

## Traveling and Recreating in a Burned Area



A burned landscape presents a number of safety hazards that either did not exist prior to the fire or have been exacerbated by the effects of the fire. In some cases these hazardous conditions may persist for several years after a fire. Be very aware of your surroundings, follow warning signs, area closures and directions from agency personnel, and pay particular attention to these potential safety hazards.

### *Unstable Terrain*



Typically the roots of plants hold soil in place. Many shrubs will re-sprout and many trees will regenerate after a fire. However, where plants were burned and will not recover, their roots are also dead and will decompose over the coming months and even years. As these old roots decompose, they will cease to bind the soil which will allow the soil and rock to shift and move under foot. Storm-triggered landslides and rockfall may make trails and roads impassable. In some cases the existing trail prism and trail markers may also be obliterated making route finding difficult. Soil erosion also increases after a fire due to lack of ground cover.

### *Displaced Wildlife*



Fire dramatically alters wildlife habitat. Many animals are migratory and were out of the area at the time of the fire. These animals may experience a delayed response to the changes in their habitat when they return or they may simply choose not to return to that particular site. As many plants will respond favorably to fire, there may be a fresh flush of desired forage plants that will concentrate animals in new places.

**If you have questions about hunting seasons or zones affected by fire, contact your local California Department of Fish and Wildlife Office.**



### *Hazard Trees*

Hazard trees will exist throughout the burned area. It is often hard to assess the long-term survival of scorched trees, some of which may subsequently die while others may recover. Assume that a dead or defected tree may fall and impact an area up to two times its height. Even isolated green trees that are surrounded by a heavily burned area are very prone to breakage and uprooting. Allow yourself some extra room and consider the potential fall zone when choosing a travel route and especially where you choose to rest or camp. Be especially wary of hazard trees after rain events or during high winds.



### *Burned stump holes and root chambers*

Burned stumps may create rather obvious large holes, but these holes may actually be bigger than you think! In many cases, the fire may have traveled through the root chambers and consumed the woody root material leaving vacant chambers where solid wood used to be. Overtime, these root chambers will collapse. Your body or vehicle weight on the root chambers may cause them to collapse and open up holes under your feet. Large trees have particularly large root chambers that can also be very deep. Be especially wary after rain as the moisture may travel through the root chambers and make collapse easier.



### *Flash floods and debris flows*

Burned landscapes have fewer plants to intercept rain thus more reaches the ground with high impact. In addition there are fewer plants actively growing so evapotranspiration rates are also much lower, which means the soils become saturated much more quickly than they did before a fire. This creates a risk of flash floods and debris flows. Both create deep rumbling noises and ground vibration. Be very aware of the weather. Avoid travel in channels when rain is likely. If you get caught unaware, climb to high ground. Don't enter flood waters as you may not have a solid substrate underneath and the flow may be stronger than you estimate. Look, listen, and react quickly! Debris flows can make trails and roads impassable.



### *Management Activities*

Burned Area Emergency Response (BAER) efforts have started on many fires and is scheduled to continue for the first year after the fires. The US Forest Service specialists assess the burned area for watershed impacts, hazard trees, and other concerns. Treatments to minimize those impacts are then prescribed and implemented. Watch for personnel and equipment as the Forest Service ramps up its restoration efforts which include – to name a few – roadside hazard tree management, thinning, burning and planting. During implementation there may be heavy equipment and aircraft working in and around the burned area.

Stay Informed about closures and road and trail conditions on the forests.

Forest websites and contact information: <https://www.fs.usda.gov/main/r5/about-region/offices>