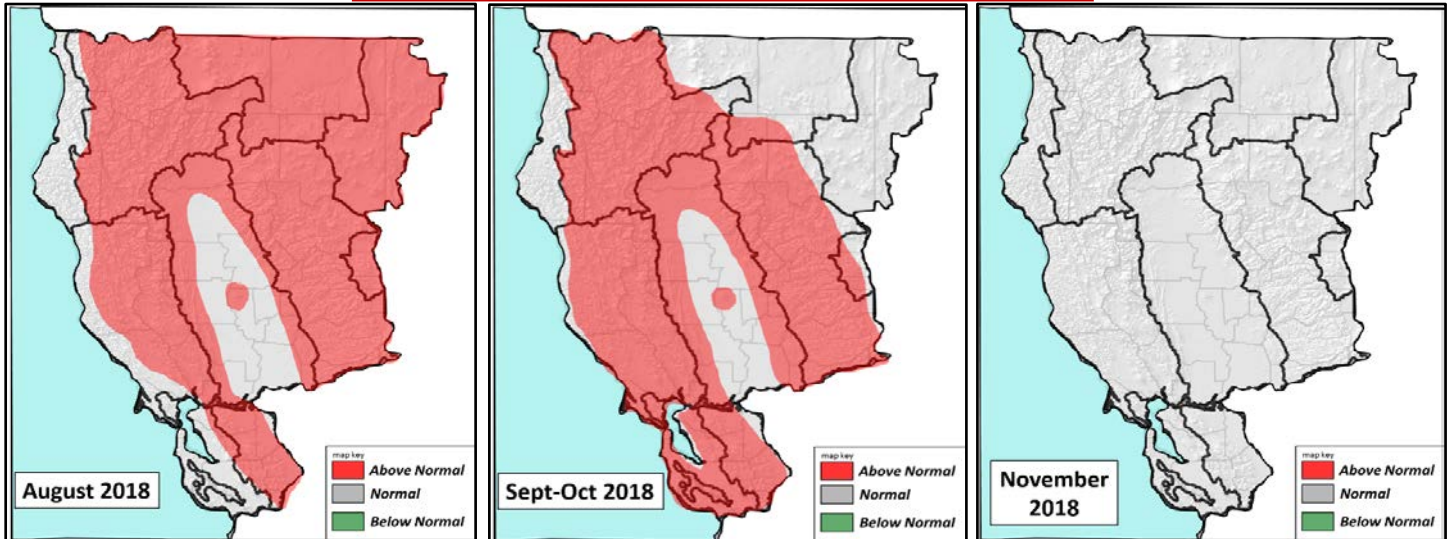


SIGNIFICANT FIRE POTENTIAL



AUGUST

SEPT-OCT

NOVEMBER

August - November Highlights

- *Warmer and drier than normal*
- *N-NE/Offshore wind events less common in August, returning September-October*
- *Below normal amount of lightning in western areas and slightly below normal in eastern areas*
- *Fuels of all size classes drier than normal and close to record values*
- *Abundant load of fine fuels and brush at mid and lower elevations*
- ***Above Normal Large Fire Potential most areas in August***
- ***East/NE areas back to Normal in Sept/Oct. Otherwise, continued Above Normal***
- ***All areas Normal in November***
- *ENSO neutral currently...increasing chances of El Niño in the fall*

WEATHER DISCUSSION

July was drier than normal across all but the SE corner of the North Ops region, where thunderstorms mid-month produced locally heavy rain (**Fig 1**). Most of the region was warmer than normal by 2-6 degrees F in July (**Fig 2**), with a small area near Cape Mendocino slightly cooler than normal. There was also a small area north of Lake Tahoe that was more than 6 degrees F warmer than normal. Even though the spring was wetter than normal across the majority of the region (**Fig 3**), a large portion of the North Ops region, mainly west of the Cascade-Sierra crest, received less than 80% of normal precipitation during the 2017-2018 rainy season (**Fig 4**). Only a few areas near and to the east of the crest received more than the normal amount of precipitation this past rainy season. The high elevation snowpack topped out at only about half of the normal snow water content and there was little runoff. Other than several days of lightning during the middle of July, lightning amounts during the month were light.

