



Monthly Climate Report

NWS Reno

Issued: 07/06/2024



Weather Synopsis & Highlights:

June finished with well above average temperatures throughout western NV, northeast CA, and the eastern Sierra. Many locations recorded average monthly temperatures around 3-7 degrees above normal (Figure 1), and both Reno and South Lake Tahoe Airport tied or set several record high maximum and minimum temperatures during the month. In fact, Reno ended up with the warmest June on record at 75.8 degrees, beating the previous record of 75.2 degrees from 2021. The entire region was drier than average, with many areas receiving little or no precipitation. Only portions of Mineral, Mono and Lyon County received rain from thunderstorms that produced localized heavy rainfall and flooding, with amounts mainly between 25-75% and isolated sites up to 90% of June averages (Figure 2).

The first half of June was highlighted by well above average temperatures, especially from the 5th-7th and 11th-13th when highs were in the upper 90s to near 100 degrees for lower elevations of western NV. During this time, Reno set a new record high of 98 degrees on the 6th, and tied the record of 99 degrees on the 11th and 12th. Record high temperatures were also set in South Lake Tahoe on the 11th and 12th, with temperatures both days reaching 85 degrees. While mainly dry conditions prevailed across much of the region, isolated scattered thunderstorms formed during this warm spell, most notably on the 6th, 9th, 12th and 13th. The storms occurred in parts of the eastern Sierra, western NV south of US-50, far northwest NV, and west central NV near and east of US-50, but avoided the main urban areas of far western NV. This period of early summer heat continued to dry out the fuels, and several non-lightning fires started in western NV, including two small brush fires in the Reno-Sparks vicinity on June 11th (Photos 1, 2).

The ridge that brought us record heat finally broke down on the 14th as a trough of low pressure brought wind gusts upwards of 35-40 mph and humidities down to 8-15%. With the already receptive fuels, the first Red Flag warning of the 2024 fire season was issued for the northern Sierra Front and much of western NV. Cooler temperatures finally arrived by the 15th as the high pressure ridge gave way to a dry cold front passage with breezy winds. A second dry cold front brought additional cooling on the 17th with daytime highs only in the 60s to lower 70s with even a new record low of 27 degrees in South Lake Tahoe on the 18th. But, with the increased winds and low humidities, another Red Flag warning was issued for the northern Sierra Front and much of western NV the day prior on the 16th. Quiet weather then prevailed with a warming trend from the 18th through 22nd. Temperatures peaked on the 22nd with Reno reaching over 100 degrees for the first time of the year, setting another record high of 101. Temperatures then eased back from triple digit heat but remained above average for the remainder of the month.

While most days in the second half of June were dry, showers and thunderstorms formed from the 24th through 26th. Coverage was isolated to Mono-Mineral counties on the 24th and parts of northwest NV on the 26th. But, the most impactful weather event was an active thunderstorm day across much of west central NV on the 25th. These storms produced heavy rainfall and mudslides that closed portions of US-95 near Walker Lake, and NV-358 south of Hawthorne until the early morning of the 26th, with additional minor flooding in

Fernley. Lightning from these storms started several fires in western NV. The two most notable fires were the Yellow Peak Fire in northern Washoe County, which burned 1,262 acres and was fully contained on July 2nd and the Pizona Fire in southern Mineral County, which burned 2,160 acres and was fully contained on July 5th (Photos 3, 4).

Hydrology:

June was a fairly benign month hydrologically with the exception of a few days where thunderstorms produced brief heavy rains. On June 13th, brief heavy rain occurred on the eastern portions of the Tamarack burn, but no impacts were reported. On June 25th, a short duration heavy rain event caused flooding and mud to close both Highway 95 and 359 in Mineral Counties (photo 5, 7). Heavy rainfall was also reported in Fernley (Photo 6) as well as in areas of Spanish Springs.

Monthly streamflows for the area are near to slightly above normal (Figure 3). Mountain soil moisture conditions as measured by SNOTEL are slightly above normal for the east side of the Sierra, and normal for the Humboldt basin (Figure 4). Water year to date river flows are near normal on the east side of the Sierra, and above normal along the Humboldt river (Figure 5). Reservoir conditions (Figure 6) remain in excellent condition, with Tahoe peaking at just .04 feet below the legal limit.

Drought Update:

Abnormally dry (D0) conditions were introduced in parts of northeast CA including the Surprise Valley, and also northwest NV. Another area of D0 conditions was introduced for the main urban corridor of far western NV including Reno-Sparks, Carson City and Douglas County, and the Tahoe Basin southward to eastern Alpine County (Figure 7). It has been exceptionally dry the last 3 months across the entire hydrologic service area (HSA). The current 90-day precipitation anomalies show much of western NV and the eastern Sierra between 20-50% of average, with northeast CA between 50-75% of average (Figure 8). When combined with the hot temperatures of the last month, the latest SPEI (Figure 9) is generally between -1.0 to -2.0 across the HSA, indicating moderate to very dry conditions. However, longer term drought indicators mentioned in the hydrology section such as reservoir storage, soil moistures, and stream flows are still in good shape and do not point to long-term drought at this time.

