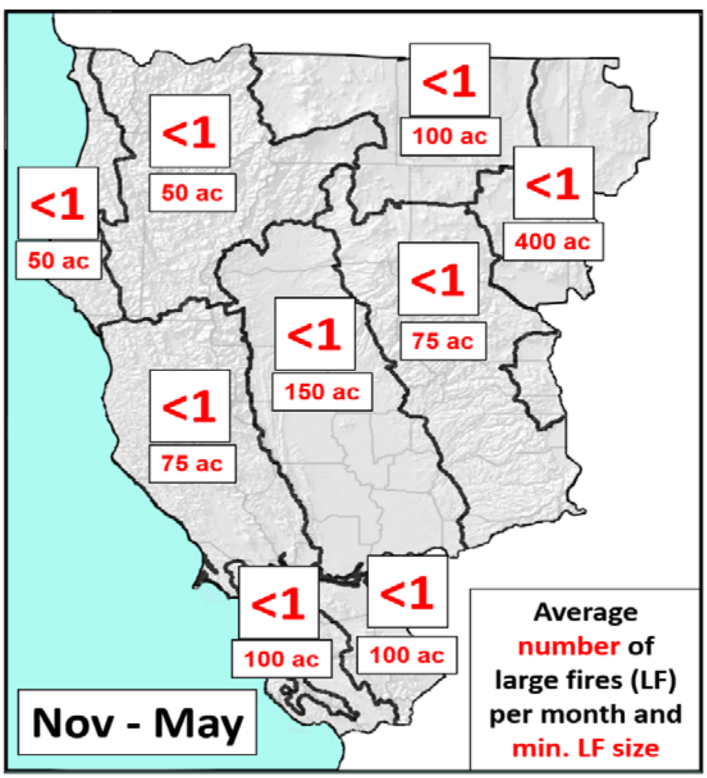
NORTHERN OPERATIONS

MONTHLY/SEASONAL OUTLOOK

ISSUED DECEMBER 1, 2017 VALID DEC 2017 – MAR 2018

PREDICTIVE SERVICES

SIGNIFICANT FIRE POTENTIAL



December 2017- March 2018 HIGHLIGHTS

- Above normal temperatures and below normal precipitation in December.

- Near to slightly warmer than normal temperatures and near normal precipitation from January through March.

- Normal Significant Fire Potential
(During a time when little to no large fire activity typically occurs (Nov-May)).

SUMMARY

The majority of the North Ops region received above normal precipitation in November. Although December looks dry and warm, the outlook for the period from December through March calls for slightly above normal precipitation with normal to slightly above normal temperatures. Typically, little to no large fire activity occurs within the North Ops region during this period, and with fuel moisture fairly high across the region already, **the Large Fire Potential for December through March is Normal**.

PAST WEATHER DISCUSSION

Precipitation in November tended to be above normal in much of the mountainous terrain, but generally below normal in the Sacramento Valley, areas east of the Cascade-Sierra crest and in the Shasta Valley (**Fig 1**). Several fall storm systems moved through the region, and they were spread out fairly regularly throughout the month. The wettest storm came during the middle of the month. Snow levels were fairly typical for November - somewhat high with brief periods of snow down to 4000-6000 ft at the tail end of the storms. The storms that impacted the North Ops region tended to barely reach the northern end of the South Ops region. The South Ops region received very little precipitation in November, and this followed a very dry October state-wide.

Temperatures state-wide were generally above normal (**Fig 2**). A few small areas in the North Ops region to the west of the crest were slightly cooler than normal. The warmest portions of the North Ops region were east of the crest and at the far southern end of the region. The South Ops region was quite a bit warmer than normal in November.