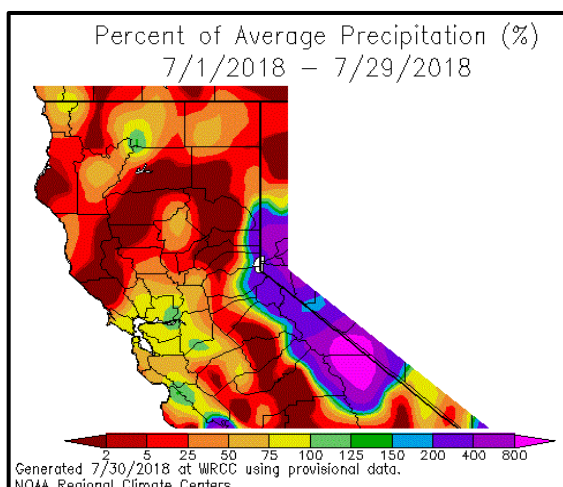


Fig 1: July Precipitation - % of Ave.

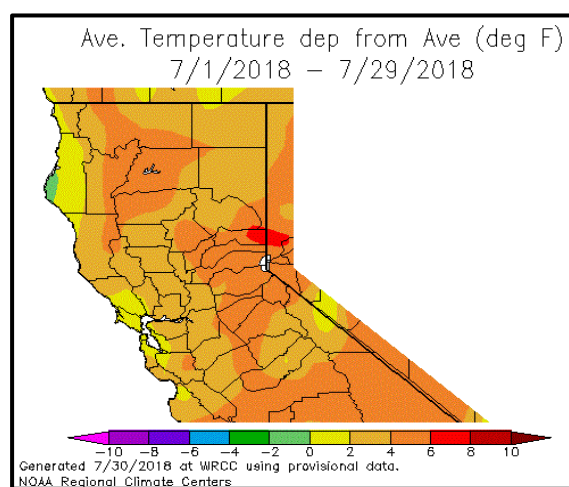


Fig 2: July Temperature (Departure from Ave.)