Additional Information on Drought and Climate:

[Report Drought conditions here](#)

[Nevada statewide Drought update](#)

[NV Living with Drought](#)

[Drought Monitor](#)

[New Drought.gov](#)

[California Nevada Drought Early Warning System](#)

[NOAA CPC Drought page](#)

[CNAP Drought tracker](#)

[California Nevada River Forecast Center](#)

[WRCC Drought Tracker](#)

[WRCC Enso page](#)

[WRCC Monthly Climate Summaries](#)

[Evaporative Demand Drought Index](#)

[US Seasonal Drought Outlook](#)

Contact NWS Reno Climate Team

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<https://www.weather.gov/rev/>

Photos:



Photo 1: The Sullivan Fire east of the Reno Office on June 11th. Photo courtesy of NWS Reno.



Photo 2: The Trail Fire near Stead on the afternoon of the 11th. Photo courtesy of Ryan @Ryface via X.



Photo 3: The Pizona Fire on 6/26 from a helicopter. Photo courtesy of Stefan via inciweb.gov.



Photo 4: The Helena Hotshot Crew on scene of the Pizona ICP on June 27th with a pyrocumulus in the background. Photo courtesy of inciweb.gov.

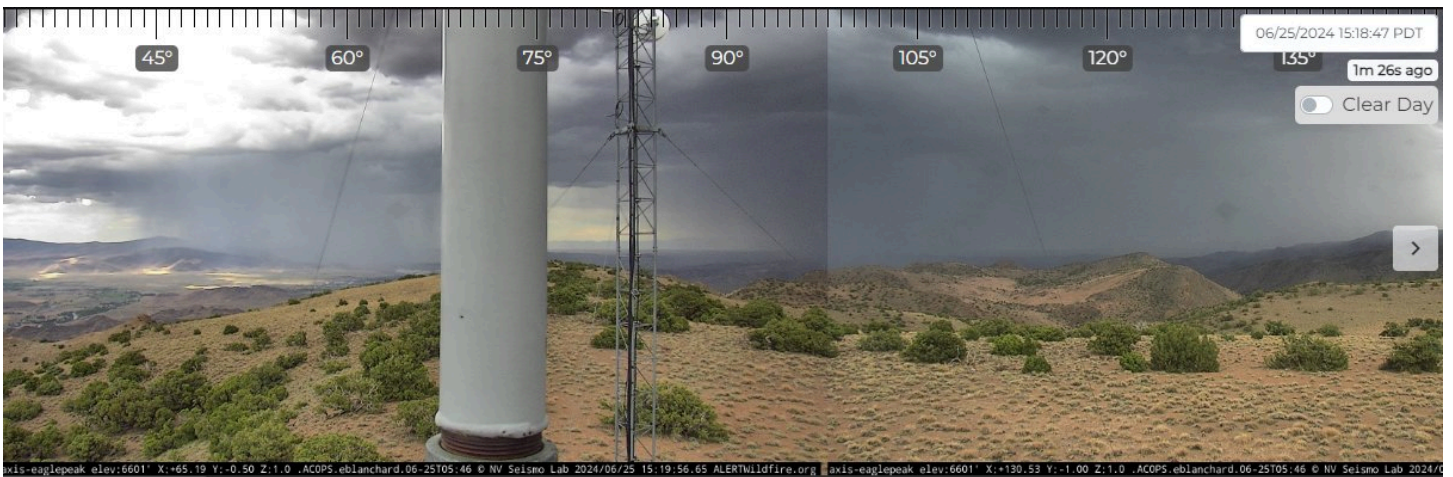


Photo 5: Heavy rainfall on the 25th led to localized flooding and several flood advisories in western NV. Photo courtesy of NEVADA Seismo Lab via AlertWest.



*Lucille McGowan
June 25, 2024 4:19 PM*

Photo 6: Areal flooding in the Fernley, NV area on the 25th. Photo courtesy of Lucille McGowan via Facebook.



Photo 7: Highway 95 south of Hawthorne. Photo courtesy of NDOT

Figures:

