



Monthly Climate Report

NWS Reno NV

Issued: 4/07/2025



Weather Synopsis & Highlights:

Temperatures in March finished 2-3 degrees below average across the eastern Sierra. Outside of northern Washoe County which came in about 1-3 degrees above average, most of western NV was near average (Figure 1). Precipitation was mixed across the region, with average to just above average in the Sierra and portions of the inner basin and range. Precipitation was below average for far western NV and in Mono County (Figure 2).

The early tease of spring from the end of February only lasted into March 1, when Reno received its first 70 degree day of the year. The first 3 weeks were quite active with multiple storms bringing periods of moderate to heavy snow for the Sierra, decent amounts of rain and snow for northeast CA, but much of western NV received more wind and lighter amounts of precipitation with these storms.

The first storm on the 2nd brought light amounts of snow to the Sierra, mainly between 1 and 5 inches (Photo 1), except for 10 inches at Mammoth Mountain. The main effect was cooling temperatures down by about 20 degrees compared to the 1st, with near to below average temperatures continuing through the first week of the month. The next storm on the 5th and 6th brought more snow to the Sierra, generally 6-12 inches except up to 15 inches in a few higher elevations along the Sierra crest. Areas of rain spread into western NV, with Reno reporting about 0.20" of rain while heavier amounts around 0.50" fell in west central NV including Lovelock and Fallon. Higher elevations of eastern Churchill County received up to about 6 inches of snow with this storm (Photo 2).

After a short period of warmer and drier conditions from the 8th-11th, the strongest storm of the month then arrived between the 12th and 14th. This storm produced some of the season's heaviest snow totals, with 1-3 feet across the Sierra (Photo 3) including the Tahoe basin down to lake level, and up to 45 inches in higher elevations near the Sierra crest. Precipitation amounts dropped off quickly going eastward into western NV, with only 0.15" at Reno and less than 0.05" for west central NV. Peak wind gusts of 50-65 mph were reported across several sites in western NV during the afternoon and evening of the 12th, and similar gusts returned on the afternoon of the 14th.

Another potent storm brought the most widespread strong wind event of the month on the 16th with gusts of 50-70 mph across nearly all lower elevations of eastern CA-western NV. A few wind prone areas in western NV saw peak gusts of 75-85 mph while ridge gusts up to 135 mph were reported along the Sierra crest. These winds were followed by heavy snowfall of 10-18 inches along the Sierra crest and 6-12 inches in the Tahoe basin, which continued through the 17th. While northeast CA received liquid amounts up to 1.5 inches (including 2-6" of snow for areas west of US-395), precipitation amounts again dropped off significantly into western NV, with most areas receiving rainfall of 0.10 inch or less (Photo 4). Temperatures dropped to 10-15 degrees below average for the 17th-18th.

Another quick storm moving through on the evening of the 19th brought minimal amounts of precipitation, but produced a short 2-3 hour period of strong winds across the eastern Sierra into far western NV, including peak gusts of 75-85 mph in wind prone areas between Reno and Carson City, and Sierra ridge gusts 95-115 mph.

Temperatures returned to near average from the 20th-22nd, with a couple days of mostly cloudy conditions and spotty light rain and snow showers on the 21st-22nd. Then a building ridge of high pressure brought a dry period and a notable warmup which began on the 23rd and peaked on the 25th-26th. Highs pushed into the 70s for lower elevations and even reached 80 degrees in parts of western NV (Photo 5).

This warm spell was short lived, as a series of storms reaching the northwest US displaced the high pressure from NV and brought temperatures down to near or below average for the final 5 days of the month. The first storm brought strong winds on the 27th, with peak gusts of 50-60 mph with up to 75 mph in wind prone areas and Sierra ridge gusts 100-120 mph. Most precipitation was limited to portions of northeast CA, far northwest NV and the Sierra crest west of Tahoe, while the remainder of the region was shadowed out with little or no measurable precipitation. A second storm brought additional rain, snow and wind for the final two days of March, with heaviest snowfall amounts between 15-30 inches along the Sierra crest and in the Carson Range, with 4-8 inches in the Tahoe basin and parts of northeast CA, except for higher amounts up to 15 inches along Tahoe's west shore. Far western NV including the Reno area also received snowfall on the evening of the 31st, with up to 2 inches in valleys and 2-6 inches in foothill locations.

