Friends of the Inyo and Sierra Forest Legacy wish to submit the following scoping comments on the Eastern Sierra Fire Restoration and Maintenance Project. We are strong advocates for expanding fire restoration across the Sierra Nevada and welcome the opportunity to comment on this innovative approach to restoring fire to the Inyo National Forest on a landscape scale. On June 24, 2018 we submitted comments on the Sierra National Forest’s similar forest-wide prescribed fire plan¹. These scoping comments mirror much of what was discussed during that process but are tailored to the ecology and the sociopolitical environment of the eastside.

Public involvement

Given the use of a forest-wide Categorical Exclusion we want to make sure the public is notified and has the ability to provide feedback to the Forest through the next iterations of this project. We understand the importance and applicability of using this CE to give more flexibility to prescribed burns and increase the pace and scale of fire restoration. Overall, the scoping document does not contain a level of detail necessary for a comprehensive review of the project’s impacts and implications on the Forest. For example, the scoping document notes that the forest will complete an analysis for prescribed fire potential across the project area but does not include what such an analysis will consider and if it will be available to the public. We recommend making this report and other subsequent documents available on the project webpage.

¹https://www.sierraforestlegacy.org/Resources/Community/PrescribedFire/SierraNF_PrescribedFireEA_Scaping.pdf
The proposed action would benefit from a discussion of how the project goals fit into the use of this CE. The use of CEs do however, limit public involvement, so we strongly recommend general announcements for spring and fall burns, as well as annual public field trips to previous and upcoming project sites. Field trips will help integrate the community in prescribed fire and move the needle on social acceptance of living with fire.

Integration of Fire Management Zones

The forest plan allows for wildfires to be managed for resource benefit in the wildfire maintenance and restoration zones outside of designated wilderness. Since most of the maintenance and restoration zone is within designated wilderness, we encourage the use of managed wildfire for resource benefit within protection zones as well, where feasible. North et al. 2012 describes the necessity of using managed wildfire from natural ignitions to achieve fire restoration objectives. A successful recent example of this was the Springs Fire last summer. In addition, places previously treated for fuels reduction should be prioritized for managed wildfire and first entry fire.

Fire as First Entry and Tree Mortality

On the Inyo National Forest we have a unique opportunity to make significant progress towards achieving NRV and paying off our “fire debt”, especially in Jeffery Pine habitats. Fire has only been absent from these forests for 50 years, about half the time of other areas in the Sierra Nevada. In order to fully restore fire return intervals and burn the acreage necessary for landscape restoration (140k acres per decade) the use of fire as first entry must be used. Reports related to the proposed action should detail how the Forest will use fire as first entry to achieve acreage goals. Alternatively 2,000-5,000 acre units will need to be planned, which seems unlikely in the near future. A plausible first step to transitioning to first entry fire is determining and mapping where such places are possible on the Forest. We ask the INF to think big when considering the range of available tools for prescribed burning and root fire restoration goals in the historic fire regime and fuel burdens within specific habitats. An emphasis should be placed on restoring fire for ecological benefit.

We were disappointed to see the lack of disclosure in the proposed action that expanding fire will result in some tree mortality. The proposed action focuses on the use of low to moderate severity fire, when in fact science supports the necessity for variable mixed severity fire. Studies of the natural range of variation in Jeffrey pine and red fir forests estimate that pre-settlement high severity proportions in these forest types ranged from 5-16% (Safford and Stevens

In lodgepole pine forests, scientists acknowledge the average high severity proportion to be as high as 24% (Meyer and North 2019). At appropriate scales and frequencies, high severity fire can provide numerous ecosystem benefits by creating landscape heterogeneity, and by creating biodiverse complex early-seral forests. The Forest would benefit from stating up front that killing some trees with fire is acceptable and well within fire regimes on these landscapes. It is better to disclose such intent early on and give full transparency to the public.

**Design Features/Criteria**

Because the proposed action does not contain information on design features, we offer some suggestions based on previous work with the Dinkey Collaborative and the Record of Decision from the SNF. In general, we recommend using the design features presented in the SNF's ROD. Design features can maintain and enhance habitat for sensitive species and protect other irreplaceable resources found within the proposed plan area.

- **Limited Operating Periods (LOPs)** can make it difficult to conduct spring burns. Spring fire events were a relatively rare occurrence in the Sierra Nevada historically, but due to air pollution and population issues, spring burn windows are being used more and more on the Forest. On the INF, spring fire windows should be used outside of special species habitat, and the forest should conduct as much fall burning and expanded winter burning whenever possible.

- **In addition to LOPs**, prescribed burning within Marten and Goshawk habitat should be designed to result in a 5% or less reduction in canopy cover, averaged over the treatment unit. Specific requirements should be put in place for large snags (15’ DBH) and downed logs (30’ DBH) retention. Fuels objectives in these habitats should be for low to moderate fire severity. Snag blasting should be avoided in these habitats. Of particular concern is the absence of guidance for Northern Goshawk protections under the new INF plan. We urge you to still consider design features to protect Goshawks within the forest’s prescribed burn work.

