

***Monthly Images will only be shown when there are changes**

March – June 2024 South Ops Highlights

- Precipitation will likely be above normal through June.
- Temperatures will likely be below normal through June.
- The amount of Santa Ana wind events will likely be below normal through June.

Weather Discussion

A series of strong Pacific troughs and associated atmospheric rivers moved inland into California from the Pacific Ocean during February. Only brief weak areas of high pressure moved inland in between troughs. Temperatures were below normal with the troughs and near normal with the weak ridges. Overall, temperatures were 2 to 4 degrees below normal for the month (**Fig 1**). However, local mountain locations had temperatures that were 6 to 8 degrees below normal, and most of the San Joaquin valley had temperatures that were around a degree above normal. Periods of rain, heavy at times, moved across the area during the month, with only brief breaks in between storms. For the month, precipitation was between 150 and 400% of normal over most of the region (**Fig 2**). However, the Lower Deserts received well below normal rainfall. The snow level was mainly between 6,000 and 8,000 feet for much of the month, but briefly dropped to between 4,000 and 5,000 feet February 6-7. Many new feet of snow fell over the High Sierra and over the higher mountains of Southern California. Since snow levels were high most of the month, the snowpack in the Sierra is currently 75% to 80% of normal and is around 65% of normal for the entire season which ends April 1st (**Fig 3**). Strong southerly winds accompanied the Pacific troughs throughout the month. There were no significant Santa Ana wind events during the month.

Av. Max. Temperature dep from Ave (deg F)
2/1/2024 – 2/27/2024

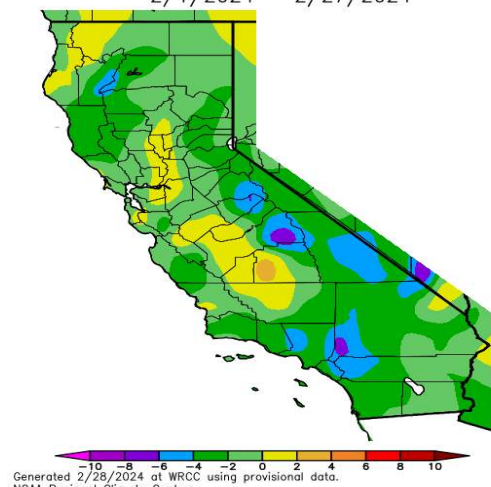


Fig 1: February 1st - February 27th Temperature (% of Ave.)

Percent of Average Precipitation (%)
2/1/2024 – 2/27/2024

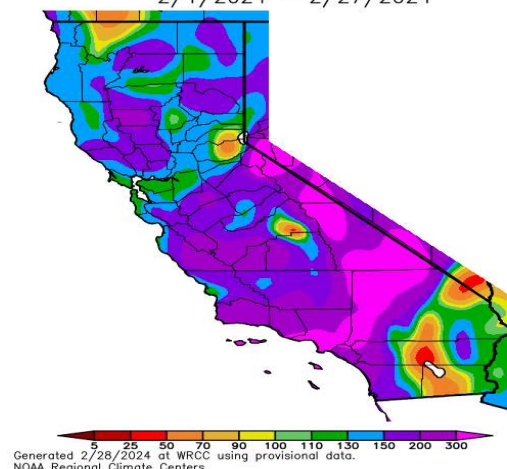


Fig 2: February 1st - February 27th Precipitation (% of Ave.)

Data For: 28-Feb-2024

% Apr 1 Avg. / % Normal for this Date

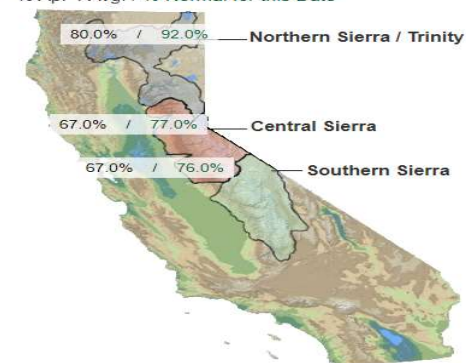


Fig 3: Snow pack as of Feb 28th, 2024

Fuels Discussion

Almost the entire region continues to have no drought issues. However, abnormally dry conditions continue near the Colorado River. Also, a new area of abnormally dry conditions has popped up over the Eastern Sierra in Mono County (**Fig 4**). The well above normal rainfall brought well above normal 1000-hr and 100-hr dead fuel moistures to most of the region during the month, except over the Eastern Sierra where dead fuel moistures were near to below normal (**Figs 5 and 6**). Live fuel moistures are slowly increasing and are now mainly between 80% and 100% (**Fig 7**). Widespread green-up continues across the lower elevations. Expect curing of fine fuels over the lower elevations to start in April and be almost entirely cured by the beginning of May. However, expect greenness in the brush into at least early summer.

