



\*Significant Fire Potential per Predictive Service Area (PSA)

## **March - June 2025 North Ops Highlights**

- Active jet stream periods creating cool/moist weather expected during most of March.
- April is expected to be the transition month with timely moisture intrusions and near to above normal precipitation while May and June trend warmer and drier than normal.
- Transitional green-up and snow cover will serve as fire spread barriers during this period.
- Extended flammable fuel alignments in terms of cured grasses and critically dry dead fuels will be possible across the **lowlands** during June but confidence is not high enough at this time to warrant an above normal outlook.
- **Significant Fire Potential is projected to be normal from March through June and June historically represents the month when large fire activity increases.**



## Weather Discussion

Several Atmospheric River events occurred during February and led to widespread and abundant precipitation. The most notable period (**Fig 7**) occurred between January 31st to February 7th. Precipitation anomalies (**Fig 1**) were generally above, to well above normal, although a few small pockets of near normal occurred. Average temperatures (**Fig 2**) were generally near to below normal with the strongest cool signal found across the northern tier. Around 100 lightning strikes were recorded and fell below the 2012-2022 February average of a little under 250 strikes. Three N-NE-E dry wind event periods affected the region and were generally weak to locally moderate in strength. Several gusty to strong S-SW wind days occurred due to the heightened Atmospheric River events but were generally accompanied with high humidity.

Northern California is expected to be unusually cool and moist during March (**Fig 10**) and then trend warmer and drier the rest of spring into early summer as the jet stream becomes less influential. April is expected to be the key transition period when timely moisture intrusions and near to above normal precipitation can still be expected. May and more so June is expected to trend unusually warm and dry for extended periods. The wind patterns are likely to continue to fluctuate between stronger onshore and drier offshore but more of the moist onshore influences are anticipated during March, and to a lesser extent, April. There are some indications of an early onset to the North American Monsoon during June with more impacts found west of the Continental Divide but it is still too early to say how that would impact northern California.

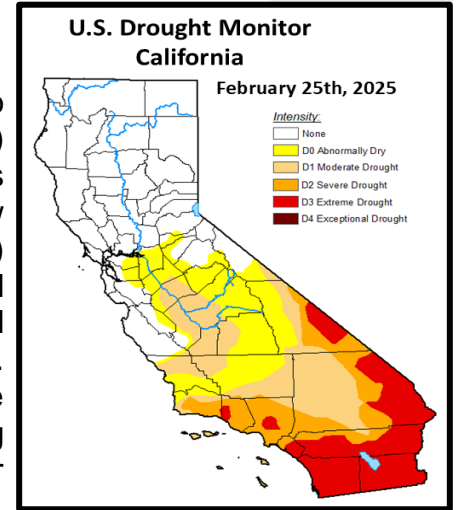


Fig 3 – Drought Monitor

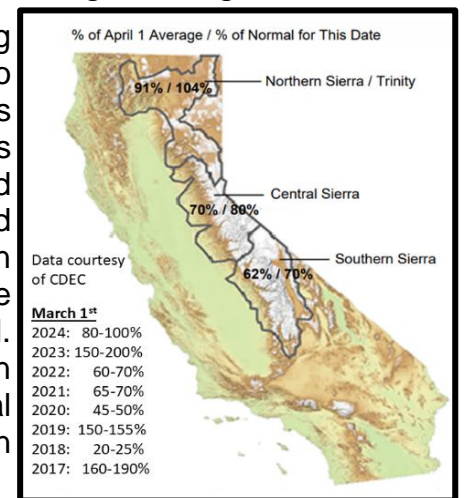


Fig 4 Feb 28th Snow Water Equiv.

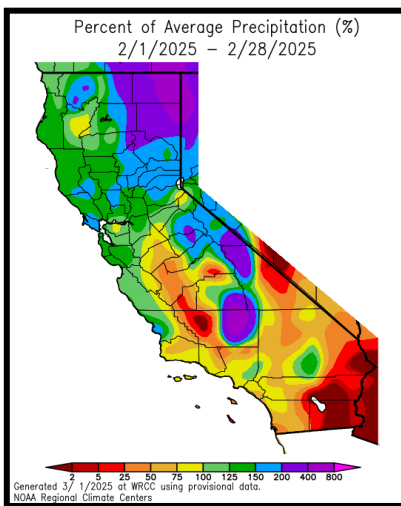


Fig 1 – Precip in February (% of avg.)