Hydrology:

March storms helped boost snowpack conditions to near the median, and just shy of the median peak on the east side of the Sierra, and helped maintain above normal conditions on the Humboldt (Figure 3). The few days of very warm and sunny weather late in March ramped up snowmelt at lower to mid elevations, most notably in the Humboldt basin (Figure 4). Recent snowmelt increased mountain soil moisture to near normal levels for this time of year (Figure 5). This snowmelt did bump streamflows up somewhat, but nowhere near flooding concerns, and most monthly streamflows were near normal, with one notable exception of Marlette Creek which was high due to planned dam repairs (Figure 6). Water year to date streamflow volumes are above median in NE California and the Truckee system, near to slightly below median on the Carson and Walker, and below median on the Humboldt, and April to July water supply forecasts above to near median in NE California including the Truckee and Carson, and a bit below median on the Walker and lower Humboldt (Figure 7). Reservoir storage remains well above normal in Tahoe and Rye Patch reservoirs, and near normal on the Truckee, Carson and Walker (Figure 8).

Drought Update:

March storms maintain drought free conditions in northeastern California and the Sierra, and abnormally dry (D0) and moderate drought (D1) in parts of Churchill, Lyon, Mineral and southern Washoe counties. Mid-March storms helped improve conditions somewhat in central Nevada leading to a one category improvement in parts of NE Churchill county, and a small sliver of SW Pershing county (Figure 10). Water year precipitation has been near to above normal along in northeastern CA and northwestern Nevada, but still lags below normal in west central Nevada (Figure 11). Meanwhile, this has been a warm water year, which is evident in the below average snowfall in lower Sierra elevations. Average temperatures are in the top 10th to 33rd percentile warmest for all of the NWS Reno service area (Figure 12).

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: Light snow over Donner Pass on the 2nd. Photo courtesy of Caltrans.



Photo 2: Up to a half foot of snow fell across the inner basin and ranges in Nevada on the 3rd. Photo courtesy of Nevada DOT.

