



March 2, 2023

Attn: Teresa Benson, Forest Supervisor
Sequoia National Forest
220 East Morton Avenue
Porterville, CA 9257

Dear Supervisor Benson,

Thank you for the opportunity to comment on the Castle Fire Ecological Restoration Project. We greatly appreciate our ongoing and multi-faceted collaboration with the Sequoia National Forest (SQNF) in the Giant Sequoia National Monument (GSNM), which reflects our shared goals to protect and restore our iconic giant sequoias, and connect people to their peace and beauty. As you are well aware, we signed a Master Stewardship Agreement (MSA) with USDA Forest Service Region 5 in September 2022. Subsequently, we worked with you and your team to finalize a Supplemental Project Agreement (SPA) that covers stewardship activities in two groves within the GSNM: Long Meadow and Packsaddle. On November 1, 2022, we began restoration work in Long Meadow Grove and were able to complete approximately 80 acres before snowfall made continued work infeasible.

We are very excited about the prospect of continuing to work with SQNF on additional shared stewardship projects, including within the footprint of the Castle Fire. As you are aware, we own and steward our Alder Creek property near the Sequoia Crest community. This property burned in the Castle Fire shortly after it was acquired by the League in 2019. Since that time, the League has been restoring portions of the property that burned at high-severity and plan to plant over 50,000 seedlings (giant sequoia, ponderosa and sugar pine, and white fir) in these areas in 2023. We also expect to begin work on a project within the “green” portions of this property to reduce hazardous fuels and restore a more natural fire regime after many years of fire suppression. We applaud SQNF for considering actions surrounding this property that will provide additional protection to the irreplaceable Alder Creek sequoia grove.

We strongly support your team’s work on the Environmental Assessment (EA) for the Castle Fire Ecological Restoration Project. We agree with the purpose and need, desired conditions and proposed actions identified in the draft EA. We want to commend your team for the approach embodied within the EA that focuses on a broad suite of restoration actions, including dead tree removal, fuels reduction, prescribed fire and reforestation. We think the EA could be strengthened with the following adjustments:

1. Allow for dead tree removal and mechanical treatments in strategic “buffer” areas within designated grove boundaries

As you are aware the established grove boundaries within the GSNM include significant “buffer” areas that do not contain giant sequoias. These “buffer” areas were originally included within designated grove boundaries to protect giant sequoias from impacts of potentially harmful activities, including logging. As an example, nearly half of the designated acreage of Long Meadow Grove falls within these “buffer” areas and does not contain giant sequoias. More recent grove delineations completed via remote sensing by Rodney Hart (presented at the 2022 Giant Sequoia Lands Coalition annual meeting) provide more accurate data for where sequoias are actually found on the ground.



The “buffer” areas that lie between the designated grove boundaries and the Rodney Hart grove delineations offer critical opportunities to moderate fire behavior before flames reach a grove of giant sequoias. In Long Meadow Grove, the “buffer” areas contain dense fuels from remnant pine plantations that are in critical need of mechanical fuels treatments before fire can be safely reintroduced to the grove. We recommend that the updated Rodney Hart grove delineations be used to delineate areas to be excluded from mechanical treatments, instead of the original GSNM grove boundaries. Again, we believe this would allow for critical fuels treatments that could moderate fire behavior within groves and facilitate the reintroduction of prescribed fire.

2. Recommend including use of air curtain burners as a fuels reduction tool

We recommend that the EA be amended to explicitly allow for the use of air curtain burners as an alternative method for removing excessive fuels from treatment areas. As you know, there are many thousands of piles that have been generated by fuels reduction projects across the SQNF. The process of revisiting these piles to burn them is intensive and requires a major commitment of staff and time. In addition, the weather/fuels condition windows to complete pile burning can be short. Use of air curtain burners can reduce the reliance on pile burning by combusting the material when it is green and soon after it is cut. In addition, transportation of biomass out of the forest is extremely costly and carbon intensive.

While the operating of air curtain burners can be labor intensive, there are many contractors in the Central Valley that own and operate this equipment. The units themselves can be loaded by hand or with heavy equipment. In addition, the combustion process in an air curtain burner can yield biochar, which can be reapplied to the forest floor as a soil amendment. This tool also significantly reduces carbon and particulate matter emissions when compared to pile burning and transportation of the material for chips. We recognize that this tool is not feasible in all project areas, but should be considered where road access and existing landings allow for its use in combination with either manual or mechanical fuels reduction.

3. Allow for tree and biomass removal within mechanical treatment areas and along existing roads within manual treatment areas

Based on our read of the Draft EA, it is unclear if the EA intends to allow biomass removal within mechanical treatment units. While this is explicitly described in the Dead Tree Removal section of the Proposed Action, we suggest clarifying that both dead and green trees (selected for removal as part of understory thinning) could be removed within mechanical treatment areas. This material could be sold as sawtimber or as biomass. We also believe that this should be allowed within manual treatment areas where equipment can be operated from existing roads.

4. Allow for flexibility to modify mechanical treatment boundaries based on ground truthing

We would like to encourage SQNF to allow for modifications to mechanical treatment boundaries based on ground truthing. In our recent experiences at Long Meadow Grove, we have made several modifications to treatment unit boundaries after conducting extensive on-the-ground surveys and reconnaissance.



Thank you again for the opportunity to comment on this draft EA. We look forward to working with SQNF on implementation of this critical restoration work.

Yours sincerely,

Ben Blom
Director of Stewardship and Restoration