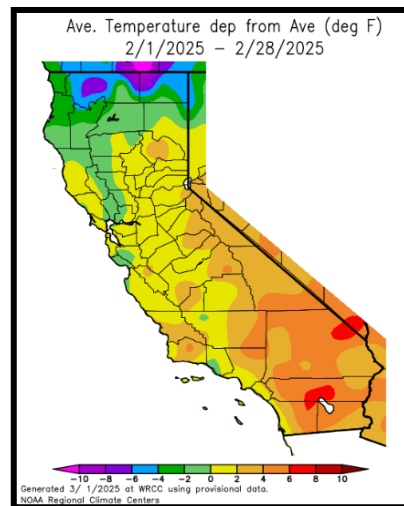


Fig 2 – Temp in February (dep of avg.)

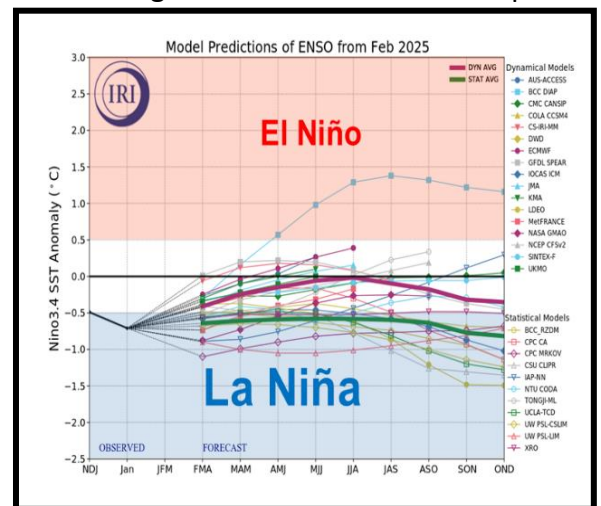


Fig 5 – Current ENSO state and outlook





## Fuels Discussion

Fuels were generally moist and less flammable during February. The regional energy release component (ERC) value was either near or below average the majority of the month. Woody fuels remained in a dormant state across most areas although initial green-up became more expansive across the lowest elevations. Herbaceous green-up remained most pronounced below approximately 3000 feet while grasses were generally cured and dormant above that level.

The blue line found on the North Ops 1000-hour dead fuel moisture chart (Fig 6) showed noticeable moistening during the first half of the month with smaller fluctuations the latter half. Values were near normal on February 28th. The grey line is the historical average based on 23 years of data. The dashed lines represent various flammable percentile thresholds from the 40th to the 3rd.

Woody fuels across lowland areas experienced more noticeable greenup during the latter half of February with blossoms peaking across the Sacramento Valley and leaf-out in some of the shrub species although dormancy remain across most elevations. Fig 7 shows shrub leaf near Paradise and how it compares to the previous 4 years. Herbaceous fuels remained in a green-up state below 3000 ft. Fig 9 illustrates the state of herbaceous green-up across various elevation bands. Snow cover fluctuated with the lower elevations observing snow earlier in the month, then erosion occurred the latter half. Snow cover was generally found above the 4300 to 5500 ft elevation level, depending on sheltering and aspect, by late month. Snow water equivalent values rose from 60-85% of normal on January 31st to 80-100% of normal on the 28th. Drought conditions (Fig 3) remained absent across N. California.