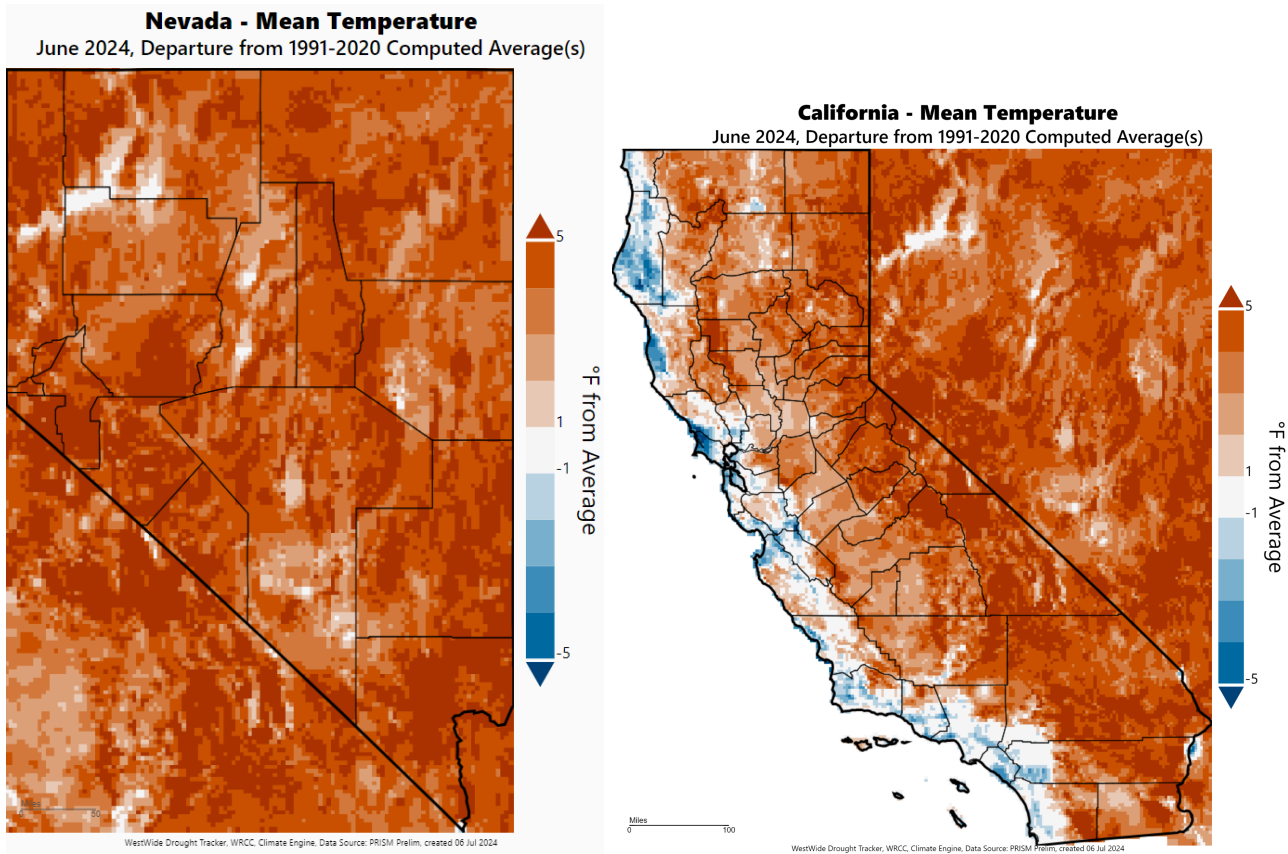


Figure 1: Nevada (left) and California (right) departure from normal temperatures for June 2024. ([WWDI](#))

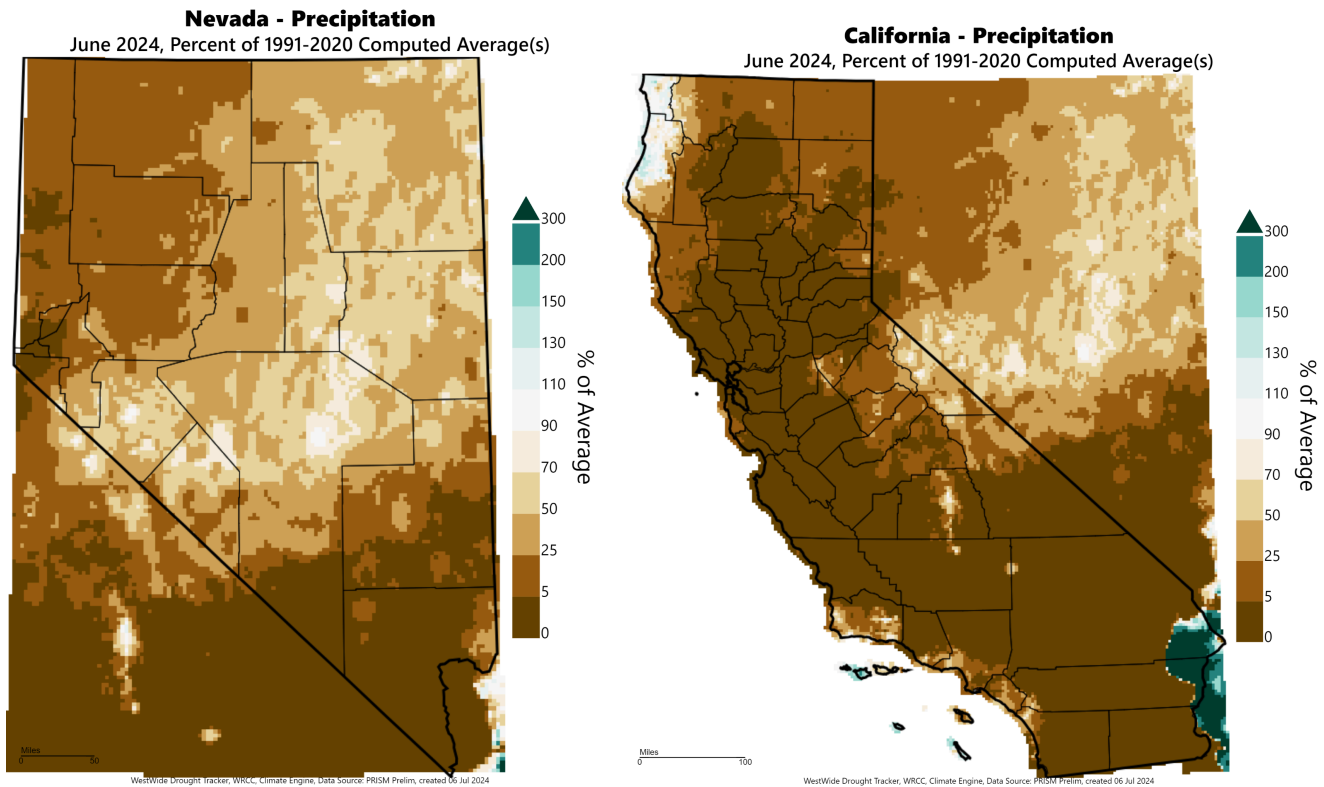


Figure 2: Nevada (left) and California (right) percent of normal precipitation for June 2024. ([WWDI](#))

