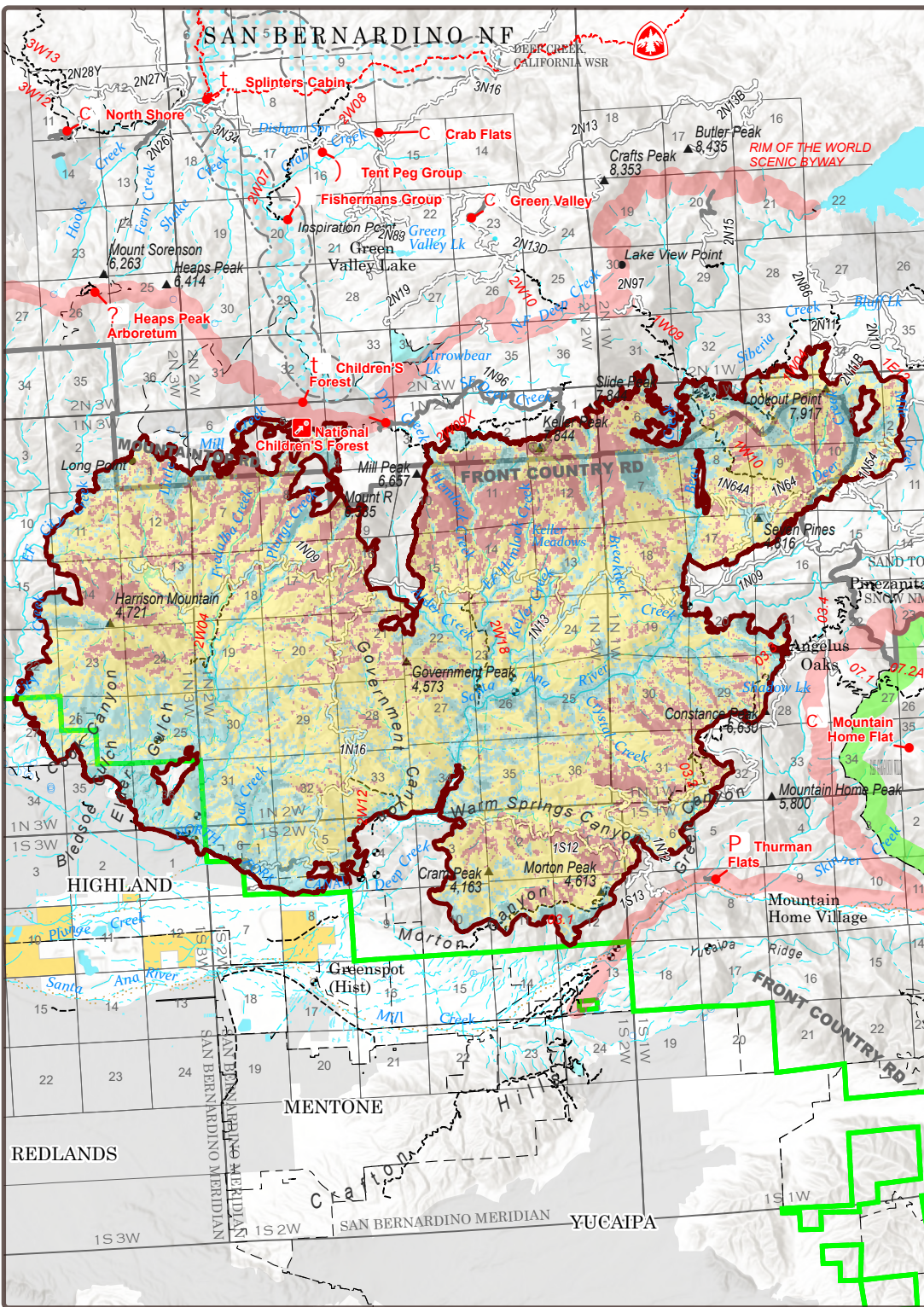




# Soil Burn Severity: Line Fire Burned Area Emergency Response (BAER)



## Soil Burn Severity

Soil Burn Severity is a measure of the fire's effects on the ground surface and soil condition. This map identifies the fire-induced changes in soil and ground surface properties that may affect infiltration, runoff, and erosion potential. The BAER Team uses this map to identify areas of unacceptable risk to a critical value and where mitigating treatments may be most effective. This product is appropriate for wildland landscapes and does not represent fire effects in developed areas.

## Severity Indicators:

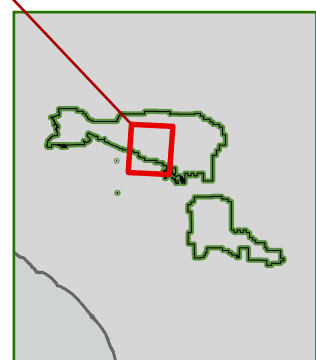
**High soil burn severity:** Most or all of the pre-fire ground cover and surface organic matter (litter, duff, and fine roots) is generally consumed, and charring may be visible on larger roots. Soil is often gray, orange, or reddish at the ground surface where large or dense fuels were concentrated and consumed. Soil structure is often altered and less stable at the surface.

**Moderate soil burn severity:** Up to 80 percent of the pre-fire ground cover may be consumed but generally not all of it. In burned forests, there may be potential for recruitment of effective ground cover from scorched leaves that will soon fall to the ground. In burned shrublands, there is low potential for additional cover recruitment. Soil structure is generally unchanged.

**Low soil burn severity:** The ground surface, including any exposed mineral soil, may appear brown or black (lightly charred), and surface organic layers are not completely consumed. The canopy and understory vegetation will likely appear "green."

**Very Low soil burn severity or Unburned:** Little to no burn expected within these areas except in small patches, or where fuels were sparse. Canopy and ground litter almost completely intact. Little to no vegetation mortality expected.

For additional information including photo examples of soil burn severity see the Field Guide for Mapping Post-Fire Soil Burn Severity at: [https://www.fs.usda.gov/rm/pubs/rmrs\\_gtr243.pdf](https://www.fs.usda.gov/rm/pubs/rmrs_gtr243.pdf)



### Soil Burn Severity

- High
- Moderate
- Low
- Very Low or Unburned
- Assessment Boundary

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