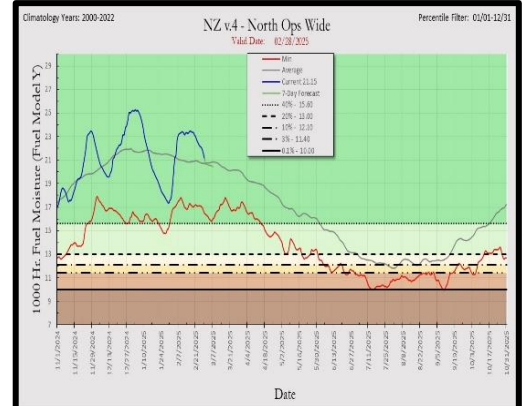


Fig 6 – North Ops 1000-hr Fuel Moisture - February 28th

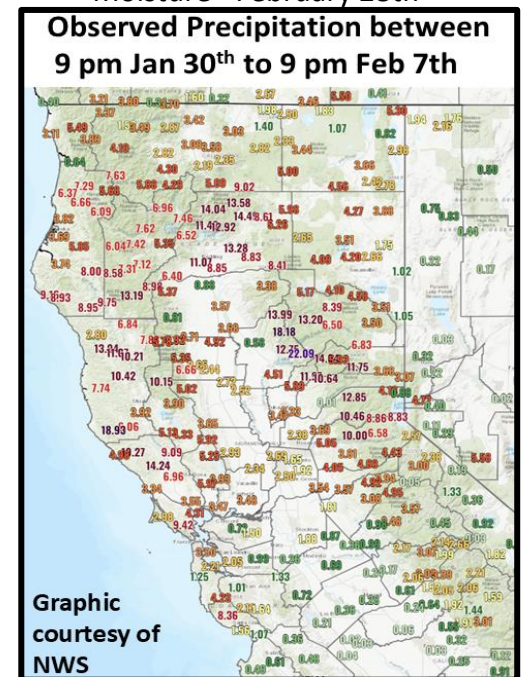


Fig 7 Atmospheric River event

**Jan 29th**

**Sierra Foothills (750 ft)**

Near Paradise Shrub Green-up	Transition Week
2025	February 14th-21st
2024	March 1st-7th
2023	March 7th-14th
2022	February 7th-14th
2021	February 21st-28th

**Feb 25th**

Reviewed daily Alert CA Ratiron West webcam imagery from 2021-2025 to produce an approximate transition week for full shrub leaf out

Note: webcam history starts 08-31-2020

Fig 8 Shrub leaf-out between Chico & Paradise

**N. Coast (3000 ft)**

**Sierra Foothills (2300 ft)**

**Bay Area (900 ft)**

**Western Sacramento Valley Foothills (1200 ft)**

Fig 9 Herbaceous green-up at 4 locations on Feb 25th



## NORTH OPS FIRE BUSINESS & TRENDS

Wildfire business decreased during February due to the moist conditions. The daily average for reported wildfires dropped to less than 1 compared to 3 during January and was below the February 2008-2024 daily average of 2. Fire growth was limited to less than an acre for most of the reported fires although one fire grew to a little over 1.5 acres in Amador County on the 23<sup>rd</sup>. Pile burning was sporadic and likely limited overall due to the weather conditions.

Based on the current fuel state and future weather predictions normal large fire potential is projected for the entire area from March through June. Historically, March through May is a period with minimal large fire occurrence with June being more active. Generally, 1-3 large fires occur per PSA during June, with the exception of the North Coast and Far Eastside where less than 1 occurs.

The main part of the lowland growing season is expected to develop during March and April with curing likely to become more noticeable during May and continue into June. Transitional green-up will occur further up the slopes during May and June and provide a barrier to fire spread. Snow cover and moisture found within the snowpack is expected to be near to perhaps slightly above normal by April 1st, or when it is typically at its peak level. Snow cover will serve as a barrier to fire spread across the upper elevations during the entire 4-month period although the erosion rate is expected to be fairly quick during late spring to early summer, if the forecast anomalies are correct.

More noticeable lowland herbaceous curing should occur the latter half of May and will increase the fire ignition and spread potential. However, extended periods of critically dry dead fuel moisture and a mostly cured lowland herbaceous fuels shouldn't align until sometime in June. Therefore, will be monitoring future forecast trends for June. If the forecast remains consistent and confidence builds then an "above normal" potential may be added in future outlooks for certain lowlands PSA's. Environmental conditions that support larger broadcast burn activity should be present during April, and less so during May, and potentially very limited during June.