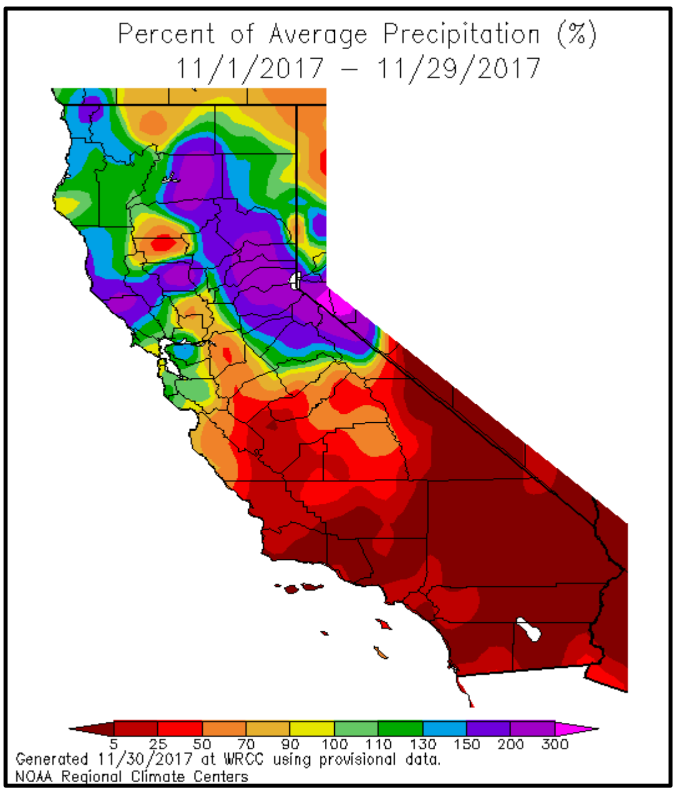


Fig 1: November Precipitation - % of Ave

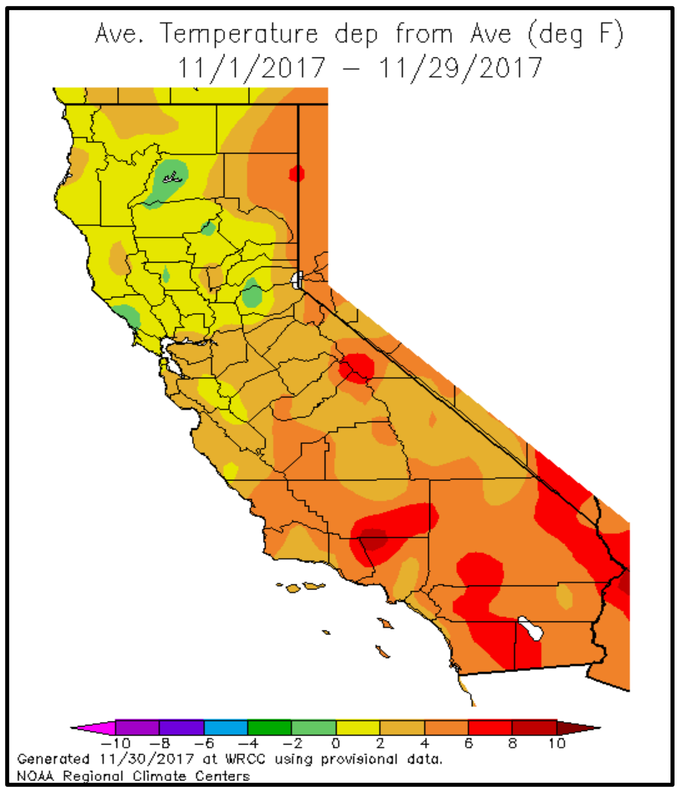


Fig 2: November Average Max Temps - Departure from Average

FUELS AND DROUGHT

Fuel Moisture readings are normal to above normal for the beginning of December (**Fig 3**). The moist conditions have led to a new grass crop at lower elevations across much of the region. The above normal precipitation at mid and upper elevations has more often been in the form of rain and has been able to soak into the ground.

Drought conditions are not evident in the North Ops region (**Fig 4**), but they are beginning to increase in the South Ops region as we are at the time of year when some precipitation is typical there.

