SIGNIFICANT FIRE POTENTIAL

August 2020

September 2020

October 2020

November 2020


Contact: redding.fwx@fire.ca.gov
August - November 2020 North Ops Highlights

- **Fuels of all size classes drier than average**
- Above normal loading of cured fine fuels below 3000 ft elevation
- Warmer and drier than normal in August, then closer to average
- Lightning poses a bigger threat of large fires in Aug and early Sept. N-NE/Offshore wind events become a bigger threat of large fires beginning mid Sept
- Above Normal Significant Fire Potential above 3000 ft in August
- Above Normal all areas in September
- Above Normal Wrn Cascade-Sierra slopes to the Coast in October
- Normal Significant Fire Potential all areas in November

WEATHER DISCUSSION

Dry and warm conditions continued in July. There were two significant monsoon thunderstorm surges into the region, one during the middle of the month and the other in the final week of July. New large fires were ignited by lightning during both events. Rainfall from thunderstorms was spotty and mostly light. Precipitation since the rainy season began on October 1, 2019 remains below average in all but a very small area in far NE CA (Fig 1). Much of the region has only received 25-70% of normal precipitation since October 1st, leaving fuels more vulnerable than usual to wildfire spread. The equatorial Pacific is currently in the ENSO-neutral category, and now cooler than average (Fig 2). In the upcoming fall and winter there is a near 50-50 chance of the status remaining neutral category or a weak La Niña pattern developing.

![Fig 1: Pcpn (% of Ave.) Since 10/01/19](image)

![Fig 2: ENSO Status - Neutral or La Niña expected fall/winter](image)
The U. S. Drought Monitor for California shows the impact of the drier than normal rainy season. Portions of far northern CA are considered to be in Extreme Drought, and the remainder of the region is in Moderate or Severe Drought (Fig 3). To the west of the Cascade-Sierra crest the spring fine fuel crop came in more robust than usual and it is now cured. Dead fuel moisture values in all size classes are below normal for the date. In fact, in most areas they have reached or dried beyond the seasonal peak reading of the normal curve, several weeks ahead of when peak extreme conditions typically occur (Fig 4). Live fuels are at or drier than normal for the date, and in their declining phase. The Evaporative Demand Drought Index (EDDI) (Fig 5) shows the stress on vegetation from the below average rainy season. This chart is a good indicator of where fire danger is and will be the highest as the fire season progresses. Higher EDDI values can be seen in the south and southeastern portion of the region.
The official Predictive Services outlook calls for drier and warmer than average conditions in the North Ops region in August, followed by closer to average conditions from September through November (Fig 6). The above normal cured fine fuel crop will be vulnerable to rapid spread rates and extreme fire behavior during dry breezy weather patterns, which will become more common beginning in mid September. The SW Desert monsoon pattern is expected to impact the North Ops region with near to below normal lightning amounts into early September. However, due to very dry fuels any lightning poses a high risk of large fire development. The main risk areas for lightning fires are the northern and eastern mountains, above 3000 ft. Most areas at 3000 ft and above have Above Normal Significant Fire Potential in August. All areas are in the Above Normal category in September. In October the focus for Above Normal Significant Fire Potential is on areas from the western Cascade-Sierra slopes to the coast. All areas not mentioned above have "Normal" significant fire potential, and all areas return to Normal in November.

In August "Normal Significant Fire Activity" is defined as near 1 large fire in each of the Bay Area PSAs while the remainder of the PSAs average between 2 and 6 large fires. In September "Normal" is defined as 1-3 large fires per PSA. In October "Normal" is defined as 1.2 or fewer large fires per PSA. All PSAs average below 1 large fire in November.

**Fig 6: Predictive Services graphical Outlook for August - November 2020**