<u>Santa Fe National Forest – 2021 "Holiday Mesa" Wildfire</u> <u>Proactive Fuel Treatments on Forest Roads</u>

Introduction

On the afternoon of April 19th, a cook fire crept into a receptive fuel bed, where it quickly spread through dry fuels at the toe of a slope on a remote area of the forest. The fire had been smoldering through a stump's roots deep under the pumice ground for several days. The smoldering fire finally made its way back to the surface where it began actively burning dried fuels of the forest floor. The fire was quickly driven up a 40' slope to the east building momentum as it climbed burning through a continuous bed of dried litter and various down woody fuels. Fuels in the area consist of over stocked Ponderosa Pine with infrequent pockets of Pinon and Juniper. Immediately to the east of Holiday Mesa is Virgin Canyon a continuous strip of rugged untreated fuels that go on for over 5 miles in a Southern alignment. Two and a half miles due east of the fire is the Jemez Canyon where the community of Jemez Springs is located. There are also many private land inholdings up the canyon from Jemez Springs as well as numerous recreation sites including Jemez State Monument and Soda Dam.

The Holiday Mesa fire was first reported by the Cerro Pelado lookout on the Jemez District, Santa Fe National Forest at 1730 on April 19th, 2021. At the time nearby fuel moistures readings were extremely dry at only 9% in the 100 and 1000hr fuels. Forecasted high temperature were 61 degrees with relative humidity's bottoming out in the mid-teens. Winds were west at 15 to 25 mph, lending perfect alignment to fire spread from its origin at the bottom of the slope. When crews arrived, they found the fire had burned an estimated 2-3 acres with flame lengths ranging from 4-6 feet.



Fire scorch at edge of mastication treatment



Under burn within mastication treatment.

Fuel Treatment Effectiveness

Though the fire was in perfect slope and wind alignment to continue spreading to the east, it was halted by a mastication buffer that followed Forest Road 608. The mastication buffer was part of 664 acre CFLRP task order implemented in 2018, that treated more than 20 miles of forest roads in the SWJM project area (Figure 1). Treatment buffers were conducted along main forest road systems in a proactive measure to fortify holding features for wildfire or prescribed fire operations. These efforts were employed in conjunction with over 6,000 acres of burning over the past 5 years along with thousands of acres planned for the near future.



Treated Fuels (left side of the road) and Untreated fuels (right side of road)

Conclusion

Though the initial push of the fire had built up enough momentum to torch out small trees and leave significant scorch on mature pines, once the fire reached the fuels treatment its rate of spread and intensities dropped. Jemez District fire crews were then able to contain the remaining flanking and backing fire at 3 acres. Although the Holiday Mesa fire was caused by a random act of carelessness it highlights the effectiveness of intentional and strategically placed fuels treatments.



Figure 1

Josiah Salaz – Prescribed/Fire Fuels Technician – Santa Fe National Forest Brian Riley, Jemez District Ranger: Date: abel.salaz@usda.gov