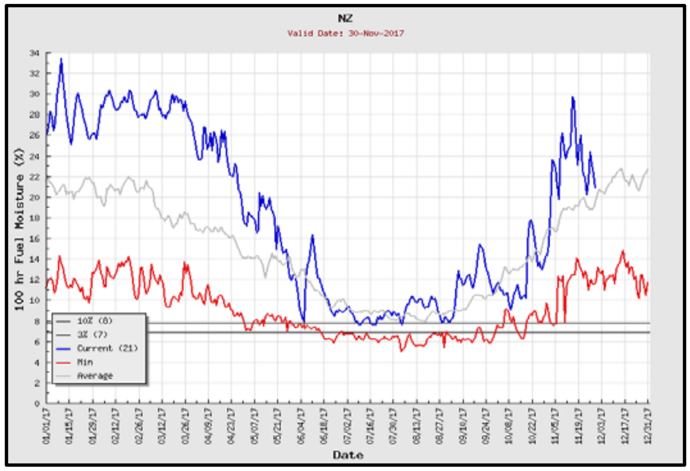


Fig 3: North Ops 100 hour fuel moisture November 30, 2017

blue = 2017 grey = average red = record

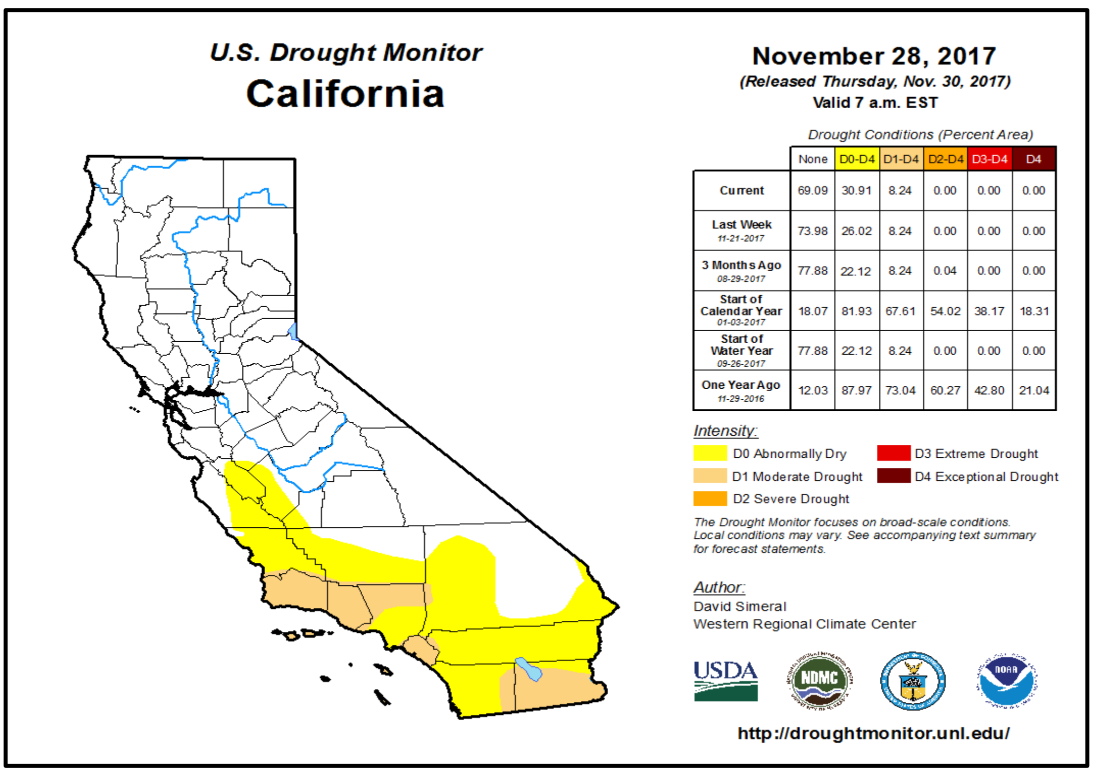


Fig 4: California Drought Monitor

NORTH OPS OUTLOOK

The first half of December will be warmer and drier than normal across the North Ops region. The pattern is expected to change again in the third week of the month and Pacific storm systems are expected to occasionally move through the region again. Even with this pattern change, it is likely that December will end up a bit drier than normal across much of the region. The remainder of the four-month outlook through March will likely be near to slightly warmer than normal with slightly above normal precipitation (**Fig 5**).