June 2024

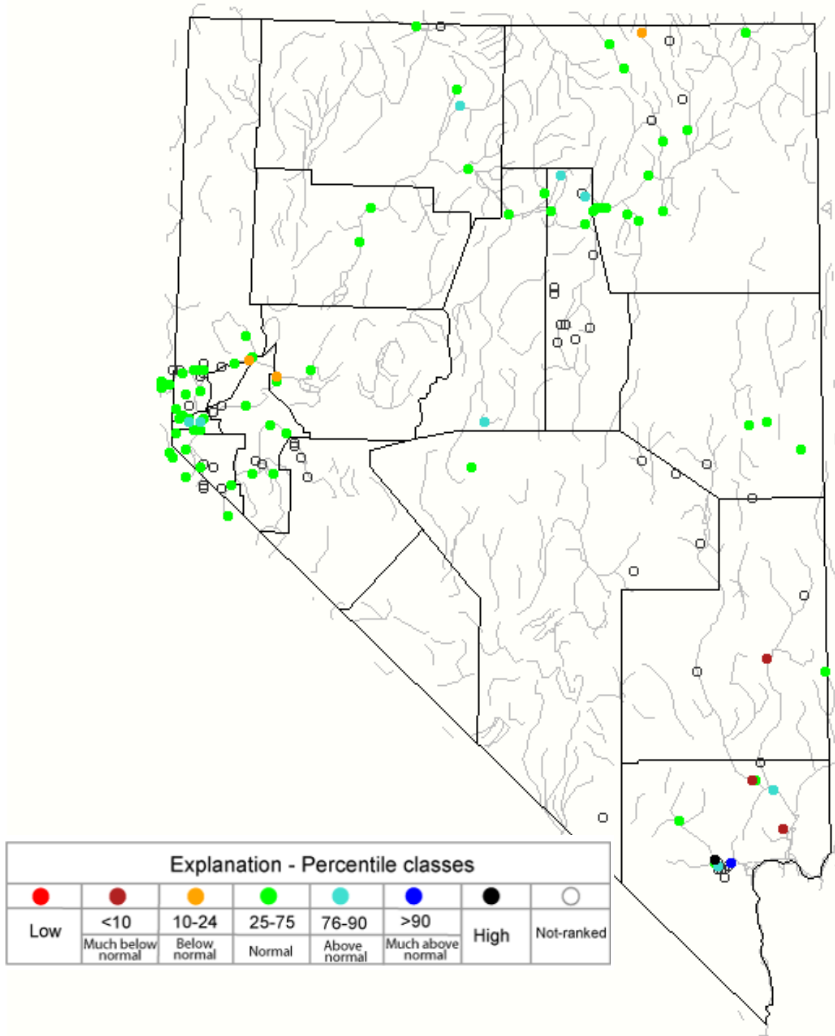


Figure 3: June 2024 [Monthly USGS streamflow](#)

