

# Fuels and Fire Behavior Advisory

## Southern California Geographic Area Coordination Center

January 16-30, 2025

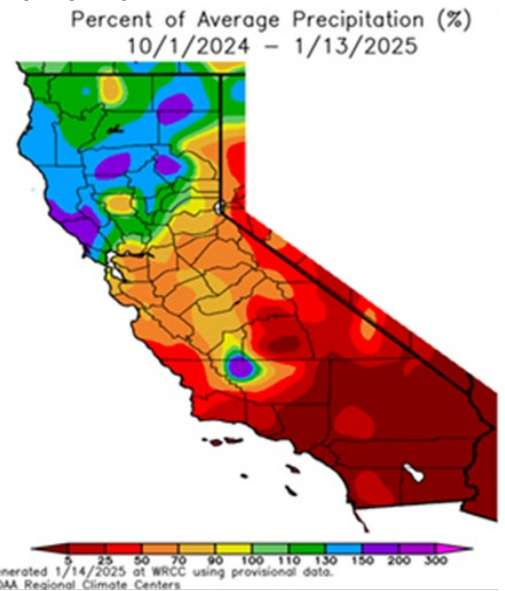


**Subject:** Critical Fire Weather and Fuel Conditions in Southern California.

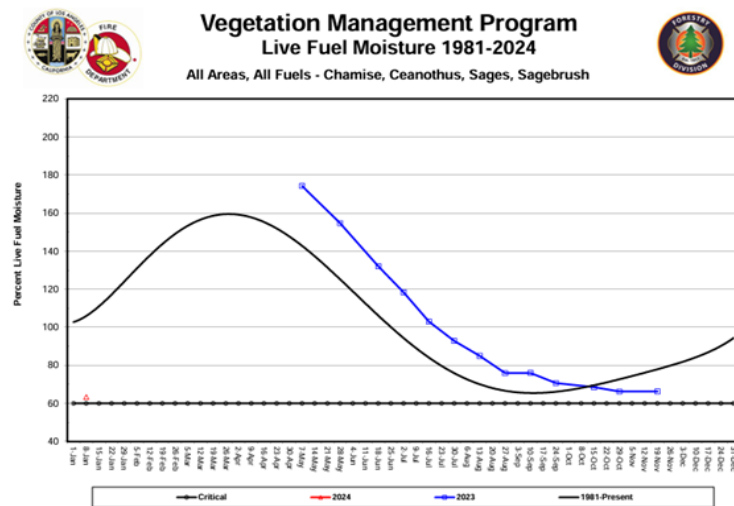
**Discussion:** Prolonged dry conditions, coupled with extended periods of warm, dry weather and frequent Santa Ana wind events, have caused fuels in Southern California to reach unprecedented levels of dryness. The resultant level of fuel volatility would be notable in summer months, **and is extraordinary for January.**

Recent fires have shown high resistance to control, with rapid spread and frequent spotting, with retardant often proving ineffective in the current fire environment.

Little to no change in the weather pattern is expected through the end of the month, with warm, dry conditions and periodic Santa Ana winds persisting. Fuels will remain highly receptive to ignition and spread, maintaining the risk of large fires.



### Difference from normal conditions:



Dead fuels across much of Southern California are at or near all-time record dry levels. Fine dead fuels (esp. 1hr and 10hr fuels) are consistently drying to critical thresholds, with only brief reprieves during short periods of higher humidity. Live fuel moisture levels, which would typically be much higher, instead resemble late summer or early fall conditions.

The extreme fire behavior observed on recent incidents like the Palisades and Eaton Fires further illustrates the severity of the situation. Fires are actively backing downhill and burning into the wind in fine fuels and heavier chaparral. This behavior, coupled with high winds, has made suppression efforts extraordinarily challenging.

### Concerns to Firefighters and the Public:

- Fires are likely to be uncontrollable during windy episodes.
- Expect extreme rates of spread with both short- and long-range spotting, and active nighttime burning.
- Prolonged stagnant weather patterns and long-duration incidents can lead to complacency, heightening risk.

### Mitigation Measures:

- Local and incoming fire personnel must be thoroughly briefed on the current fire environment, including weather forecasts, Pocket Cards, ERC values, and live/dead fuel moisture levels.
- Ensure full utilization of PPE, including shrouds and eye protection, during suppression activities.
- **Engage in all suppression actions with solid anchor points, escape routes, and safety zones.**
- Adhere to LCES principles and prioritize experienced lookouts under these extreme conditions.
- Base all decisions on current & expected fire behavior and consider augmenting initial attack resources.

**Area of Concern:** This advisory is valid for the following PSAs...South Coast (SC08), Western Mountains (SC09), Eastern Mountains (SC10) and Southern Mountains (SC11).

**Issued By:** Southern California Predictive Services Unit, in coordination with CAL FIRE and Cal OES, Fire and Rescue Division.

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