

Meteorological Events Timeline and Preparations

October 15–20, 2007

Predictive Services at the Southern California Geographic Area Coordination Center (OSCC) continued to forecast an extreme fire weather event of strong, hot, dry, winds. Regional Chief Officers, representing CAL FIRE, USFS, and OES at OSCC, monitored developing conditions and initiated actions within their specific agencies to preposition wildland firefighting resources.

Monday October 15–Wednesday, 17

Daily and 7-day forecasts discussed strong offshore flow conditions predicted for Sunday, October 21, and Monday, October 22.

Thursday, October 18

“High Risk Days” were added to the 7-day forecast for Sunday, October 21, and Monday, October 22, highlighting the prediction that this anticipated offshore event would be strong and widespread, and accompanied by very warm and very dry conditions.

Predictive Services and the National Weather Service participated in daily conference calls to coordinate weather information. Predictive Services invited local fire agencies to join in wildland fire agency briefings regarding the upcoming Santa Ana wind event.

Regional Chief Officers issued a regional special staffing pattern to go into effect Sunday, October 21:

- Staff all CAL FIRE fire crews in the Southern California Conservation Camps
- Staff all CAL FIRE bulldozers in Southern California 24 hours per day
- Staff three CAL FIRE fire crews per camp in Central California CAL FIRE Conservation Camps
- Pre-position a CAL FIRE Strike Team of Type 3 engines (five engines and a leader) from Central California into Ventura and Los Angeles Counties on October 20
- Request that Riverside County Fire Department staff five reserve Type 3 Engines

Friday, October 19

Predictive Services forecasters added Tuesday, October 23, as a High Risk Day in the 7-day report. Daily conference calls with the National Weather Service and fire agencies continued.

Regional Chief Officers placed the following requests for Sunday, October 21:

Orange County Fire Authority to staff one additional Engine Strike Team, one additional bulldozer and one additional fire crew.

- Santa Barbara County Fire Department to staff one additional task force consisting of three engines and one water tender.
- Increase Chief Officer and Emergency Command Center staffing in the Southern California Units, and place two CAL FIRE Incident Command Teams on standby.
- Reposition three Northern Region air tankers to Paso Robles, Hemet, and Ramona air attack bases.
- Activate the DC-10 Supertanker.

- Authorize extended staffing for federal initial attack engine modules (increasing initial attack capabilities by 30%) and federal Hotshot Crews.
- Authorize the four Southern California Forests to extend staffing to 24 hours per day.

Saturday, October 20

Predictive Services continued to forecast a strong widespread offshore wind event, Sunday through Tuesday. Saturday started with an onshore wind, but by late that night and into early Sunday morning, the winds in Southern California gradually shifted, blowing from the north and northeast.

Regional Fire Officers pre-positioned federal firefighting resources including:

Four Type 1 Incident Management Teams

- Five Type 2 Incident Management Teams
- Seven heavy helitankers
- Seven Type 2 helicopters
- Eight heavy air tankers
- Local federal fire officers on the Cleveland National Forest implemented 24 hour staffing.
- Local federal fire officers on the remaining three southern forests, San Bernardino, Los Padres, and Angeles National Forests implemented 24-hour staffing effective the following day.

Sunday, October 21

The anticipated Santa Ana wind event was under way.



Energy Release Component

The Energy Release Component (ERC) is an NFDRS (National Fire Danger Rating System) index relating to how hot a fire can burn. It is directly related to the 24-hour, potential worst case, total available energy (BTUs) per unit area (in square feet) within the flaming front at the head of a fire.

The ERC can serve as a good characterization of fire season as it tracks seasonal fire danger trends. The ERC is a function of the fuel model and live and dead fuel moistures. Fuel loading, woody fuel moistures, and larger fuel moistures all have an influence on the ERC, while the lighter fuels have less influence and wind speed has none. ERC has low variability, and is the best fire danger component for indicating the effects of intermediate to long-term drying on fire behavior (if it is a significant factor) although it is not intended for use as a drought index. Throughout most of the Southern region, ERCs had hovered around the 90 to 100% level from July onward. By late September all but one of the seven Predictive Service Areas (PSAs) were displaying ERCs at 95 to 100%—at or above the recorded maximum values. Fuels and slope-driven fires were burning with remarkable intensity and moved upslope as if they were driven by the wind.