Hazardous Fuels and Prescribed Burn Projects Fuel Treatment and the Camp 32 Fire: A Success Story Montana 2005

"It was obvious that the fuel treatment that was done in the Camp 32 fire area had an effect on the fire behavior of the fire. There is no doubt that the fire transformed from a crown fire to a ground fire. If the treatment hadn't been done, the fire would have ended up burning over Black Butte and into the Black Lake Road area, affecting many more homes."

North Lincoln County Community Forester, Bob Seidel

The Camp 32 wildfire burned approximately 802 acres on August 7, 2005 and is indicative of the fuel problem that exists within lower elevation forests in north-west Montana. The fire start was in the lower elevations of the Pinkham Creek drainage and the proximity to residences and private land highlights the concerns with unplanned wildfire. Suppression efforts were costly and had far more adverse impact in a short time frame than planned fuels treatments. Residences in the immediate vicinity were evacuated for several days and many others north of the fire were put on evacuation notice. Smoke impacts to the local area were high during the early stages of the fire.

In 1999, the Forest completed a plan to treat nearly 8,000 acres of fuels using a combination of timber harvest and prescribed burning. Actions were designed to help reduce the chances of a wildfire burning toward residences in the Pinkham Creek area as well as the communities of Eureka and Rexford. A planned burn and timber harvest would also greatly reduce the risk of a

stand-replacing fire and smoke impacts to local residents.

At the time of the fire approximately half of the planned treatments were completed. The fire burned into one of the completed treatment areas where units were commercially thinned from below in 2001. The silvicultural prescription called for leaving all ponderosa pine and leaving western larch over 12 inches diameter at breast height (DBH). Harvest left the largest, most vigorous trees on site and forest workers slashed the damaged residual understory. Excavator piles were created and burned in 2002. The Forest Service completed a 437 acre



Camp 32 fire burned both sides of Pinkham Road (middle). Left side of the road was untreated. The right side had previous treatments. Wind pushed the fire from left to right.

understory burn in the spring of 2003 to decrease the ground fuels by burning 70-90 percent of the fuels less than three inches in diameter, kill 50-70 percent of the stems less than five inches DBH, maintain or improve forage quantity and quality, and to keep the overstory mortality to less than ten percent.

The Camp 32 fire started southwest of the Pinkham Creek Road and burned to the north east.

Extreme fire behavior was exhibited during the afternoon of August 7th, including crown fire, torching, and spotting up to a half mile, in stands that had received no fuels treatment. As the fire reached and crossed the Pinkham Creek Road the resulting fire behavior on treated sites was a surface fire. The overstory mortality on treated sites was less than 1 percent vs. 50-100 percent on untreated areas.

Suppression efforts at the head of the fire in the untreated stands were futile. A flanking action was all that could be done, and even that was difficult. However, once the fire reached the treated area, suppression crews safely attacked the head of the fire. The Eureka Volunteer Fire Department (EVFD) played a large role in the initial suppression of the fire as well as the structure protection. John Livingston, president of EVFD, commented, "It was very evident that the treated area was crucial to the successful outcome of this incident."

Community and agency support has been instrumental in the success of the fuels program on the Rexford Ranger District. North Lincoln County Community Forester, Bob Seidel said, "If more of this type of treatment had been done the fire would never have gotten as big as it did."



Treated stand, north of Pinkham Road



Untreated stand, south of Pinkham Road

While the treated area played a large role in slowing down the Camp 32 Fire and saving many homes in its path, the other important aspect of fuel treatment is that the treated area served as a safe place for firefighters to work. According to Ron Hvizdak, District Fire Management Officer, "Even under the hot, dry windy conditions that existed on August 7th, fire behavior in the treated stand was such that initial attack crews could get close to the fire's edge and work safely, even at the head of the fire. Suppression efforts on the untreated area were much more difficult on the flanks and impossible at the head."