**Prescription (from proposal):**

***Proposed activities:*** Based on tree age and tree diameter measurements collected in the landscape assessment (CFRP 34-10), we developed a prescription of thin-from-below with a diameter cap of 12” drc (diameter at root crown). Mastication treatments will be used in areas with lower tree densities and along a private property boundary. The remaining denser forests will be hand thinned. Particular attention will be paid to the old and large trees identified during the landscape assessment; such that fuels will be removed from a buffer around these trees to prevent excessive scorch or torching during fire. The Pecos/Las Vegas Ranger District agreed to allow the mechanical treatment operators to take small-diameter material cut during the treatments. In exchange, the operators agreed to a lower treatment cost/acre (thus adding value to small diameter material). Following thinning, the Forest Service will open the area to the public through free-use permits for wood collection (see letter of endorsement). In addition to reducing fuel loads before burning, this will greatly benefit the local community who depend on small diameter trees for fuel-wood. This model was used in a prior CFRP project on the mesa (25-01). Mechanical treatments will be scheduled to occur outside of the late-spring/summer time window that is critical for breeding birds. Using experienced local operators, and through oversight by an experienced and knowledgeable implementation manager, (Orlando Romero, Forest Guild) the safety of operators / operations will be assured.

Our prescription will restore the forest structure and composition similar to when fires still burned frequently on Rowe Mesa (before ~ 1870) and protect the remaining old and large trees from excessive competition and crown fire hazard posed by the existing overly dense forest. Within the 2,500 acre treatment unit this “thin-from-below” prescription will be implemented in the areas (675 acres) prioritized by the FlamMap Treatment Optimization model (see map, Appendix A). By running hundreds of combinations of treatment locations and simulated fires, the model was used to determine that these areas were the most effective at reducing high-intensity fire behavior not only within the thinned areas, but also outside (e.g., downwind) of the thinned areas (Ager et al. 2010, Finney et al. 2007). This is accomplished by reducing the continuity of fuels and tree crown cover so that high intensity fire could not spread outside of treated areas to adjacent forest stands. Thus, by thinning only 675 acres, 2,500 acres are effectively “treated” with a first entry and ready for low intensity prescribed fire or managed wildfire at historic return intervals (average of 8 years), which the Pecos/Las Vegas District has committed to doing (see letter of commitment). Additionally, because of the central, “keystone” location of these treatments adjacent to prior CFRP treatments and recent prescribed fires, upon completion there will be over 7,000 acres that will be more resilient to wildfire and available to be burned with low severity fire. This complements a collaborative effort between the Santa Fe National Forest and the NM State Game and Fish that has prioritized Rowe Mesa for landscape-scale prescribed fire. Restoration (mechanical treatment and/or burning) with this strategic approach within a landscape-scale context is necessary to begin to tackle the overwhelming amount of forest at risk of unnatural high intensity wildfire in New Mexico. These large, strategic, fire-focused approaches are perhaps more urgent given the extremely large catastrophic fires in recent years (e.g., Las Conchas Fire).