



Pacific Northwest Region
Rogue River-Siskiyou National Forest
3040 Biddle Road
Medford, OR 97504
www.fs.usda.gov/rogue-siskiyou

News Release

Contact: Skye Sieber, Public Information Officer, (541) 630-4750
John Chatel, BAER Team Lead, (971) 801-5379

Date: October 11, 2017

Soil Burn Severity Map Released for Chetco Bar Fire

Gold Beach, Oregon— The Burned Area Emergency Response (BAER) team finalized its soil burn severity map for the Chetco Bar fire. The map identifies 7 percent of the fire area as having high burn severity and 34 percent with moderate burn severity. The remaining 59 percent has low or very low burn severity.

“We originally expected burn severity to be higher given the extent of the fire. However, the team did not find significant soil effects in most locations,” said BAER Team Leader John Chatel.

High burn severity is evidenced by the consumption of all ground cover and surface organic matter (litter, duff, fine roots), sometimes leaving a layer of ash several inches deep. Moderate burn severity areas will have up to 80 percent ground cover consumed however soil structure is generally unchanged. In areas with low burn severity, the ground often appears lightly charred.

A soil burn severity map is generated using satellite imagery and validated and adjusted by field surveys, which the BAER team wrapped up late last week. The team observed roots below the soil surface were generally unburned and providing soil stability, water able to infiltrate into the soil at deeper depths, and soil structure was not degraded.

“There still is the risk of erosion on steeper, burned hillslopes that lack ground cover,” notes Chatel. “These risks will remain for several years until vegetation recovers.” The higher the burn severity, the less likely soil is able to absorb rainfall, increasing surface runoff and risk of erosion, debris flows, and flooding.

Using the burn severity map, BAER scientists calculate expected increases in stream flows and run models that identify areas prone to erosion or landslides. “Those are the areas that we focus on for protecting values at risk,” Chatel said. Values at risk include public safety, roads, buildings, recreation sites, trails, historic and cultural sites, and more.

The BAER team is now prioritizing values at risk and developing a suite of emergency actions to mitigate potential hazards. BAER proposals focus on federal lands, but the team will be sharing information about identified hazards with other agencies later this week to help them plan for potential problems. The soil burn severity map is available for viewing and downloading at:

<https://inciweb.nwcg.gov/incident/5631/>.



for the greatest good

###