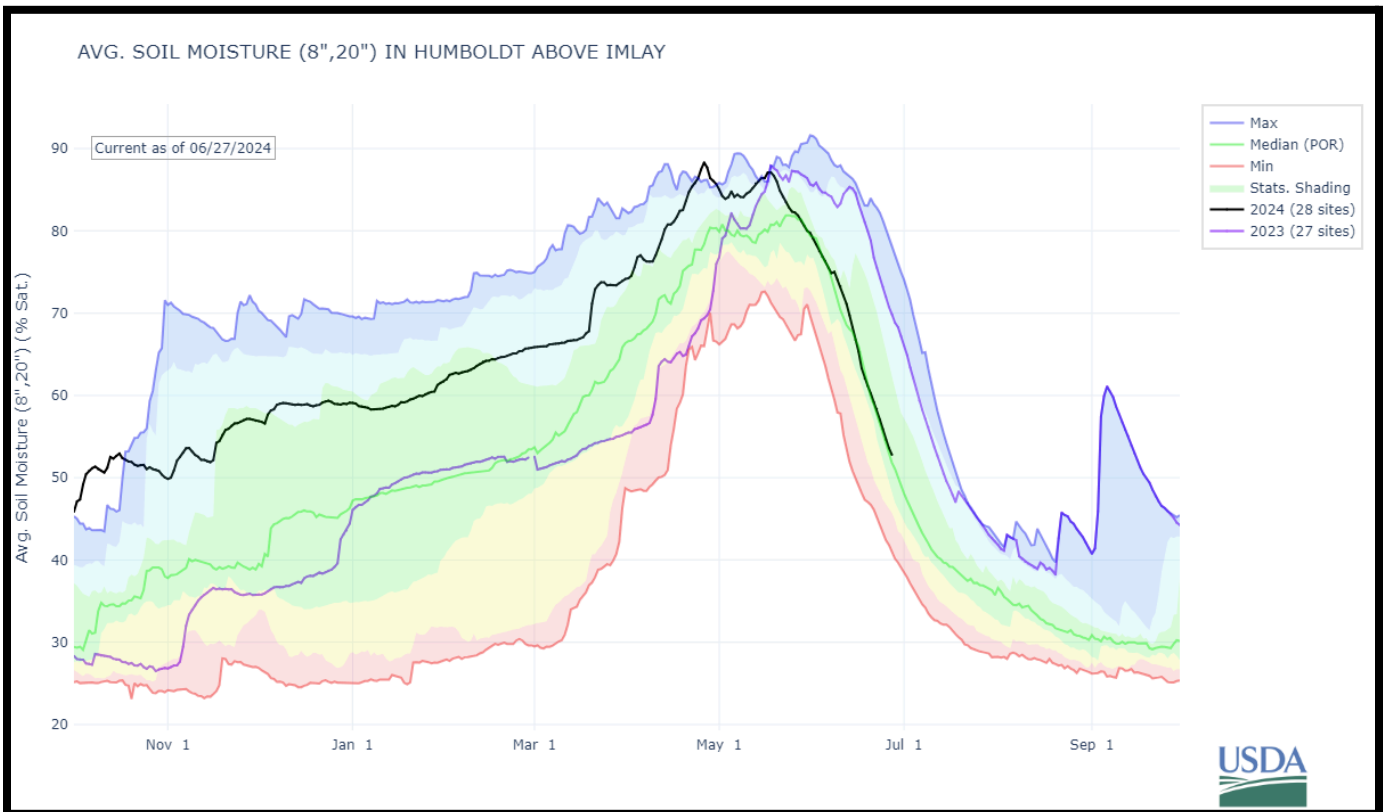
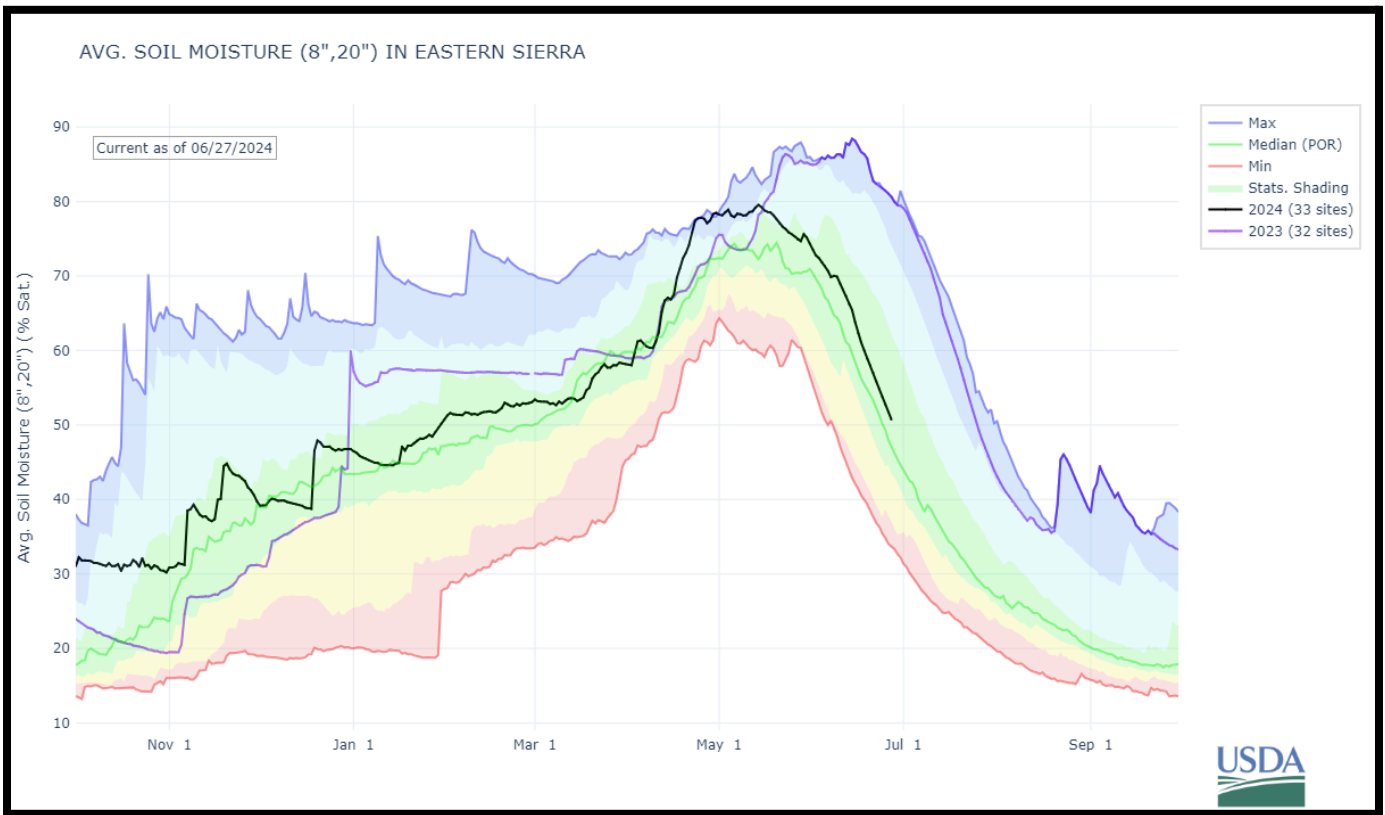


Figure 4: [NRCS SNOTEL soil moisture](#) for the combined Tahoe, Truckee, Carson and Walker basins (upper), and Humboldt basin (lower) indicated in dark black for water year 2024. Water year 2023 is plotted in purple for additional perspective.