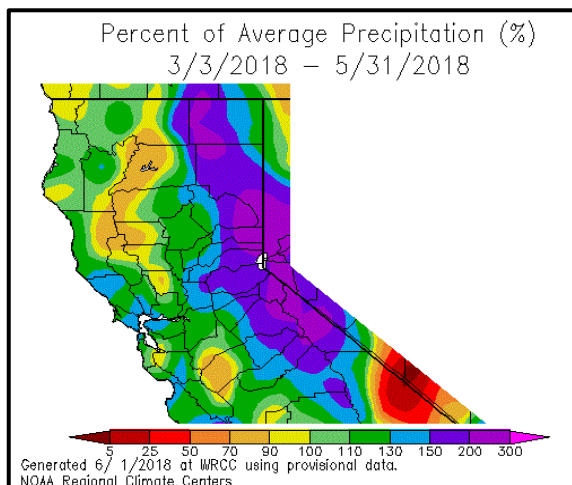


Fig 3: Pcpn (% of Ave.) Mar-May, 2018

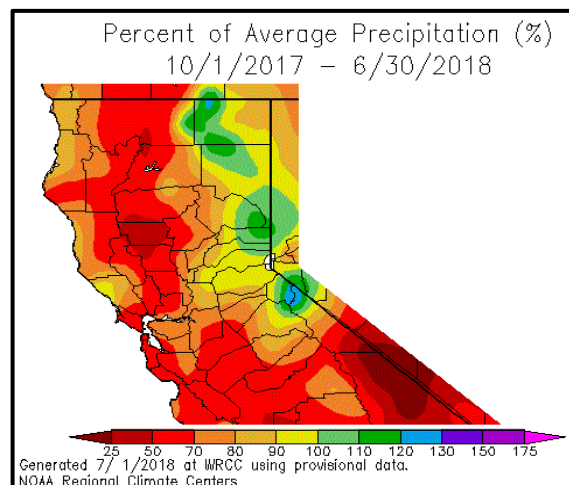


Fig 4: Pcpn (% of Ave.) since Oct 1, 2017



FUELS AND DROUGHT

The drier than normal rainy season has led to drier than normal fuels and soils across the North Ops region. The U. S. Drought Monitor product now shows a large area of "Abnormally Dry" conditions with a smaller area of "Moderate Drought" to the west of the Cascade-Sierra crest (Fig 5). The wet spring weather was ideally timed to produce a heavier than normal crop of fine fuels at mid and lower elevations and a near to slightly above normal green-up phase among perennial live fuels. The University of California Sierra Foothill Research and Extension Center reported that on May 1 the fine fuel crop in the foothills of the eastern Sacramento Valley had reached more than 180% of normal, higher than the 120% reading a year prior. The longer-term precipitation and soil moisture deficit have led to a rapid curing of the fine fuel crop (Fig 6) and a more rapid live fuel decline phase. The North Ops average 1000-hr fuel moisture chart shows that the heavier fuels are drier than normal and at the 10th percentile value, which is about halfway between the normal and record values for late July (Fig 7). Fuels of all size classes at all elevations are drier than normal and area available for wildfire spread. Extreme fire behavior and rapid fire spread have been observed at elevations below 7000' and these conditions will only continue to spread to higher elevations in August.

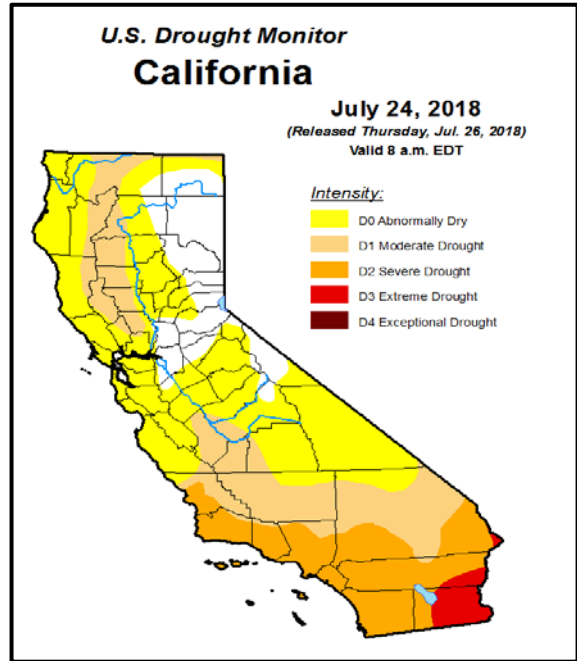


Fig 5: California Drought Monitor from July 24, 2018



Fig 6: Above normal crop of cured fine fuels in the Sacramento Valley - mid June 2018

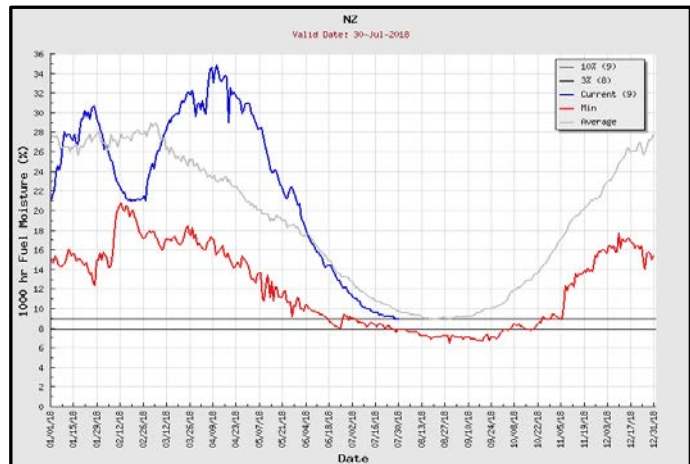


Fig 7: North Ops 1000 hour fuel moisture July 30, 2018

blue = 2018 grey = average red = record

NORTHERN OPERATIONS MONTHLY/SEASONAL OUTLOOK

ISSUED AUGUST 1, 2018

VALID AUG – NOV 2018



NORTH OPS OUTLOOK

The overall outlook for August-November is for warmer and drier than normal conditions, although there are smaller month-to-month trends (Fig 8). We expect a pattern of semi-persistent low pressure troughs positioned near the west coast in August, and this pattern tends to limit the number of monsoon surges into the North Ops region, especially the west side. Eastern areas are expected to see slightly below normal amounts of lightning in August. The long-term precipitation and soil moisture deficit has led to a robust crop of cured fine fuels and dry brush. Wildfire activity was well above normal at all elevations in July and this situation will continue in August. Fuels will only continue at their current very dry condition or become even drier as August wears on. The occasional lightning events that do occur have the potential to start new fires, and the potential for new large fires will be high whenever many lightning ignitions happen in a short period of time. As lightning diminishes in September our "offshore wind season" begins, and the robust crop of cured fine fuels and dry brush will once again produce a higher than normal potential of large fires in September-October. Near normal precipitation in November will bring significant fire potential back to normal.

