Santa Fe National Forest

Burned Area Emergency Response (BAER)

Post-Fire BAER Assessment

May 24, 2022 **BAER Information: (707) 853-4243**

Phase 1 Emergency Assessment of Post-Fire Debris Flow Hazards for Hermits Peak-Calf Canyon Burned Area

BAER SAFETY MESSAGE: *Everyone near and downstream from the burned areas should remain alert and stay updated on weather conditions that may result in heavy rains and increased water runoff. Flash flooding may occur quickly during heavy rain events-be prepared to act. Current weather and emergency notifications can be found at the* ***National Weather Service*** *website: www.weather.gov/abq/.*

The Forest Service (USFS) Burned Area Emergency Response (BAER) assessment team coordinated early with US Geological Survey (USGS) staff during its evaluation of the Hermits Peak-Calf Canyon Fire burned area to strategically assess potential post-fire impacts to the watersheds and predicted debris flow response during damaging storm events.

USGS models estimate a moderate to high level of debris flow hazard for the area burned by the Hermits Peak-Calf Canyon Fires in the Tecolote and Gallinas watersheds. Many stream reaches and drainage basins have a greater than 40% likelihood of debris flow occurrence at a very modest 15-minute rainfall intensity of 24 mm/h (~ 0.25 inches of rain in 15 minutes). A few drainage basins are estimated to have a high to very high level of debris flow hazard, with debris flow likelihood exceeding 60% and 80%, respectively. These highest hazard areas occur in several sections of the assessed burn area, including: Cañon Del Aqua and Cañon Alto northwest of Montezuma; in small drainages above Gallinas Creek near Trout Springs; above Forest Service Road 263 and Gallinas Creek near Canovas Canyon; and in sections of Burro, Hollinger, Tecolote and Porvenir Canyons.

Most of the assessed burn area requires rainfall rates less than 32 mm/h to exceed a 50% likelihood of debris flow occurrence. High to very high hazard areas require very modest rainfall rates between 12 and 24 mm/h to exceed a 50% likelihood of debris flow occurrence.

The online interactive map is posted at (click on the button at the top right corner of the map to show different components of the hazard assessments). Zoom in if the map does not immediately load:
https://landslides.usgs.gov/hazards/postfire_debrisflow/detail.php?objectid=415.

Visit the following link for *Scientific Background* and more information on how the predictions are calculated:
https://landslides.usgs.gov/hazards/postfire_debrisflow/background2016.php.

Hermits Peak - Calf Canyon Post-Fire BAER Assessment information is available at:
https://inciweb.nwcg.gov/incident/8104/

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