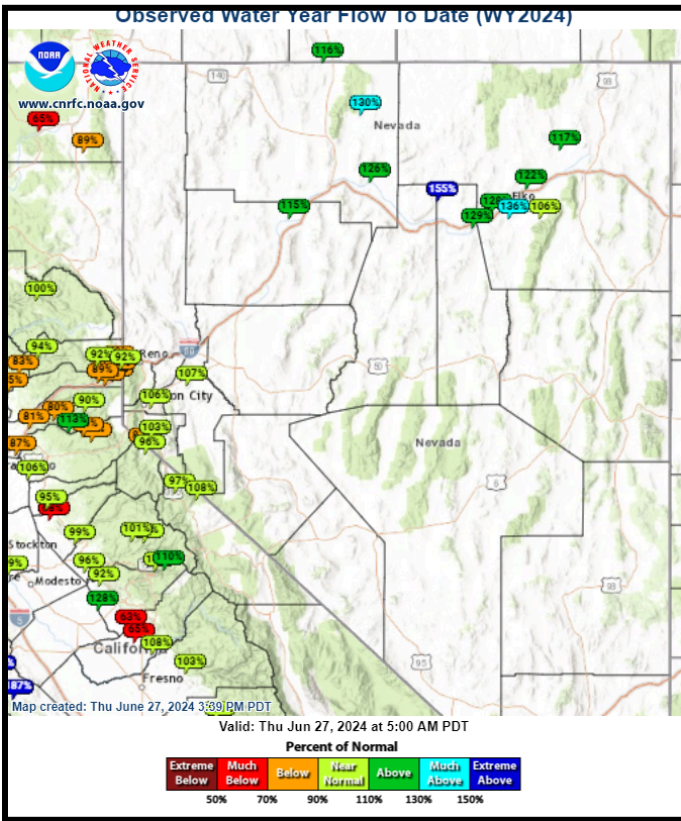


Figure 5. [CNRFC](#) Water year to date volume.

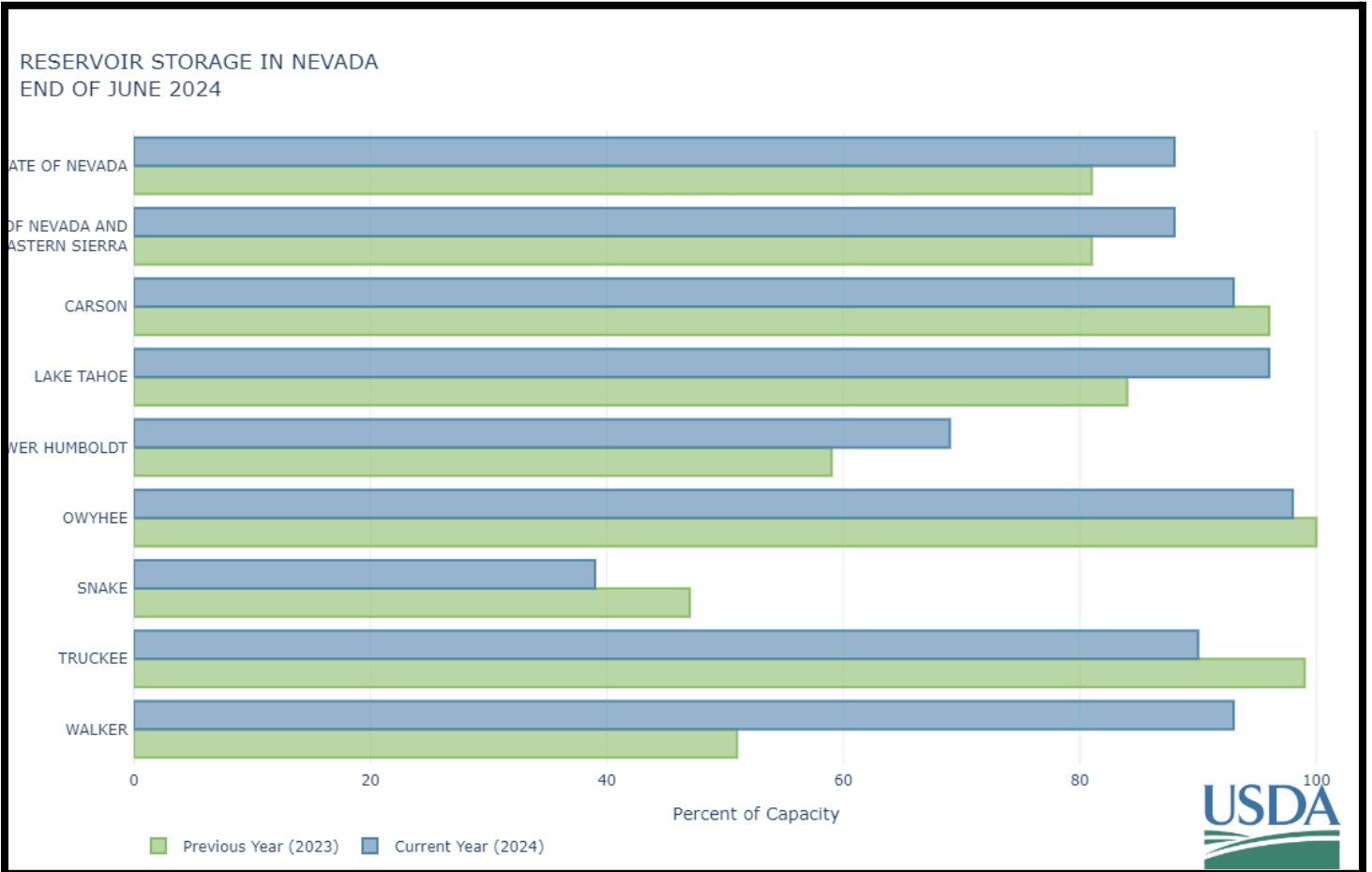
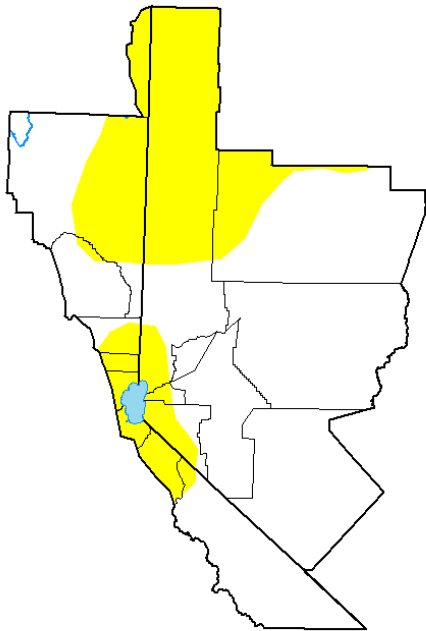