The majority of the North Ops region has Above Normal Significant Fire Potential in August. In September-October eastern areas drop back to Normal while most western areas are added to the Above Normal category. All areas drop back to normal in November.

The normal number of large fires per Predictive Service Area is defined as:

August: <1 Bay Area. 2-3 elsewhere, except 4-6 Northern Sierra and NW Mountains.

September: 1-3, with highest amounts in the Sacramento Valley/Foothills and NW Mountains.

October: <1 in the north, 1-1.2 elsewhere.

November: <1 in all areas.

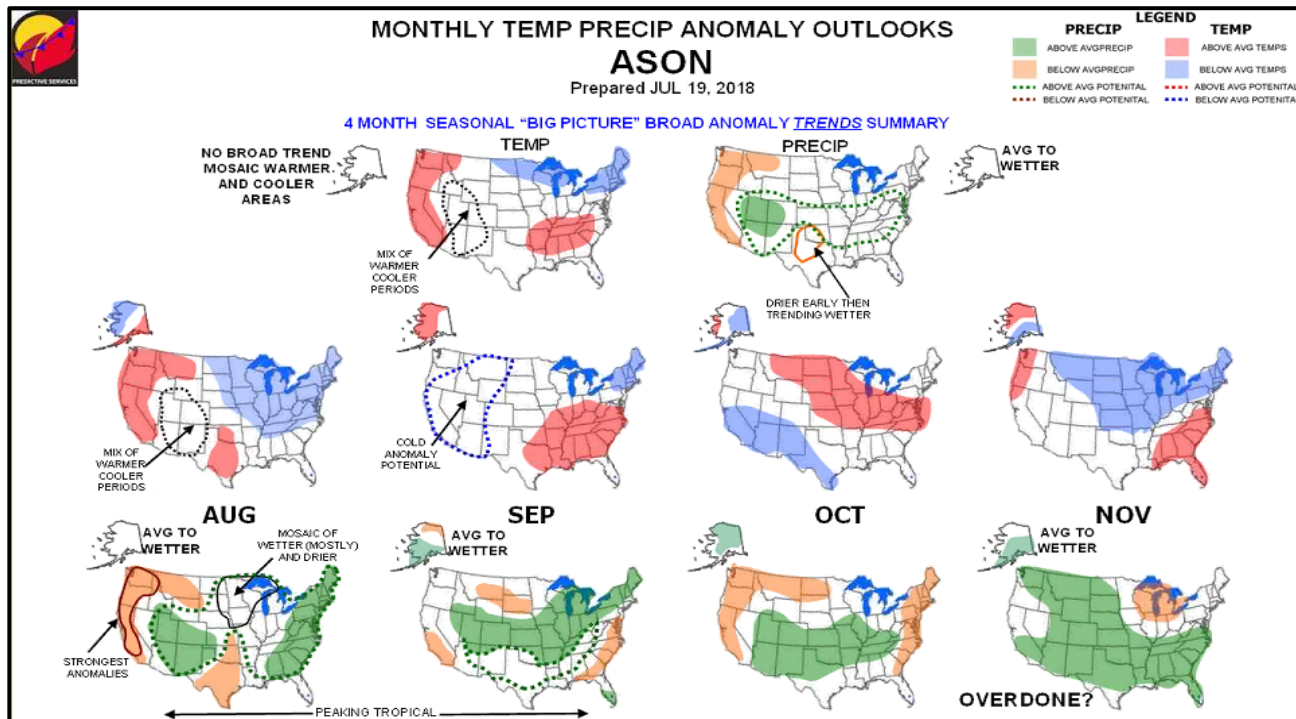


Fig 8: Predictive Services graphical Outlook for August through November 2018