After The Fires – Mudslides?

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Wildfires increase the risk of flooding and landslides/mudslides:

- Increased water runoff burned areas have less vegetation to absorb rainwater, while rapid flows pick up soil and debris
- Water-repellent soil wildfire heat bakes the earth, creating waxy, and non-absorbent surfaces that make it difficult for water to penetrate, adding to the surface runoff flow, in affected and surrounding areas
- Debris flows the most dangerous post-fire landslide issue is a fast-moving mixture of mud, rocks, and debris. Post fire, there is more debris to flow
- Severity of burn areas experiencing high-severity burns are more prone to landslides

In southern California, even modest rainstorms can trigger flash floods and debris flows. Any rainfall above 0.4 inches/10mm per hour poses significant risks to life and property (NOAA). The debris flow probability map for the Palisades Fire assumes rainfall of 1.0 inches/25 mm per hour, for 15 minutes:

California law increases the risk of flooding and landslides/ mudslides impacting insurance portfolios:

Typically flood/earth movement are excluded from standard homeowners and commercial property policies, but California's "efficient proximate cause" doctrine means policyholders may have a valid claim if the primary cause of the flooding/mudslide is determined to be the wildfire. This doctrine applies when multiple causes contribute to a loss, and one of the causes is covered by the policy.

Landslide risk after fires remains elevated for up to 5 years, because the soil is less able to absorb water while the (water drinking) vegetation grows back slowly.

Post-wildfire risk can be mitigated with erosion control measures, including:

- Install barriers such as silt fences and straw wattles to decelerate runoff/ capture sediment
- Replant to improve soil stabilization/ restore natural water absorption capacity
- Monitor the weather and issue early warnings to give communities time to prepare



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