Figure 6: End of month reservoir storage percent of capacity. Data courtesy of [NRCS](#).

**U.S. Drought Monitor
Reno, NV WFO**

July 2, 2024
(Released Wednesday, Jul. 3, 2024)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	68.90	31.10	0.00	0.00	0.00	0.00
Last Week 06-25-2024	91.41	8.59	0.00	0.00	0.00	0.00
3 Months Ago 04-02-2024	62.10	37.90	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-26-2023	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago 07-04-2023	94.03	5.97	0.00	0.00	0.00	0.00

Intensity:
 None (white) D2 Severe Drought (orange)
 D0 Abnormally Dry (yellow) D3 Extreme Drought (red)
 D1 Moderate Drought (light orange) D4 Exceptional Drought (dark red)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

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droughtmonitor.unl.edu

Figure 7: Early July Drought Monitor Status. Introduction of D0 to the WFO Reno area. Check for updates at: Drought Monitor.

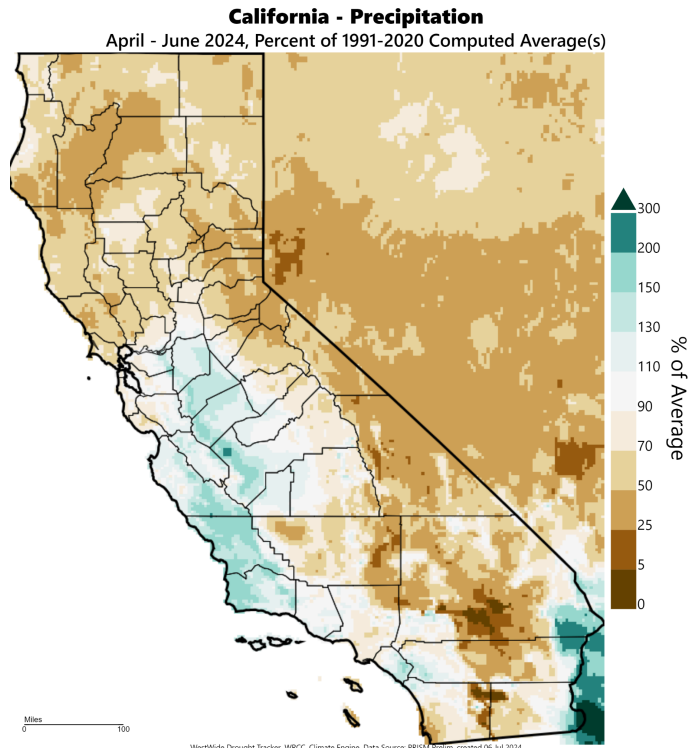
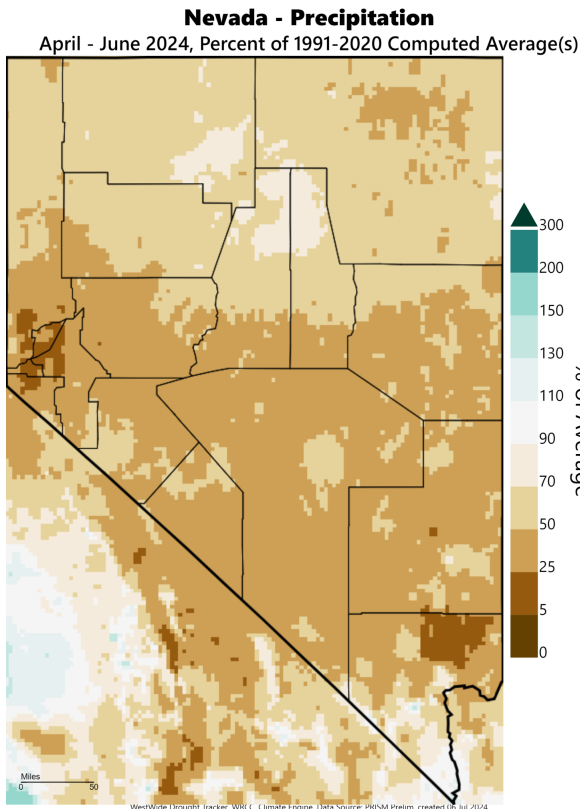