Typically, little to no large fires occur in all sections of the North Ops region during winter and early spring. Considering the new grass crop at lower elevations and the above normal fuel and soil moisture at mid and upper elevations due to the wet weather in November, **all areas of the North Ops region have Normal Significant Fire Potential from December through March.**

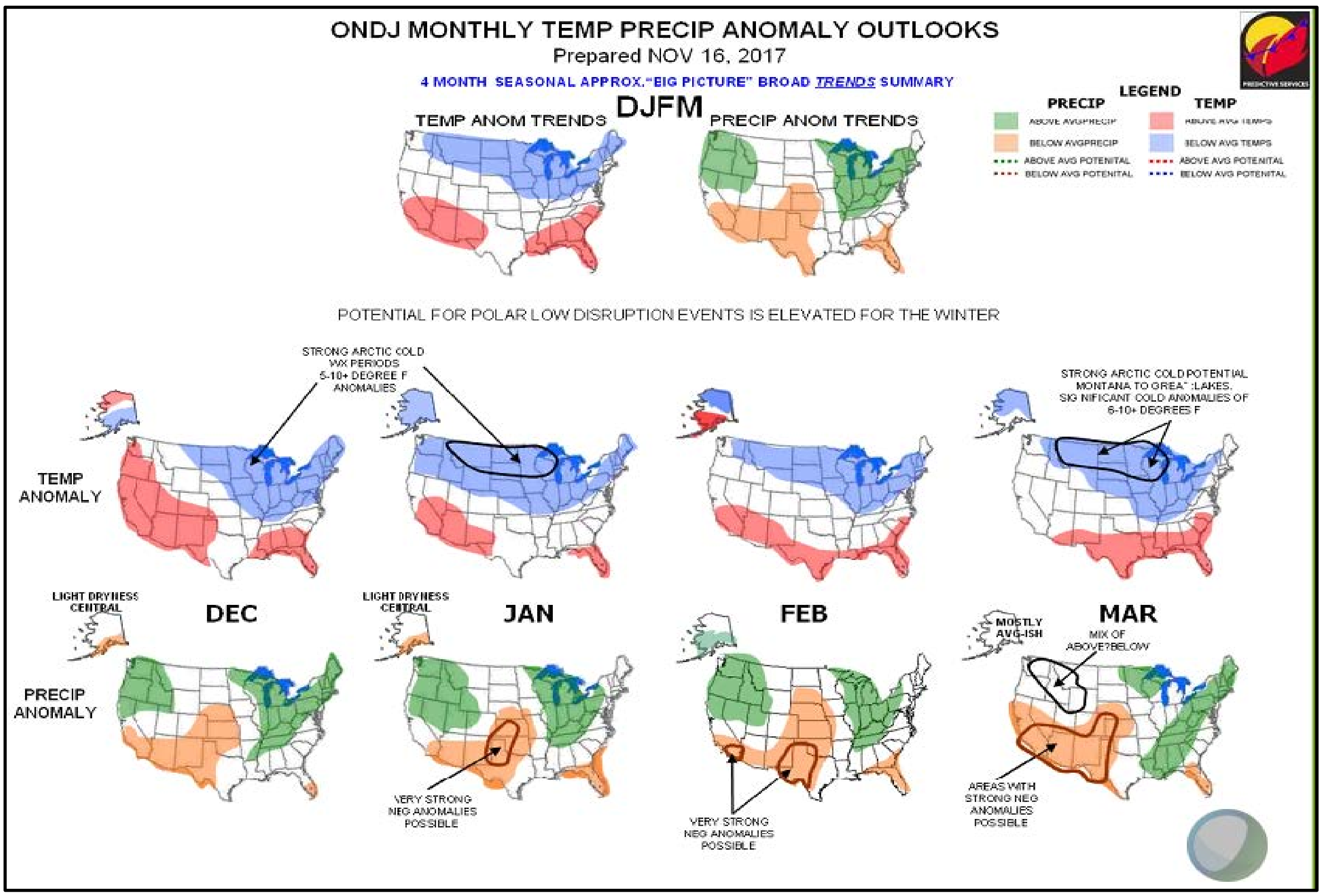


Fig 5: Predictive Services' temperature & precipitation outlook - December 2017 through March 2018