. (emphasis added).

Although the Forest Service does not plan to cut or remove trees in the 20 inch dbh size, the Garner study should be addressed as it applies to the previous harvested units and to inform whether fishers may avoid the TRRPP as a result of treatments up to 12 inches (or even 8 inches as we propose). Since fisher prefer dense habitat, the Garner report can also inform the analysis to determine whether connectivity of habitats will be affected if fisher were to avoid the TRRPP area as a result of implementation.

In implementing the TRRPP, we must err on the side of caution. We believe that a 400-foot wide shaded fuel break clearing on one side of the boundary with the reservation and another 400 foot-wide shaded fuel break on the other side would mean that fishers will hesitate to travel through the project area. Implementation of the project should be delayed until an analysis is

completed on the fisher's habitat with input from the U.S. Fish and Wildlife Service whose listing proposal for the fisher is imminent, with a listing rule to be finalized in 2015.

The analysis must also address impacts on other species resulting from the removal of white fir. Shaded fuel breaks focus on removing white fir, which is preferred for nesting by many cavity nesters because white fir contain more cavities than most other tree species. Focusing on white fir will overwhelmingly remove habitat for cavity nesters, which cannot be considered a treatment that would be endorsed by the Proclamations requirement to protect objects of interest, which include cavity nesting species.

6. Support for No Tree Removal

The DEIS states at one point that removing small sawlogs would cost more than they would be worth at the mill. We agree that removing any biomass from such a remote area cannot be justified economically. We applaud the Forest Service for rejecting proposals for tree removal, consistent with the letter and intent of the Monument Proclamation and the GSNM Management Plan. We also support continued restrictions on the removal of large down woody material along roads in the project area by firewood permittees in giant sequoia groves. Since personal firewood gathering is already restricted in sequoia groves, the decision and FEIS should restate that these restrictions will remain in place in the Black Mtn. Grove.

7. Support for treatment of old harvested units/plantations

Most of the old clear cuts from previous timber sales in the Black Mtn. Grove are now extremely dense thickets of brush and planted trees—some far higher than eye level—including trees up to 50 feet high in places. These old harvest units also contain naturally regenerated and planted giant sequoias that are 20-30 years old or even older by now.

If the Forest Service were to broadcast burn these units, everything might be incinerated including the smaller sequoias, and we may even lose some of the monarch sequoias standing in the old clear cuts. We support light thinning in these old, previously-thinned, plantation units, enough to safely restore fire to these areas. We also agree with the suggestion to drag and rake surface fuels away from the very large sequoias and treat the areas directly around them. Some of the very large sequoias in these units are surrounded by thick brush and small trees that might get hot enough to scorch the foliage and even kill some of the monarchs.

8. Support for shaded fuel breaks along main roads (21S12 and 21S25) but not along spurs that traverse plantation units (end of 21S25 & 21S25A-D).

There is a road effect, in which very dense stands of small trees have grown up along the main roads where the abundant sunlight, due to the open space of the road itself, has created thickets, which should be treated. But the road effect does not extend much more than 50 feet or so into the forest. So, in most cases, it would not be necessary to go far from these roads to deal with these thickets. The same road effect does not really occur in the old clear-cut units because the entire cutting unit has grown back as a thicket. We suggest treatments of those units as discussed in the previous section.

The only roads for which we support shaded fuel break treatments are 21S21 and 21S25 (to the point before it meets 21S25C). As discussed above, the treatments along the end of 21S25 and spur roads 21S25A-D, which traverse plantation units, would be better dealt with by implementing light thinning over those units to prepare them for periodic underburning.

9. Decommissioning spur logging roads and converting these roads to trails.

Again, we applaud the Forest Service for mentioning the proposal we have agreed to, to eventually close and convert spur roads within the Black Mtn. Grove to trails. *See* DEIS at 32 ("A proposal is currently being initiated, as a separate project, to decommission or convert some sections of the roads in the TRRP project area to non-motorized trails.").

As we commented before and as we stressed on the field trip, we would have preferred that the Forest Service include the road decommissioning and conversion proposal as a part of the TRRPP. However, if it cannot be dealt with as part of this project, we insist that a separate proposal to decommission and convert these spurs be released before the TRRPP is finalized, to show good faith that the process is moving forward.