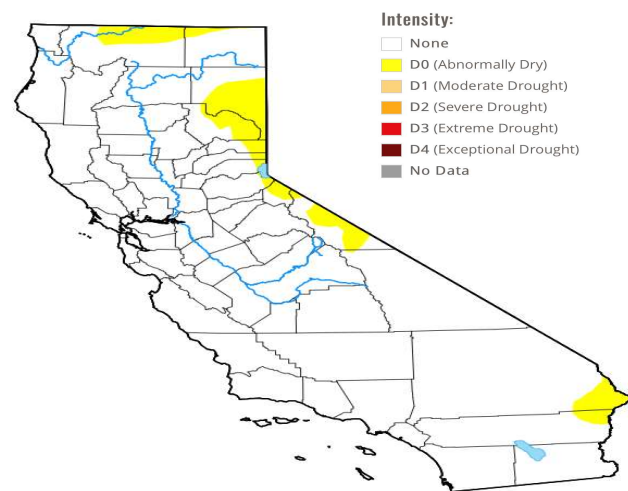


Fig 4: Drought Monitor February 29th, 2024

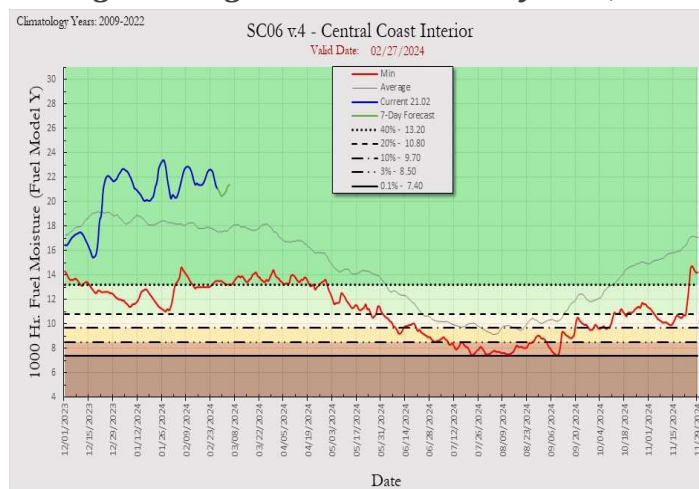


Fig 5: Central Coast Interior 1000 hr Dead fuel moisture February 27th

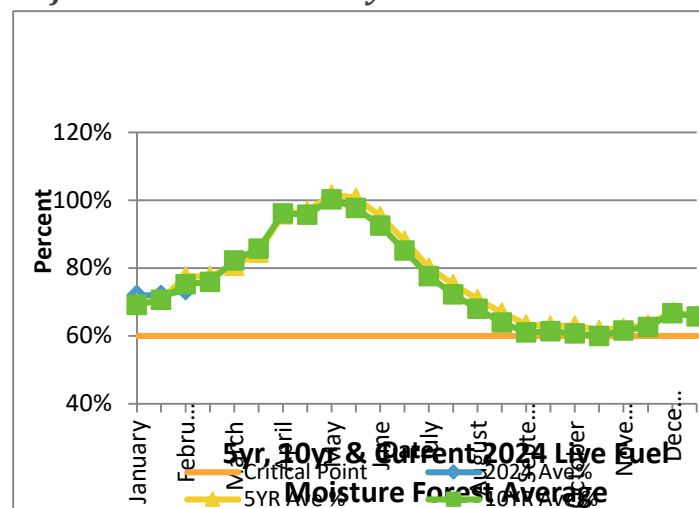


Fig 7: LPF Live Fuel Moisture February 1st

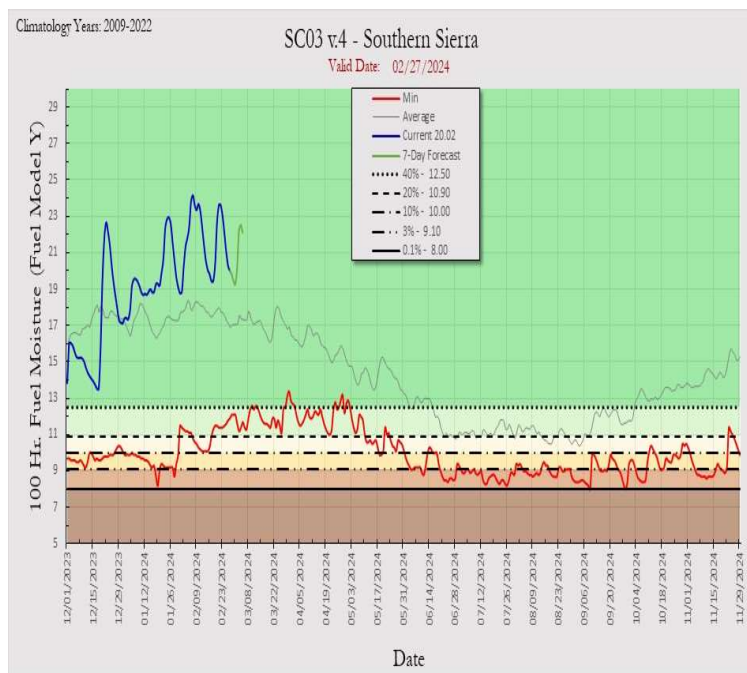


Fig 6: Southern Sierra 100 hr Dead fuel moisture February 27th

SOUTH OPS OUTLOOK

Sea surface temperatures are slowly cooling over the Gulf of Alaska and West Coast, even though on average they remain quite a bit above normal (**Fig 8**). Computer models show that these sea surface temperatures will continue to slowly cool through the spring months (**Fig 9**). With sea surface temperatures slowly cooling over the Gulf of Alaska and West Coast, expect low pressure to be the dominant weather feature over California with only brief periods of high pressure. This dominant trough will likely continue to bring below normal temperatures and near to above normal precipitation March through June. Above normal sea surface temperatures over the Equatorial Pacific will allow stronger troughs to bring subtropical moisture and heavy rainfall into the region through April. The amount of Santa Ana wind events will likely be well below normal through June. Cooling sea surface temperatures off the West Coast will allow for an above normal marine layer influence over the coastal areas in May and June. Due to the expected wet and cool conditions, large fire activity will likely remain normal through April and then become below normal in May and June when fire activity picks up.

