

News Release

DOLLAR LAKE FIRE INFORMATION 541-354-1431



Mount Hood National Forest



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Burned Area Emergency Response Team Responds Before Fire is Contained

Forest fires naturally attract attention when they are burning, but threats remain after the flames have died down. As fire behavior quiets and containment percentages increase, many people wonder what may happen in a burned area after the rain season begins.

Answering that kind of question is the work of an interdisciplinary group of scientists and natural resource specialists called BAER team, for Burned Area Emergency Response. Before a fire is even fully contained, the BAER team evaluates the burned area for threats to life, property and cultural or natural resources. The goal is to protect resources from further damage after the fire is out. Team members can come from several federal and state agencies and consist of specialists in hydrology, wildlife biology, archaeology, soil science, landscape architecture, geology, ecology, engineering, forestry, botany, and mapping.

Using satellite data to aid in determining burn severity levels across the fire area, the BAER team will prepare a Burned Area Emergency Response Plan. The plan documents the effects of the fire and makes recommendations for work to take place in anticipation of the first heavy rain storm. Natural recovery is preferable, but employee and public safety are the first priority.

With the plan complete, treatment measures begin, focusing on the potential for accelerated erosion, runoff and landslides from burned vegetation and charred soils.

Scorched trees and underbrush, along with water repellent soils can lead to severe surface erosion and sometimes even debris flows. In many places, a fire will have consumed the leaf litter and decomposing matter on the ground that would normally help soak up water. Along with the ground cover being removed after a fire, the soil itself has the potential to become hydrophobic, or water repellent. Many plants and trees have protective chemicals which coat their leaves to prevent water loss. Vaporized by heat from fires, these substances settle into the soil to create a waxy layer. Generally speaking, the greater the intensity and duration of a fire, the more hydrophobic the soil becomes. Hydrophobic soil absorbs less water, diverting it downslope as a sheet, eroding soil and organic material.

Beyond the immediate cause for concern, water-repellant soil pose a longer-term problem for new plant growth. As seeds and plants try to regenerate, rainwater has difficulty soaking down into water-repellent soil, sometimes slowing the healing process in severely burned areas. Treatments that help to reduce surface runoff and sedimentation might include an application of mulch to more severely burned areas along streams and other high risk areas.

BAER teams work to make an assessment report within seven days of the fire's containment. If threats exist, such as plugged culverts and road washouts, the team must include preventative measures to be carried out before the first damaging storm.

FOR ADDITIONAL FIRE INFORMATION, PLEASE VISIT:

Dollar Lake Fire Information: www.inciweb.org/incident/2563

Mount Hood Nat'l Forest: www.fs.usda.gov/mthood