All spur roads created for logging in the old Solo and Gauntlet timber sales should be closed and obliterated. Not only are the roads causing continued watershed damage, loss of soils, removed from forest habitat, etc., but road density far exceeds standards. Impacts of these roads as permanent roads were not analyzed in the original Solo and Gauntlet timber sales or the 1988 LMP and these roads were not analyzed in the GSNM Management Plan. The road densities in the Black Mountain Grove appear to be greater than in any other grove.

This direction is consistent with the agreement we reached with the Forest Service in the Mediated Settlement Agreement (MSA), as stipulated, which states:

> *f. Regeneration of Cut-Over Sequoia Groves*
> *(1) The objectives of regenerating cutover Giant Sequoia Groves will be to restore these areas, as nearly as possible, to the former natural forest condition.*

MSA, p. 27. More specifically, the proposal to decommission and convert these roads should include the following segments, which were constructed for the timber sales that cutover the Black Mtn. Grove. These road numbers represent those sections on the Forest Service's current topo maps, but which may have been given different numbers in the Solo and Gauntlet timber sales.

21S25 – segment near end, after intersection with 21S25C as indicated on map
21S25A – second half of segment
21S25B – all of segment
21S25C – all of segment
21S25D – all of segment

For details, see the map in Figure 1 below. These segments represent those roads that were constructed for the Gauntlet Sale (see Gauntlet TS Map, attached as Exhibit L) and the Solo Sale (see Solo TS Bid Prospectus map, attached as Exhibit M, PDF, p. 3).