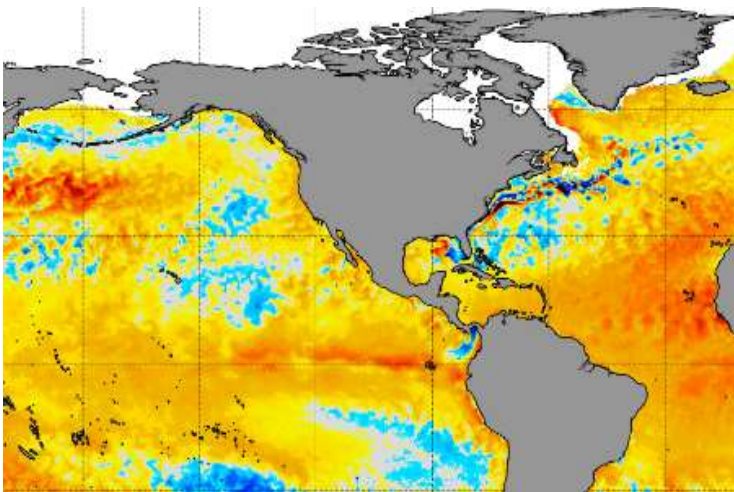


Fig 8: Sea Surface Temperature Anomaly, February 27th, 2024

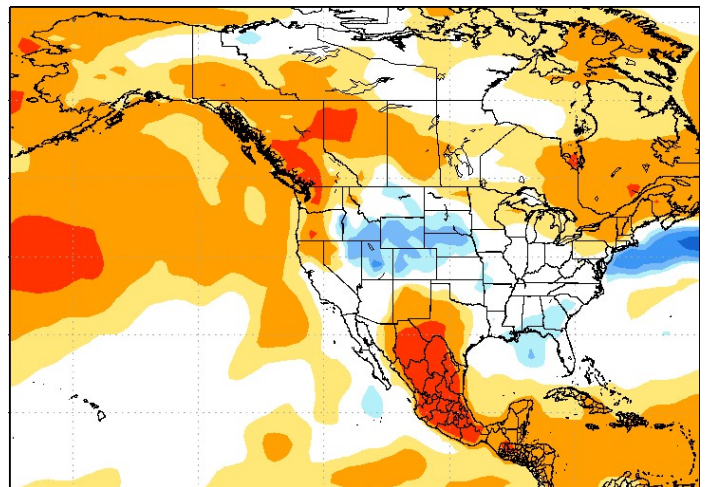
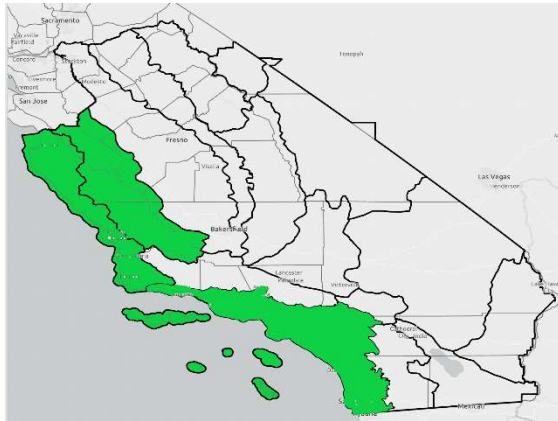
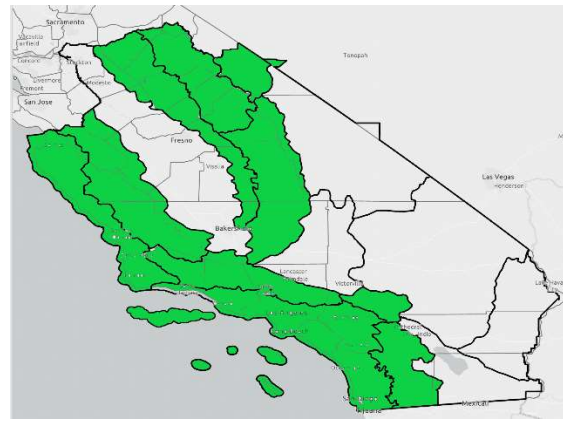


Fig 9: Forecast Temperature Anomalies for March through June, February 28th, 2024

Maps with Counties and Select Intel Links used in the forecast

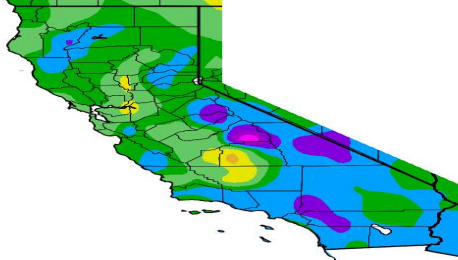


May 2024



June 2024

Av. Max. Temperature dep from Ave (deg F)
2/1/2024 – 2/19/2024



Generated 2/20/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

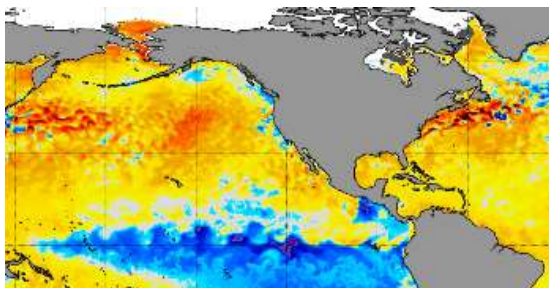


Climate

- <https://calclim.dri.edu/pages/anommaps.html>

100 hr dead fuel moisture

- https://gacc.nifc.gov/oscc/fuelsFireDanger_Hundred.php



Current sea surface temperatures

- <https://www.ospo.noaa.gov/Products/ocean/sst/anomaly/>