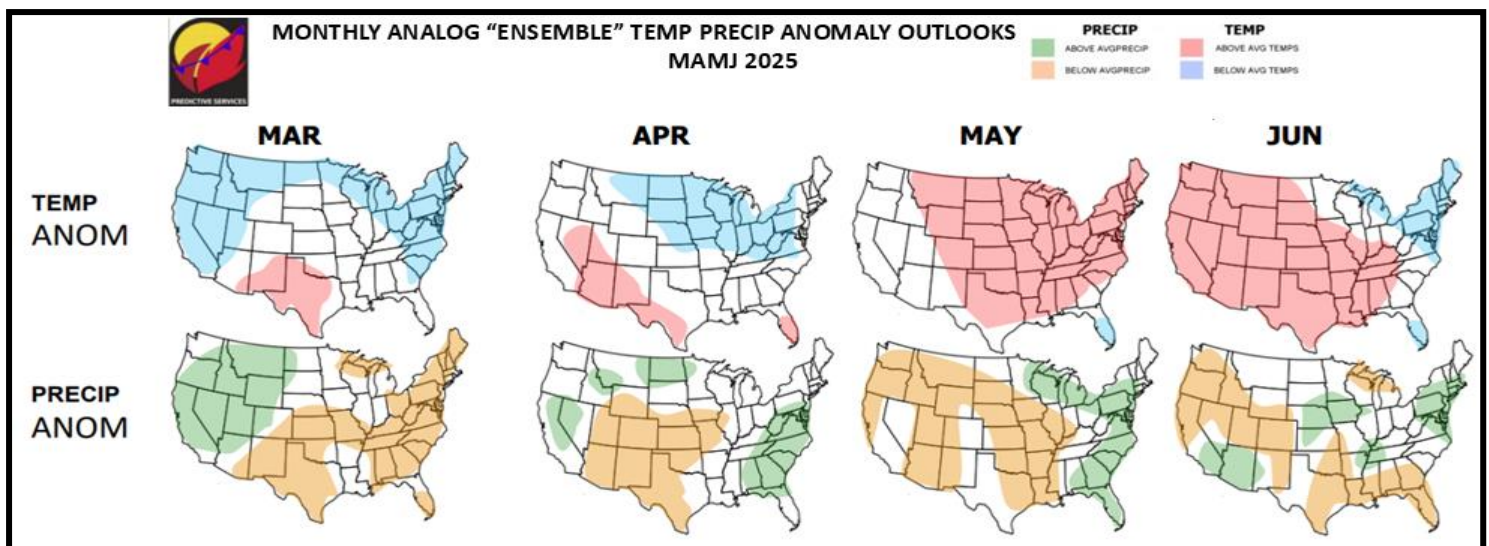


Fig 10 – Predictive Services 4-month Temperature and Precipitation Outlook



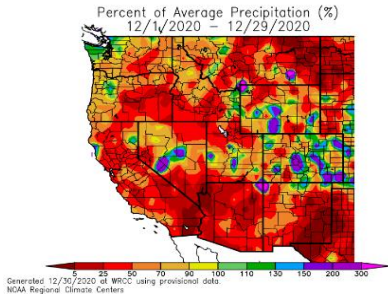
# Northern Operations

## **MONTHLY/SEASONAL OUTLOOKS**

ISSUED March 1, 2025 VALID March - June 2025



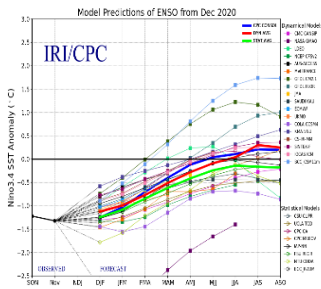
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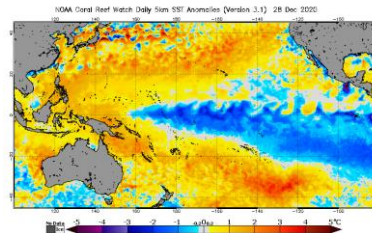
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Temperature and  
Precipitation  
Anomalies



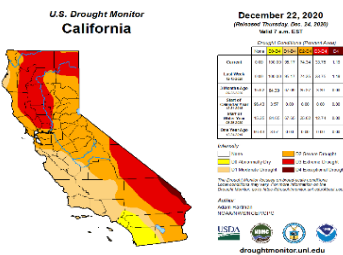
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Snowpack Map



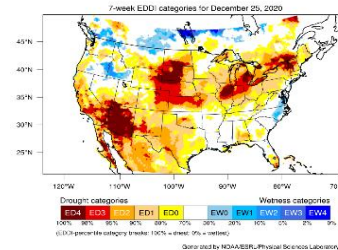
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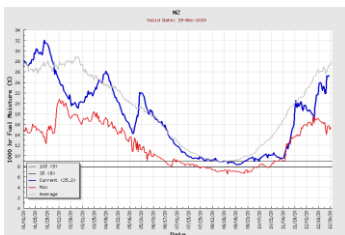
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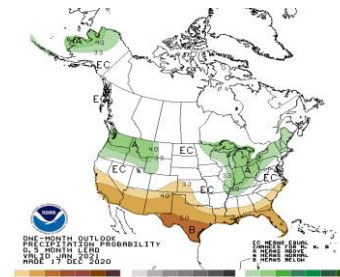
Drought  
Monitor  
Product for  
California



Evaporative  
Demand  
Drought Index



Daily  
Fuels  
Indices  
Charts



NOAA/NWS  
Climate  
Prediction Center