

Fuels and Fire Behavior Advisory

Southern California GACC



August 22, 2016

Subject: Exceptionally dry fuels, along with significant tree mortality in the Sierra, will create a high potential for extreme fire behavior conditions across much of Southern and Central California.

Discussion: Much of Southern and Central California has been affected by a multiyear severe drought that has caused significant stress to the native vegetation. Recent fires such as the Blue Cut, the Chimney, and the Rey have exhibited extreme fire behavior conditions that have not been observed in many years which underscores how dry the fuels are. Tree mortality in the Sierra continues to grow at an alarming rate with 40-100% mortality in a substantial amount of conifer stands within the Sierra and Sequoia national forests. It is estimated that over 66 million trees have died across California forestland since 2010. Currently, the Cedar Fire burning in the Sequoia national forest presents many safety hazards to firefighters as well as to the general public. For more information about the current tree mortality situation, please visit the Tree Mortality Task Force page at: <http://www.fire.ca.gov/treetaskforce/TreeMortalityMaps>

Difference From Normal Conditions: Live fuel moisture values among the native brush have reached levels that are more typical of late September and early October. Dead fuel moisture in the affected areas is either around the 97th percentile, or is at record levels for this time of year. While there may be periods of slight reprieve from the recent hot and dry weather, no significant improvement in fuel conditions is in sight. In addition, the absence of summertime convection across the mountain areas has left these areas especially dry due to the lack of increased humidity and localized rainfall.

Concerns to Firefighters:

- Due to the abnormally dry fuels, extreme fire behavior such as dangerous rates of spread, torching, crowning, and long range spotting can be expected.
- Fires will burn activity even during benign weather conditions. Active fire behavior can extend well into the night and early morning hours even with moderate humidity recovery.
- Within the tree mortality areas, falling trees and branches along with snags will be a major concern as higher decay rates in dead conifers contribute to an increase in falling material.

Mitigation Measures:

- Local and inbound fire personnel need to be aware of the potential for extreme fire behavior. Local briefings should highlight current weather and fuel conditions, and note any unusual fire behavior that has been observed on recent incidents.
- Suppression actions need to be based on good anchor points, escape routes, and safety zones. **Remember LCES. Experienced lookouts are essential under these conditions.**
- **Base all actions on current and expected behavior of the fire.** Augment initial attack resources as incident activity dictates.
- Review pocket cards, the latest fuel conditions, and the fire potential products from Predictive Services. <http://gacc.nifc.gov/oscc/predictive/weather/>

Area of Concern: This advisory is valid for the following PSAs: SC01 – SC04 and SC06 – SC11. For more details, please see a map of the affected areas at this location. http://www.predictiveservices.nifc.gov/fuels_fire-danger/Fuels_FireBehavior_Advisories.png

Issued: August 22, 2016 (Note this advisory will be in effect for 14 days and will be reviewed/updated at that time.)