



## **CALIFORNIA UPLAND GAME PROGRAM GRANT AGREEMENT NUMBER: P1780110 – FINAL REPORT**

### INTRODUCTION AND BACKGROUND

The Cleveland-Icehouse Area is an approximate 20,000 acre landscape located on the Pacific and Placerville Ranger Districts of the Eldorado National Forest within the South Fork American River Watershed. Ponderosa pine plantations were established following the loss of forest cover due to high severity wildfires occurring during the 1992 Cleveland Fire and 1959 Icehouse Fire. The Cleveland-Icehouse Forest Health Project is located within the fire scars, and consists of approximately 3,000 acres of ponderosa pine plantations and neighboring natural stands that are at risk of loss to catastrophic wildfire as well as insect and disease. However, in order to maintain and continue to advance these plantations to provide resilient forest conditions which support clean water, wildlife habitat, recreational opportunities, and wood products into the future, additional work is needed to achieve and maintain the future desired condition of this landscape.

### ACTIVITIES

Funds from this project were used to treat a total of 69 acres through mechanical mastication, focused on increasing residual tree health, stand heterogeneity, and rearranging fuels to decrease fuel ladders and canopy continuity. This reduction in stand density and tree canopy cover will enhance foraging habitat for upland game birds by stimulating the increased growth of annual grasses and forbs on the project area.

All black oak trees in the project area over 4" in diameter were retained and cleared around to maintain stand diversity and species heterogeneity. This is important because acorns from black oaks in this region are a critical three-season food source for wild turkeys, sooty grouse, and band-tailed pigeons.

Project operations began in June of 2018 and were completed in August of 2018. The units have been inspected by NWTF and USFS personnel, and have been cleared for payment.



FIGURE 1 – PROJECT BUDGET

Upland Game Bird Grant Account Proposal							
		Location					Grant Request
LINE ITEM BUDGET FOR:	Cleveland-Icehouse FHP	Eldorado National Forest					\$47,681.42
<b>OPERATING EXPENSE:</b>							
	Work/Item Description	Count	Units		Cost/Unit		
	Mastication - Upland Game Funds	69	acres	@	\$575.00	per acre	\$39,675.00
TOTAL OPERATING EXPENSES:							<b>\$39,675.00</b>
<b>GRANT ADMINISTRATION:</b>							
	Work/Item Description	NWTF's Federally-Approved Overhead Rate			Cost/Unit		
	Mastication - Upland Game Funds	20.18%		@	\$39,675.00		\$8,006.42
TOTAL GRANT ADMINISTRATION EXPENSES:							<b>\$8,006.42</b>
TOTAL PROJECT COST:							<b>\$47,681.42</b>



Figure 2 – Project site prior to treatment.



Figure 3 – Project site post treatment.



Figure 4 – All black oak trees were cleared around to mitigate conifer encroachment.



## DISCUSSION

Looking forward to what the future brings for this project! Prior to beginning operations, the tree canopy was so dense, that there was no presence of any grasses or forbs throughout the site. The entire substrate was completely shaded out (Figure 2). Now, after operations, sunlight can finally reach the forest floor (Figure 3). By spring of 2019 (and hopefully after a good winter) there will be a fresh new mat of annual grasses and forbs lining these units. In future years, we will begin to see the establishment of mast-producing shrubs such as huckleberry and thimbleberry. Increased acorn production will come from the black oak trees that now have less competition for sunlight and precious water/nutrient uptake from the soil (Figure 4), and upland game birds will have increased foraging habitat on our federally managed public lands. A win for California's forest health, wildlife, and hunters alike. Thank you for your partnership in this project!