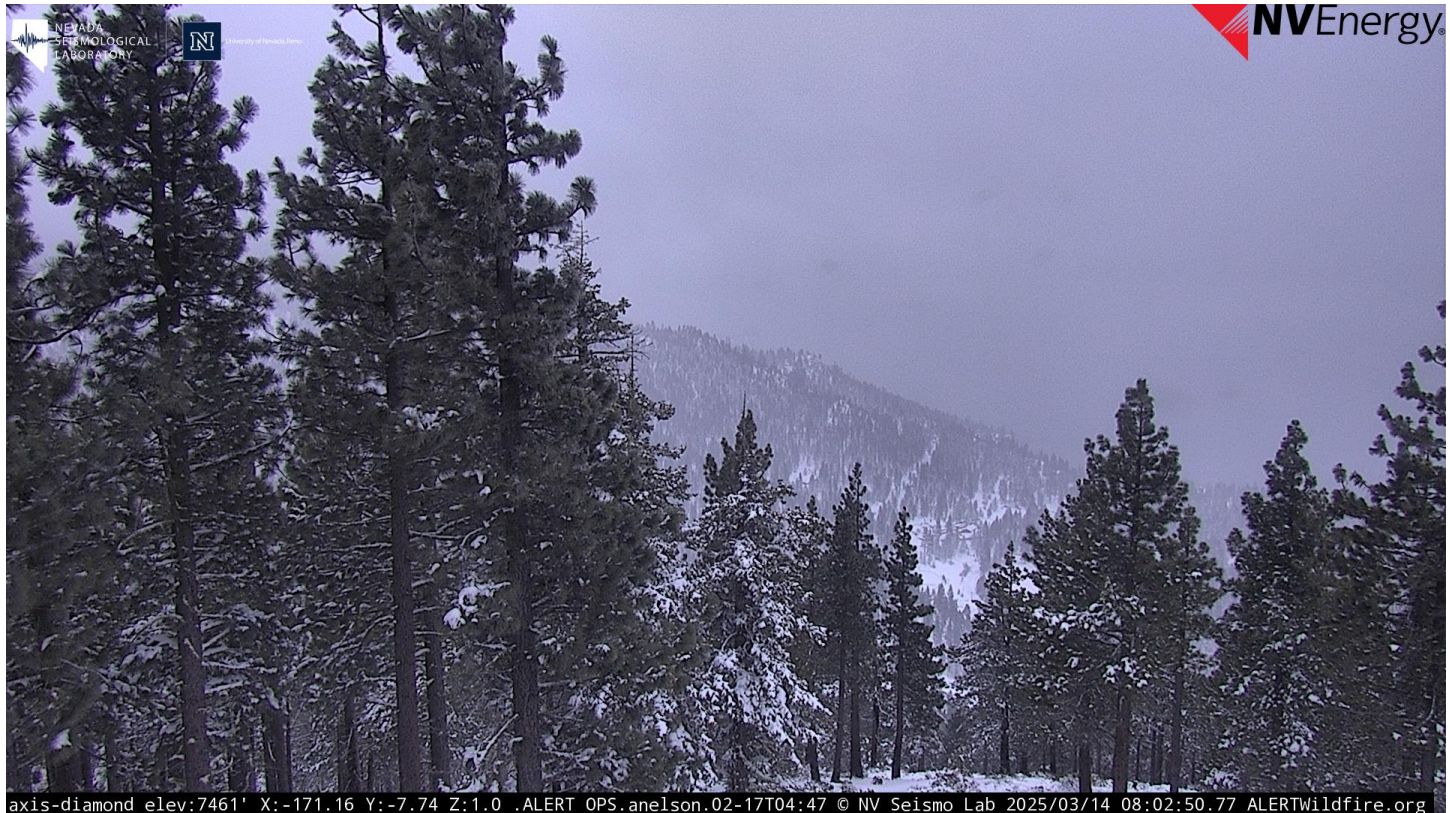


Photo 3: Heavy snow fell across the Sierra between the 12-14th, with several places seeing upwards of 2-4 feet. Photo courtesy of Nevada Seismological Lab and NV Energy.



Photo 4: Some light spillover showers in Reno on the 17th. Photo courtesy of Nevada Seismological Lab and NV Energy.