- **In compliance with the Forest Plan’s plan components**, pre-treatment surveys for rare plants should be conducted and sensitive plants flagged for avoidance.

- **Although the INF has not salvage logged in many years**, we still recommend including salvage logging standards.

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Within riparian and meadow habitats please include best management practices for erosion prevention, soil protection and maintenance of water quality such as those stated for the SNF (PA, p.9). Van Der Water and North’s (2011) research suggest that efforts need to be made to carefully reduce fuel in riparian areas to prevent severe fire effects. Reduced fuels eventually should lead to lower concern for allowing fire to burn in these areas, which was historically not significantly different to upland areas in the Sierra Nevada. We support design criteria for no direct lighting in riparian vegetation and habitats as it is fairly common practice to allow fire to back into these areas creating less intense fire effects.

A large area of the proposed area overlaps with active grazing allotments, particularly sheep. These areas should be rested after burning until native perennial grasses return, typically a 2-3 year period or longer during periods of drought.

Include design features for protection of Piaha trees and associated cultural sites. The forest did a good job of protecting these sites on the Springs Fire and we wish to see these practices continue.

Finally we understand the mechanical treatments are outside the scope of this CE and such design criteria should reflect that.

**Staffing**

Currently staffing is a major barrier to successfully achieving fire restoration objectives on the Forest. We strongly encourage the hiring of a fuels planner prior to implementation of this CE. We also encourage the forest to consider a CalFire model of dedicated prescribed fire implementation teams specifically trained in Rx. This will allow the Forest to take advantage of burn windows that occur when INF/BLM employees are committed to other incidents. Possibly as the forest moves forwards demonstrating to the region the need for fuels funding the cultural shift can be made dedicated prescribed fire crews

**Mowing in Jeffery Pine habitats**

The proposed action describes the use of Shrub mowing/mastication techniques to prep areas prior to fire entry. We are concerned about a general approval for mowing because of our observation of Cheatgrass proliferation in previously mowed fuels treatment units. The use of mastication as a pre-fire tool in Eastern Sierra forests is not well supported by the best available science. To our knowledge, no studies exist that document fire behavior following mastication in the Eastern Sierra. In fact shrubs can work in favor of burning when conditions are right, such as after rain or snow events when shrubs act as heat sinks, providing more variability for fire effects. Furthermore, mowing creates fuel loading on the forest floor, which stalls ecological processes such as decomposition, which is likely slower than on westside forests. Mastication can also increase fire risk, possibly at a greater level than the intact, live brush. It is notable that the Sierra National Forest’s draft forestwide prescribed fire decision
does not include a similar exception for mastication. We question whether mowing and mastication are needed in many of the units in Jeffrey Pine forest and ask that if the Forest moves forward with this tool, it does so cautiously, with a high level of monitoring, mitigation measures, and possibly use a small pilot area first to study the effects.

**Tribal Partnerships**

The Sierra National Forest’s proposed action included a commitment to working with tribes to advance cultural resources (PA pg 8-9). We encourage and fully support the INF engaging the five tribal nations within the plan area and discussing the use of Traditional Ecological Knowledge on the forest. Beyond TEK being built into burn plans, tribal partnerships can build the tribe’s role in planning and implementing cultural resource driven prescribed fire, strengthen tribal relationships with the Forest and possibly bring positive economic benefits to tribal members. If supported, the establishment of a stand-alone prescribed fire crew to work alongside the INF as contractors should be explored. Although we understand cultural resources burning may not align exactly with burn plans or windows, whenever possible collaboration with tribal partners to expand burning on current and ancestral lands should be used.

**Air Board MOU**

A major barrier to achieving fire goals within this proposed action is the restrictions placed on air quality and smoke management by Great Basin Unified Air Pollution Control District (GBUAPCD). We are encouraged by conversations happening between GBUAPCD and the Forest regarding the current MOU. The MOU must be updated to be consistent with the California Air Board’s 500,000 acre a year agreement. Title 17 of the Clean Air Act requires a reinterpretation to align with statewide fire restoration goals. There are statewide resources available for our air board to obtain equipment and training that can increase their ability to monitor air quality and quantifiably measure smoke impacts in a meaningful way. We seek more information and discussion of how the air board will be incorporated into planning for prescribed fires through this proposed action.

**Conclusion**

We thank the Forest for their commitment and hard work on this important first step on fire restoration. As discussed with Forest staff, we welcome the opportunity to participate and help plan the assembly of an annual review team. Sierra Forest Legacy has been promoting large landscape NEPA for prescribed fire for several years. Friends of the Inyo offers local expertise and relationships with the community that can serve to advance an effective communications strategy. Such a team, perhaps modeled after the Dinkey Collaborative, would meet annually to review yearly projects and consider changes or input, and
perhaps contribute to upcoming burn plans. The team could also be tasked with determining whether individual projects under the CE are meeting Desired Conditions and moving targeted towards NRV. This would be determined through the Monitoring Plan which, given our capacity, we may consider helping to implement on the ground. Finally we look forward to reviewing the completed documents associated with the proposed action, and learning about the upcoming priority burns for the first one to three years of implementation of the project.

Sincerely,

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