

Audio Tour, Stop 6, Salvage Timber Operations

A ghost-like forest of blackened trees was left in the wake of the Rim Fire. Nearly 100,000 acres burned under very hot conditions and the dead trees left posed a significant safety risk to travelers and forest workers alike. Structurally damaged and unstable trees lined Forest roadways and were prominent along Highway 120 leading up to Yosemite National Park. Recreational sites and campgrounds were impacted as well. With so many damaged trees across the landscape, the Forest decided to close the area burned by the fire to expedite the removal of the hazardous trees. This closure remained in effect until November of 2014 when nearly all of the closed areas were reopened to travelers. Concern for public safety is our number one priority.

Removing the dead trees adjacent to roads accomplished a variety of good things along with mitigating the safety hazard. Selling the fire killed trees removed tons of dead wood from the Forest and enabled us to capture some of the value of the wood to pay for reforestation efforts. Though many of the dead trees are still standing, wind storms, heavy rains and snow could easily cause them to fall without warning. Once on the ground, those dead logs become fuel for the next fire.

Protecting the soils from a future fire was another reason we chose to remove the dead timber before it could fall like matchsticks onto the ground. Heavy fuel loads on the ground can cause severe soil damage. When a fire lingers in an area due to dead and downed logs, the soil can get super-heated, causing it to become hydrophobic or water-repelling. Healthy soil, plant roots and a layer of forest litter normally slow down the flow of water, allowing raindrops to gently soak into the ground. When soils and vegetative cover are severely burned, they no longer have the capacity to intercept raindrops or slow the movement of water downhill. When that happens, water can race down hillsides causing flash flooding, rockslides and even debris flows. During a debris flow, massive amounts of mud, large rocks and even trees can be swept downslope. These volatile mud flows can destroy anything in their wake. People caught in their path are likely to die or suffer serious injuries at best.

Migratory deer herds, which are in decline throughout the state, could also be affected. With so many dead trees on the ground stacked up like match sticks, some prominent travel corridors for the deer could be blocked. Deer are creatures of habit and prior to the fire, they had well-worn migratory trails between the Stanislaus and Yosemite National Park. During hot summer months, the deer move higher into the mountains where forage is plentiful but in the winter, their trail system is used to access the Jawbone Ridge and Lava Cap area of the Forest. Here they seek shelter, acorns and brush, only now, due to the amount of fire killed trees that have fallen, some of their trails have been compromised and they are no longer travelable. Removing fire-killed trees from this area will improve the situation and allow wildlife biologists like myself to better manage habitat for the future.

With these thoughts in mind, the Forest began to sell salvage logging contracts in the spring of 2014 after an environmental assessment was completed. Starting in May of 2014, approximately one million board feet of fire-killed timber was removed from the Forest every day. Though that rate eventually slowed, at its peak, that equaled about 200 truckloads of wood daily. Local sawmills processed some of the wood which was used for a variety of purposes. The beautiful

park benches at Pinecrest Lake, which were fashioned from cedar trees killed in the fire, are just one example.

Salvage logging not only lessens fire danger but it stimulates the economy. In fiscal year 2014, millions of board feet of dead wood were removed from the Forest by logging contractors. More timber sales will ensue in 2015 in an effort to remove additional fire killed-timber from the forest.

Naturally this logging was done with care and forethought. A group of scientists and resource specialists carefully prepared an environmental impact statement to examine all angles of the project. EISs are required by law and their purpose is to examine any impacts that could occur to the landscape due to actions taken by forest managers. They also provide the public a voice so they can share concerns and suggest alternatives for managing the landscape. Completing a well-thought out EIS requires a team of people. On the Stanislaus National Forest, the team was comprised of wildlife biologists, soil scientists, hydrologists, botanists, foresters and ecologists. By using the latest science available, the team hoped to restore the area burned by the Rim Fire as quickly as possible.

Removing a portion of the fire-killed trees was the beginning of that process. Clearing away the dead trees also provided space for the future forest but in doing so, it was also important to leave some snags in place for wildlife.

Black backed woodpeckers are just one example for their lives are closely linked with that of the burned forest. Woodpeckers have a very unique physiology that allows them to drill into trees to find insects beneath the bark without harming their heads. Their jack-hammer like approach allows them to carve nesting sites in trees. Meanwhile, they make it easy for a host of other birds called secondary cavity nesters to follow in their wake. These woodpecker drilled cavities benefit mountain bluebirds, western screech owls, flying squirrels and even fishers, amongst others.

Wildlife habitat and fire resiliency are two key themes envisioned for the future forest. Owls and deer, along with many other species of wildlife, were specifically considered but the overall goal is to create a mixed conifer forest that is rich in biodiversity. After witnessing the devastating effects of the Rim Fire, creating a healthy forest that can bounce back after a disturbance became our goal. An interdisciplinary team of scientists is currently devising a reforestation plan that will help to improve the health and vibrancy of the forest.

By making the landscape more resilient to fire, we hope to reduce the size and intensity of future fires. Removing fire as a force is not a part of our overall plan for fire is a natural, shaping element on this landscape. For some native plants, low to moderately intense fire actually plays a role in regenerating species of brush, flowers and even certain trees.