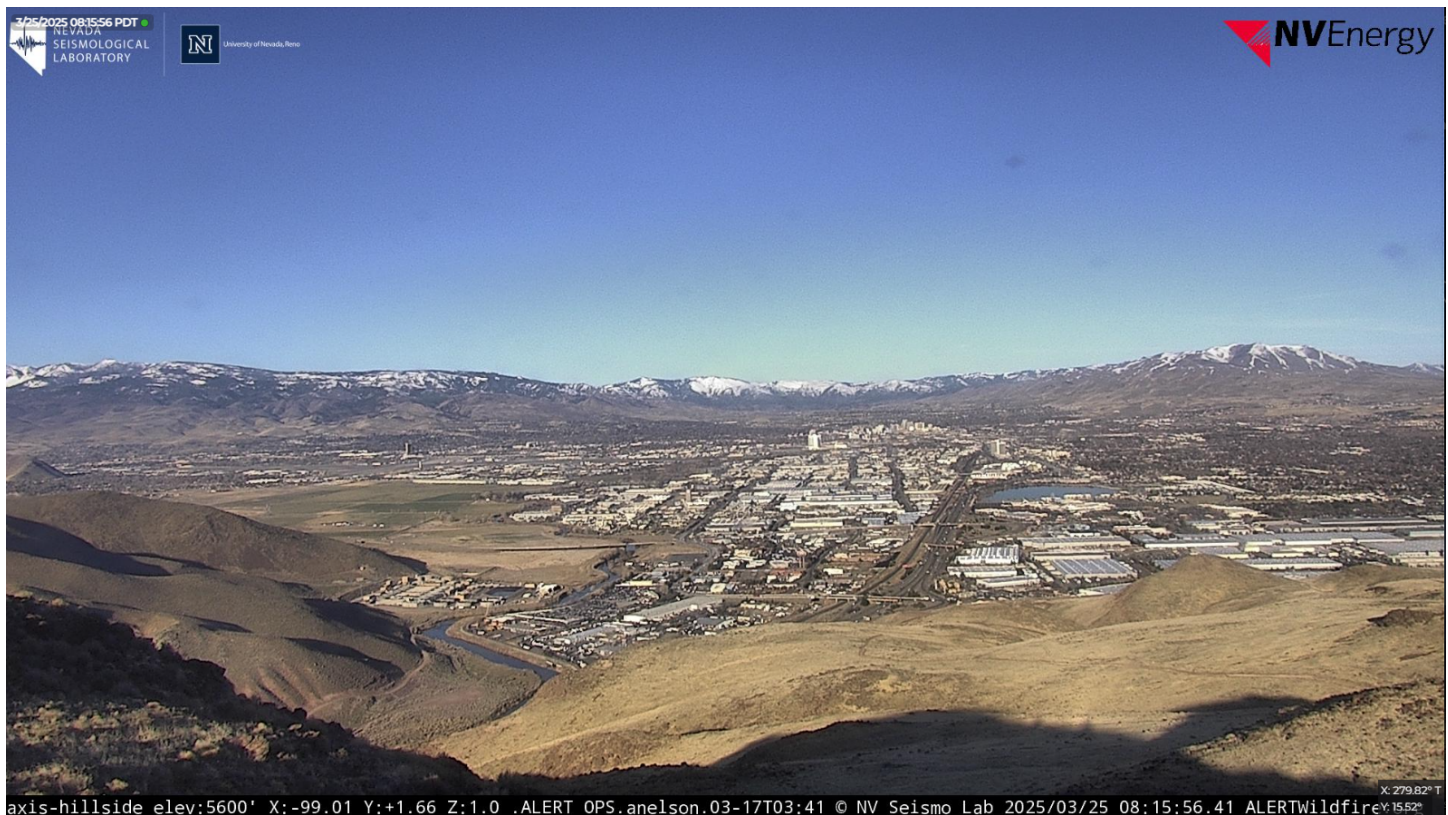


Photo 5: Several days of upper 70s and a few 80s across western NV. Photo courtesy of Nevada Seismological Lab and NV Energy.

Figures:

California-Nevada - Mean Temperature

March 2025, Departure from 1991-2020 Average

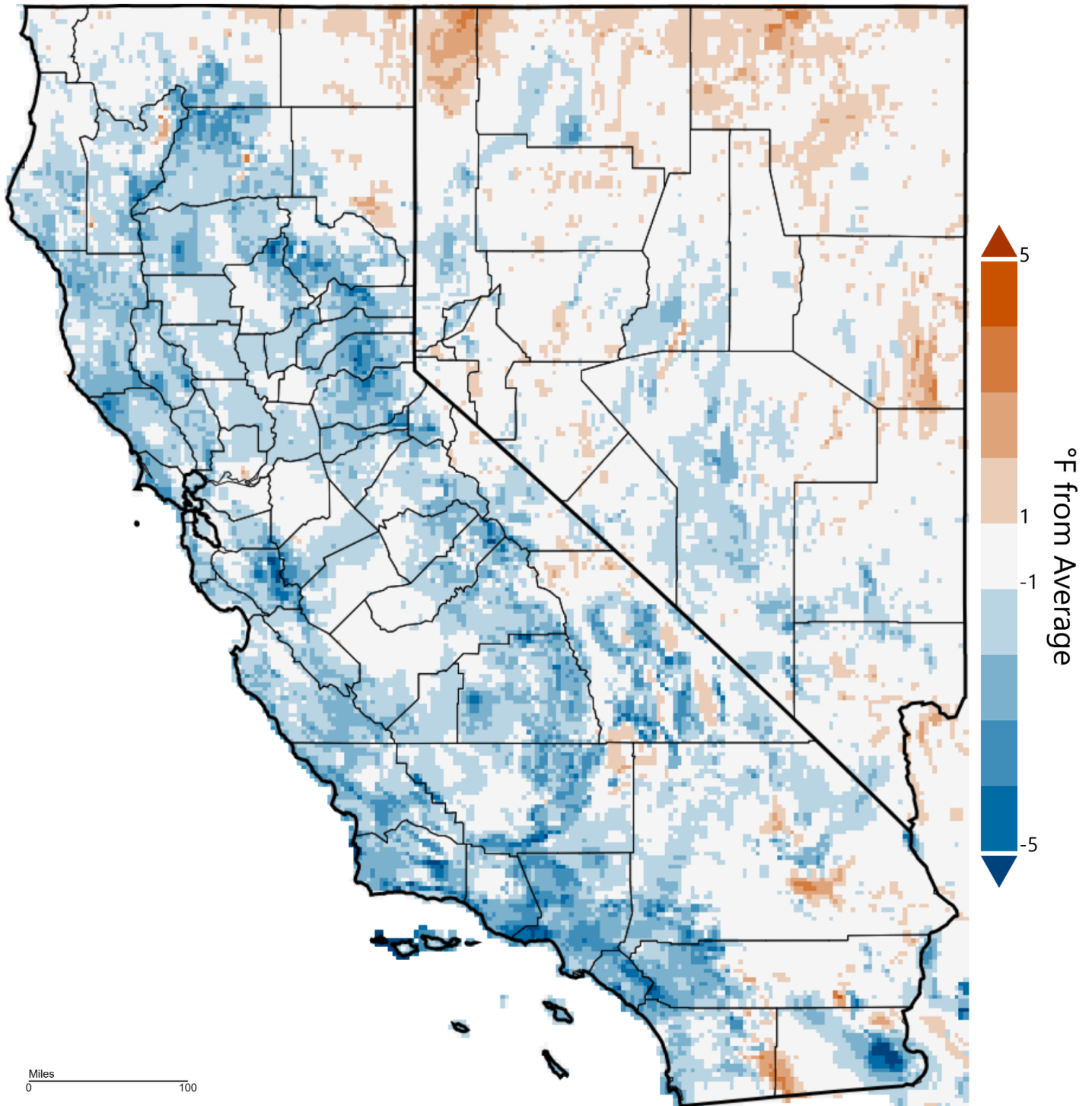
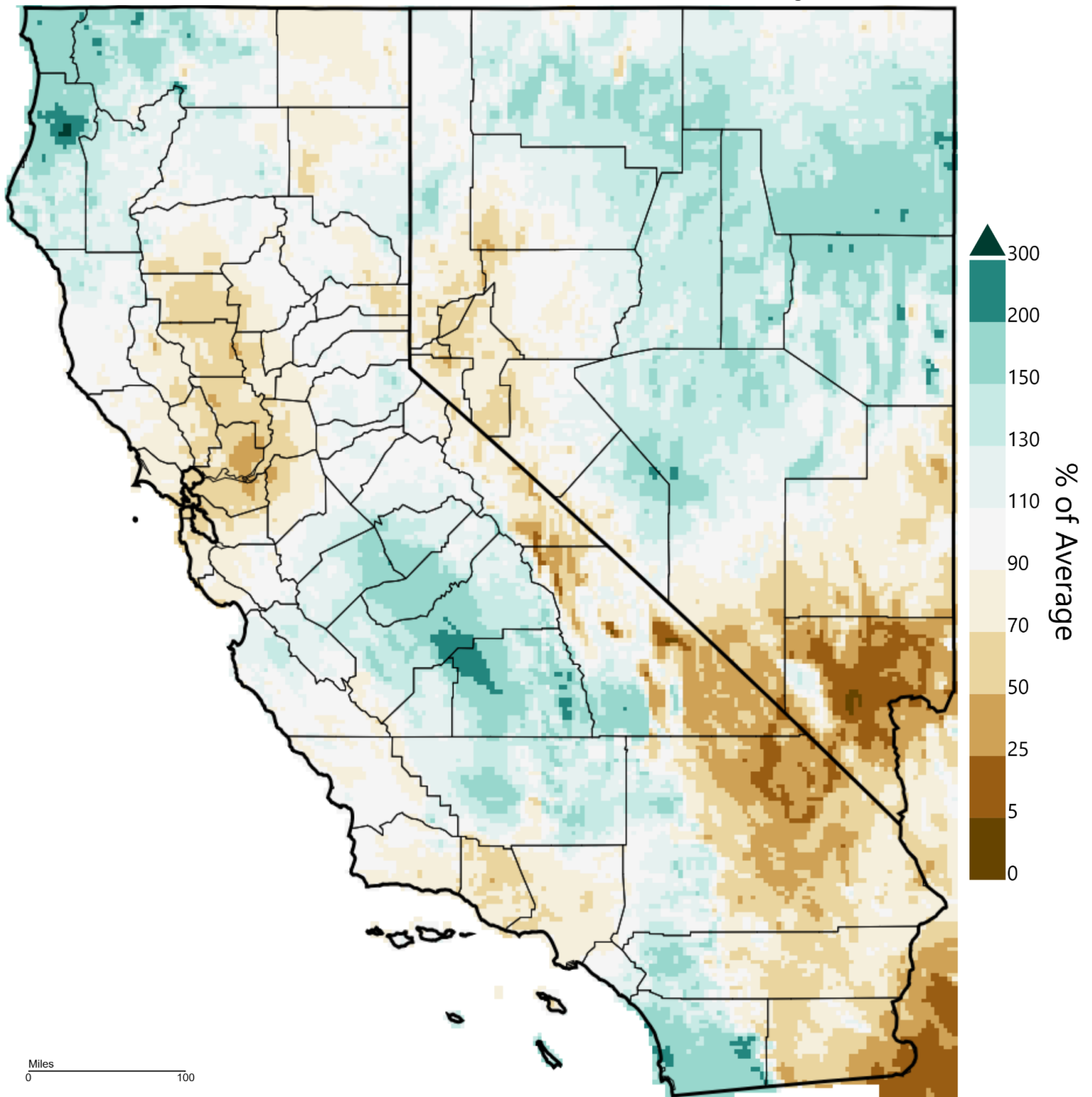


