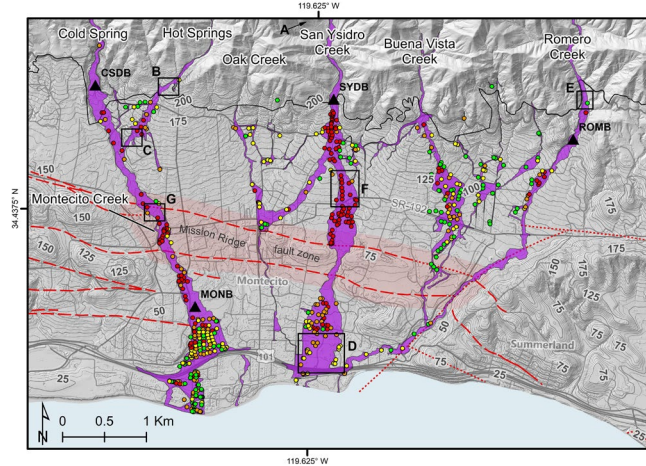
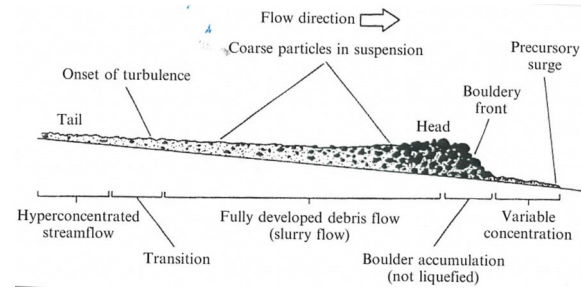
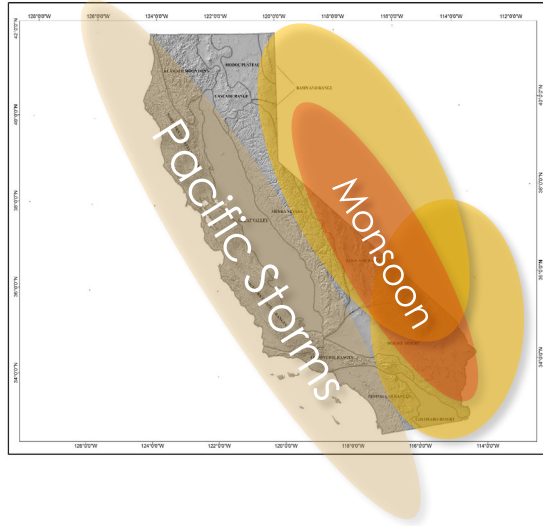


Wildfire and Flash Flooding & Debris Flow

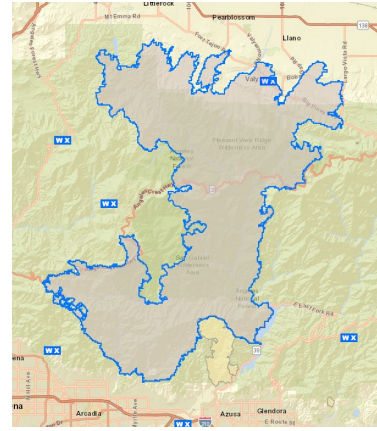


- Where do impacts occur?
- How much rain is needed?
- What time of year?
- How to plan?

Preparation – After Wildfire, Before Rain

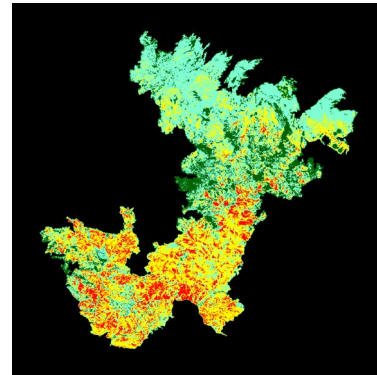
Fire Perimeters and Fire Data:

<https://data-nifc.opendata.arcgis.com/>



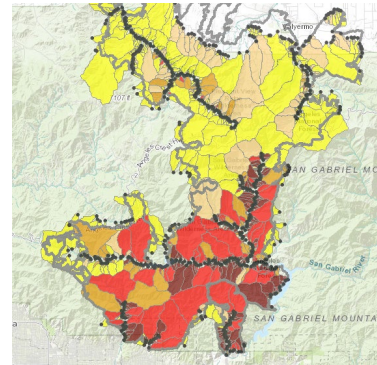
Burn Severity Mapping:

<https://mtbs.gov/direct-download>



USGS Debris Flow Hazards:

https://landslides.usgs.gov/hazards/postfire_debrisflow/



How to Prepare for a Debris Flow or Flash Flood After Fire

CAL FIRE: [Ready For Wildfire](#)

U.S. Forest Service Burned Area Emergency Response (BAER) guide: [Standard BAER Operations Guide](#)

WERT:

[Flood After Fire](#) - A short video from the California Department of Water Resources

[Post-Fire Debris Flow Facts](#) - What can residents do to prepare

[After Wildfire: A Guide for California Communities](#) - A comprehensive guidebook for communities faced with flash floods and debris flows after wildfire

[Post-Wildfire Flash Flood and Debris Flow \[Survival\] Guide](#) - Information from National Weather Service.

[Flood After Fire California Toolkit](#): A resource for Technical Specialists to assess flood and debris flow risk after a wildfire.

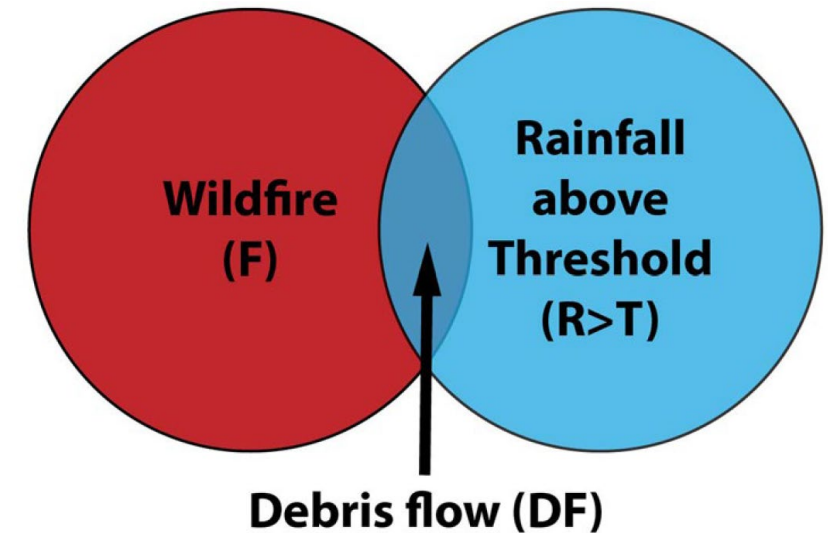
Preparation – After Wildfire, Before Rain

Tips and Tricks for Emergency Response Planning

Use Historic Data When Available

At-Threshold Event = Just enough rainfall to trigger a debris flow (Typically a 1-2 year ARI (or 100 to 50% annual-chance storm at 15-minute duration)

Extreme event = rain rate well above threshold 25-50year ARI



Preparation – After Wildfire, Before Rain

Use Historic Data When Available – A Historic Debris Flow Map, Below



Debris flow inundation map following the January 9, 2018 event by the California Geological Survey (2018). The extent of the inundation exhibits the nature of debris flow avulsions producing out-of-channel flows. The flows spread out onto the alluvial fan surface that the community is developed on.

Response



Fire and Flood Sequence

Recovery



Fire and Flood Sequence

Additional Resources (Part 1)



General Resources – Guides and Fact Sheets

[National Weather Service Post Wildfire Flash Flood and Debris Flow Guide](#)

[California Department of Conservation – Post-Fire Debris Flow Facts](#)

[California Department of Conservation – Wildfire and Debris Flow: A Geologic Hazard](#)

[Forest Service Post Fire Restoration – After the Fire Dos and Don'ts](#)

[NOAA – Drought Influences on Post- Wildfire Flooding and Debris Flow Hazard](#)

[UCLA Institute of Transportation Studies – Vulnerability of California Roadways to Post-Wildfire Debris Flows](#)

[US Forest Service – Field Guide for Mapping Post-Fire Soil Burn Severity](#)

[California – Flood After Fire Toolkit: A Resource for Technical Specialists to Assess](#)

Additional Resources (Part 2)



General Resources – Videos

[Flood and Debris Flow Risk After a Wildfire](#)

[Flood After Fire Video – California Department of Water Resources](#)

Additional Resources (Part 3)



General Resources – For Homeowners

[CAL FIRE: Homeowners Guide, Before, During and After](#)

[CAL FIRE: Returning Home After a Wildfire](#)