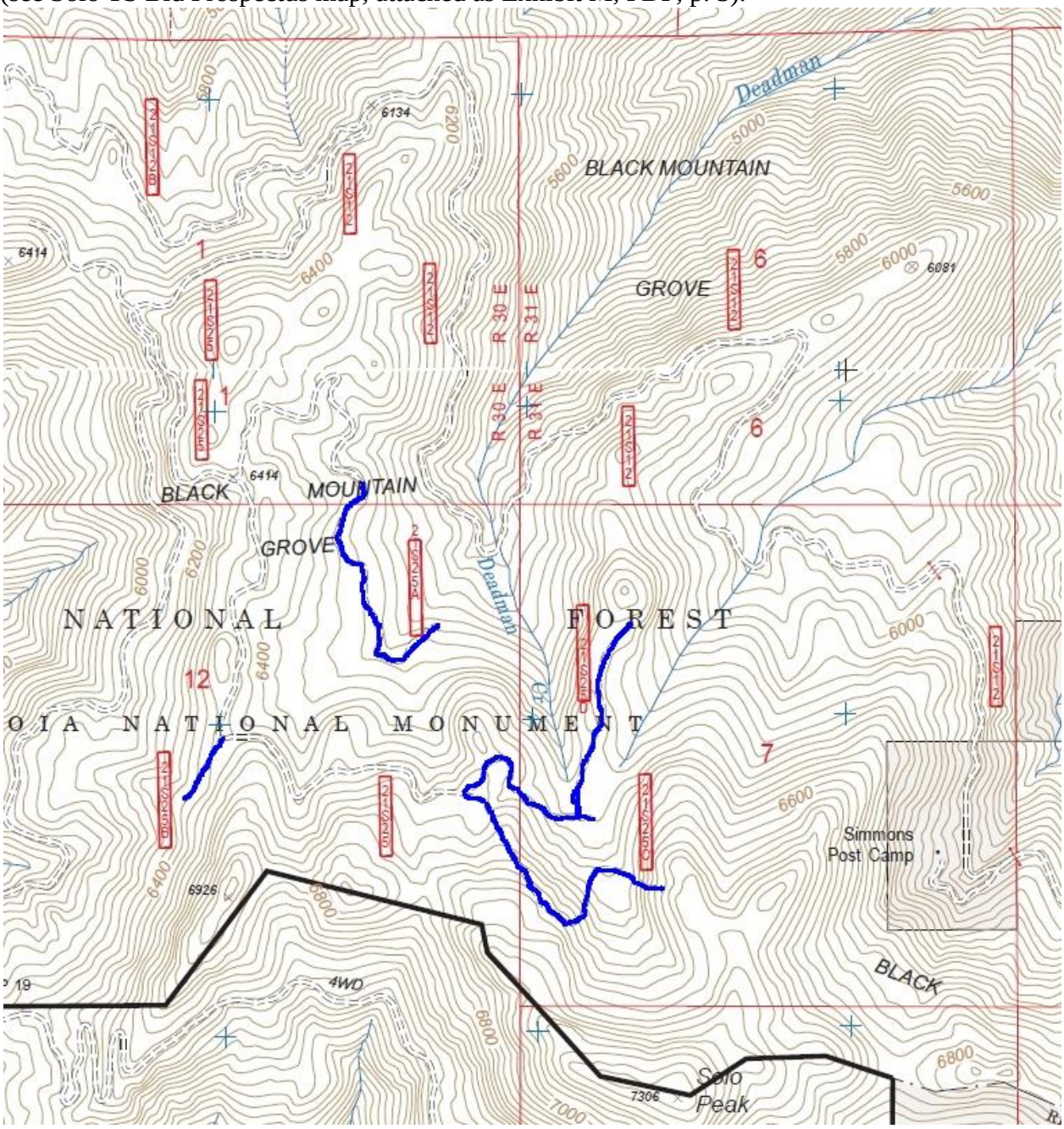

Figure 1. Map of road segments to be decommissioned and converted to Non-motorized trails (segments affected in blue).

Finally, these spurs and others across the forest are not being maintained, and if the Forest Service does not have the budget to maintain the currently designated road system in the Monument it must size the system to their budget, as is envisioned in the 36 C.F.R. § 212, Subpart A process. Decommissioning and converting these spur roads is consistent with that process.

It should be noted that these proposed changes are consistent with the management that should have occurred after the Gauntlet Sale. According to the Gauntlet EA,

> Roads 21S12B, 21S25A, 21S25B, and 21S25C will be low standard primitive class roads, with a maximum of 10% grades; which will be closed upon completion of logging operations.

Gauntlet EA, p. 21 (emphasis added; attached as Exhibit K).

10. Clarification needed of features or circumstances unique to the Tule River Tribe on Monument lands in the TRRPP, as required by the 2004 Tribal Forest Protection Act

Section 2(c) of the Tribal Forest Protection Act includes "Selection Criteria" for projects like the TRRPP, for which an Indian Tribe can seek action from the Forest Service:

> (1) the Indian forest land or rangeland under the jurisdiction of the Indian tribe borders on or is adjacent to land under the jurisdiction of the Forest Service or the Bureau of Land Management;
> (2) Forest Service or Bureau of Land Management land bordering on or adjacent to the Indian forest land or rangeland under the jurisdiction of the Indian tribe—
> (A) poses a fire, disease, or other threat to—
> (i) the Indian forest land or rangeland under the jurisdiction of the Indian tribe; or
> (ii) a tribal community; or
> (B) is in need of land restoration activities;
> (3) the agreement or contracting activities applied for by the Indian tribe are not already covered by a stewardship contract or other instrument that would present a conflict on the subject land; and
> (4) the Forest Service or Bureau of Land Management land described in the application of the Indian tribe presents or involves a *feature or circumstance unique to that Indian tribe (including treaty rights or biological, archaeological, historical, or cultural circumstances).*

See 25 U.S.C. § 3115a(c) (emphasis added); *see also* Forest Service Handbook 2409.19, Chapter 61.17 (essentially the same). The first three items were addressed in Tule River Tribe's application (*see* Exhibit P); however, so far as we know, the last item has never been addressed, in writing, by either the Tribe or the Forest Service. In fact, the Forest Service's official response simply issued a conclusory statement about meeting the necessary the criteria, but identified no "feature or circumstance unique to that Indian tribe (including treaty rights or biological, archaeological, historical, or cultural circumstances)." *See* Exhibit Q, received from the Forest Service in response to a FOIA request). No document has ever been identified by the Forest Service, which includes any feature or circumstance unique to the Tule River Tribe on Monument lands. Even the Cultural Resources Specialist report has not identified anything "unique" to the Rule River Tribe in the TRRPP area subject to the application.

During the field trip last summer we were assured that features or circumstances unique to the Tule River Tribe do exist in the project area in the Monument, but none have been put forward in the project record. Without identification of these unique features or circumstances, the authorization of this project under the Tribal Forest Protection Act is incomplete and must be rectified.

We acknowledge and understand "the hesitancy of the Native American population to share information with the national forests out of concern that the information will not remain confidential and the resources of concern will be damaged or destroyed" (Cultural Resources Report, p. 42). But the identification of unique features or circumstances need not be so specific that it may cause resource concerns. The Tribal Forest Protection Act, however, requires their identification as a part of the authorization process. This must be rectified.