Figure 8: Nevada (left) and California (right) departure from normal precipitation for the last 3 months. April-June 2024. (WWDT)

Western United States - 3 Month SPEI

June 2024

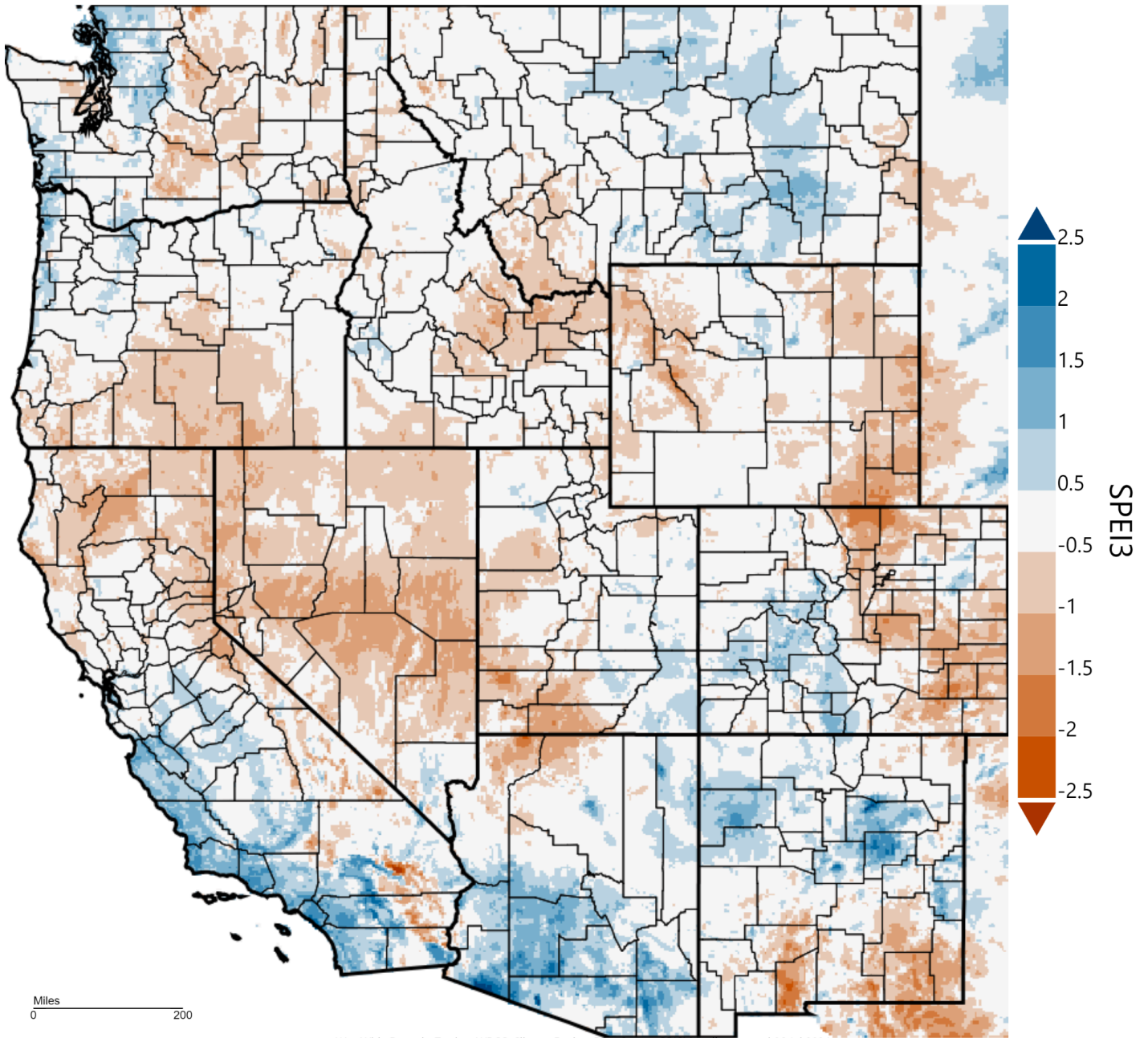


Figure 9: The SPEI for the last 3 months (April-June). ([WWDT](#))