11. TFETA

The TRRPP is the first project to give validity to the Monument Plan's Tribal Fuels Treatment Emphasis Area (TFETA). Therefore, the TRRPP will set a precedent for management in a large area of the Monument under authority derived from the plan's TFETA designation. The TFETA portion of the Plan essentially calls for Wildland Urban Interface (WUI) threat zone treatments in sequoia groves. This is not acceptable or consistent with the Monument proclamation and is uncalled-for based on the best available science.

The Forest Service's WUI and TFETA zones are arbitrarily large, and their size is not supported with any rational explanation in the GSNM FEIS or ROD. The Plan includes 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.

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 GSNM Management Plan the TFETA is shown to extend as much as 5 miles from the Tule Reservation boundary without a rational explanation. The Plan lacks both explanation and scientific justification as to why these zones contain so much of the land area of the Monument, why the treatment prescriptions in them should take precedence over other land allocations designed to protect resources such as old forest emphasis areas, spotted owl home range core areas, or Southern Sierra Fisher conservation areas. The Forest Service has failed to demonstrate that its decision is based on the determination – following the best available science – that these management directives are needed to accomplish ecological restoration of the Monument resources and to protect the objects of interest in the Monument.

The TFETA land allocation is excessively wide. We do not know whether the Tule River Reservation threatens 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 was 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 Tule River Reservation and to objects of interest. As provided above, treatment width does not equate to effectiveness of management to reduce the potential for fire spread to the Reservation. The Standards and Guidelines for TFETA management also promote fuel treatments over the protection of monument objects, including giant sequoia groves. *See* GSNM Plan, p. 48, Table 18, S&G 10. This is unacceptable and in violation of the Monument Proclamation.

12. Drift Fence

There should be no Forest Service created drift fences along the reservation boundary. That ridge is porous right now even before thinning. While there are no riparian corridors to entice cattle to wander up there, cattle do move across into the Monument from tribal lands all the time. This is the same as any allotment—if the tribe wants to keep its cattle in, it has the same options it has always had. It can build a fence on the reservation side, but there is no fencing needed along the entire boundary of the Monument.

If the Forest Service insists on a fence it must analyze the effects to wildlife, which have not been disclosed, and it must require the most wildlife-friendly (deer safe) fences possible. The Forest Service should adopt the approach taken in Montana where state law requires deer safe fences. There are many instances of bats, foxes, owls and probably fisher and marten that get caught in fences and eventually die. If the Tribe wants a fence, the cost and responsibility of maintaining the fence should be borne by the Tribe.

13. Continuing Error in p. 45 GSNM with Errata Carried forward in DEIS p. 12

The DEIS reflects a continuing error in the GSNM plan, which was not updated in the latest version. Page 12 in the DEIS erroneously states under "Strategies" for "Vegetation, Ecological Restoration (Monument Plan, p. 45)":

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

But Errata Letter #2, issued on April 15, 2013, states that this priority should have been changed to:

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

While the GSNM Plan is still incorrect on p. 45, it correctly states this priority on p. 48, Table 20, Strategy #13. This is correctly reflected for that item on p. 13 of the DEIS.

Please correct the priorities on p. 12 in the DEIS, and please ask the Forest Supervisor's office to correct the error in the revised version of the GSNM Plan on p. 45.

14. Update the quality of the maps so they are readable and useful

The quality of the alternative maps and other maps in the DEIS are unacceptable, since most of their content is unreadable. We had to resort to outside maps to identify roads and areas proposed for treatment. The public should not have to do that. All the maps in the DEIS should be updated so they provide useful content and context. We know the Forest Service has the capability to provide high quality readable maps. Please fix this discrepancy.

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

René Voss – Attorney at Law
15 Alderney Road
San Anselmo, CA 94960
Tel: 415-446-9027
renepvoss@gmail.com

Ara Marderosian – Executive Director
Sequoia ForestKeeper
P.O. Box 2134
Kernville, CA 93238-2134
(760) 376-4434
ara@sequoiaforestkeeper.org

Stephen Montgomery – Chair
Kern-Kaweah Chapter of the Sierra Club
2115 1st Street
Bakersfield CA 93304-2707
661-496-6585
samonty@pacbell.net

Carla Cloer – Chair
Sierra Club Sequoia Task Force
182 E Reid Ave
Porterville CA 93257-9761
(559) 920-6338
cac@ocsnet.net