Figure 1: Departure from normal temperatures for March 2025. ([WWDT](#))

California-Nevada - Precipitation

March 2025, Percent of 1991-2020 Average



WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Apr 2025

Figure 2: Percent of normal precipitation for March 2025. ([WWDI](#))

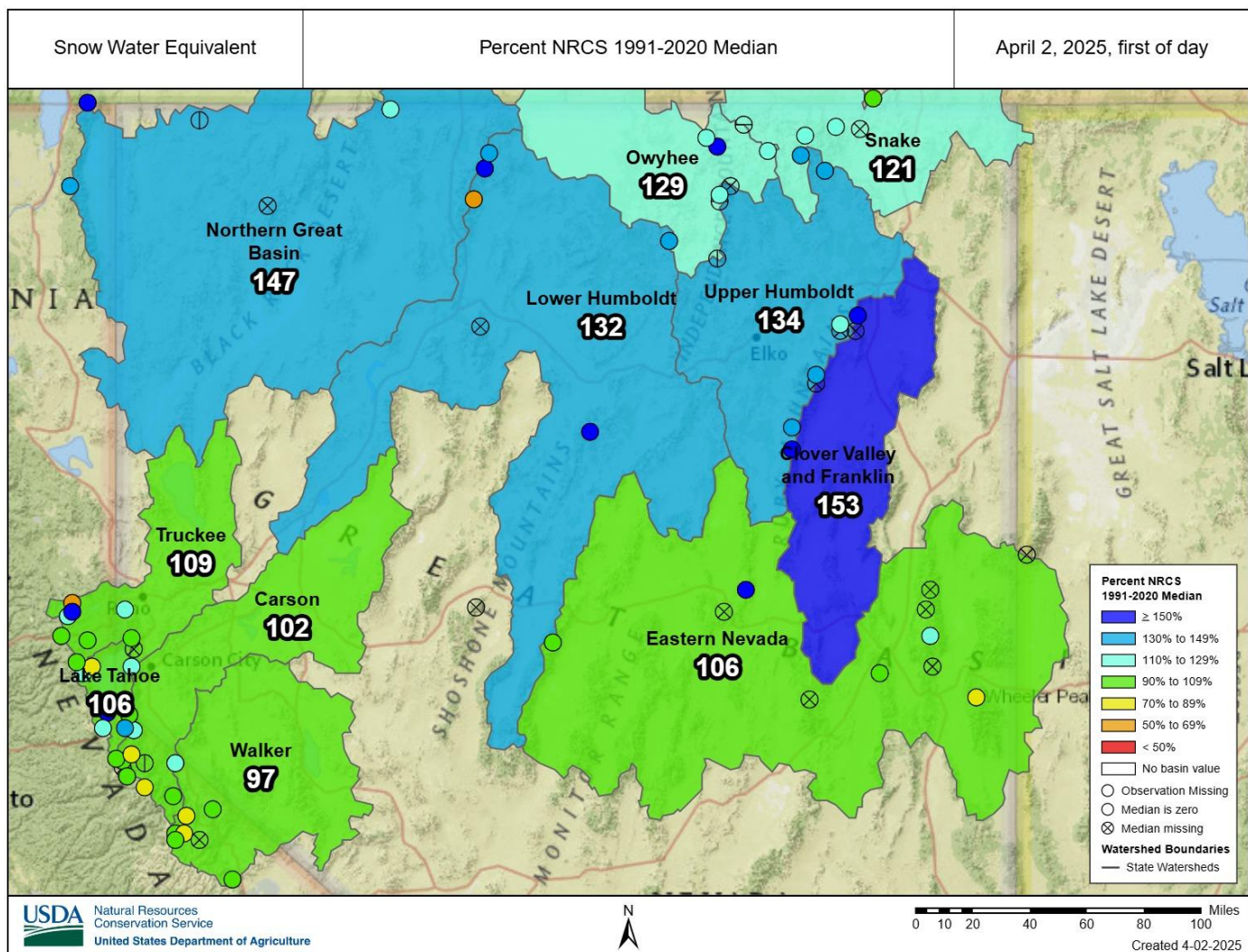


Figure 3. NRCS % of median snow water equivalent for April 2nd.

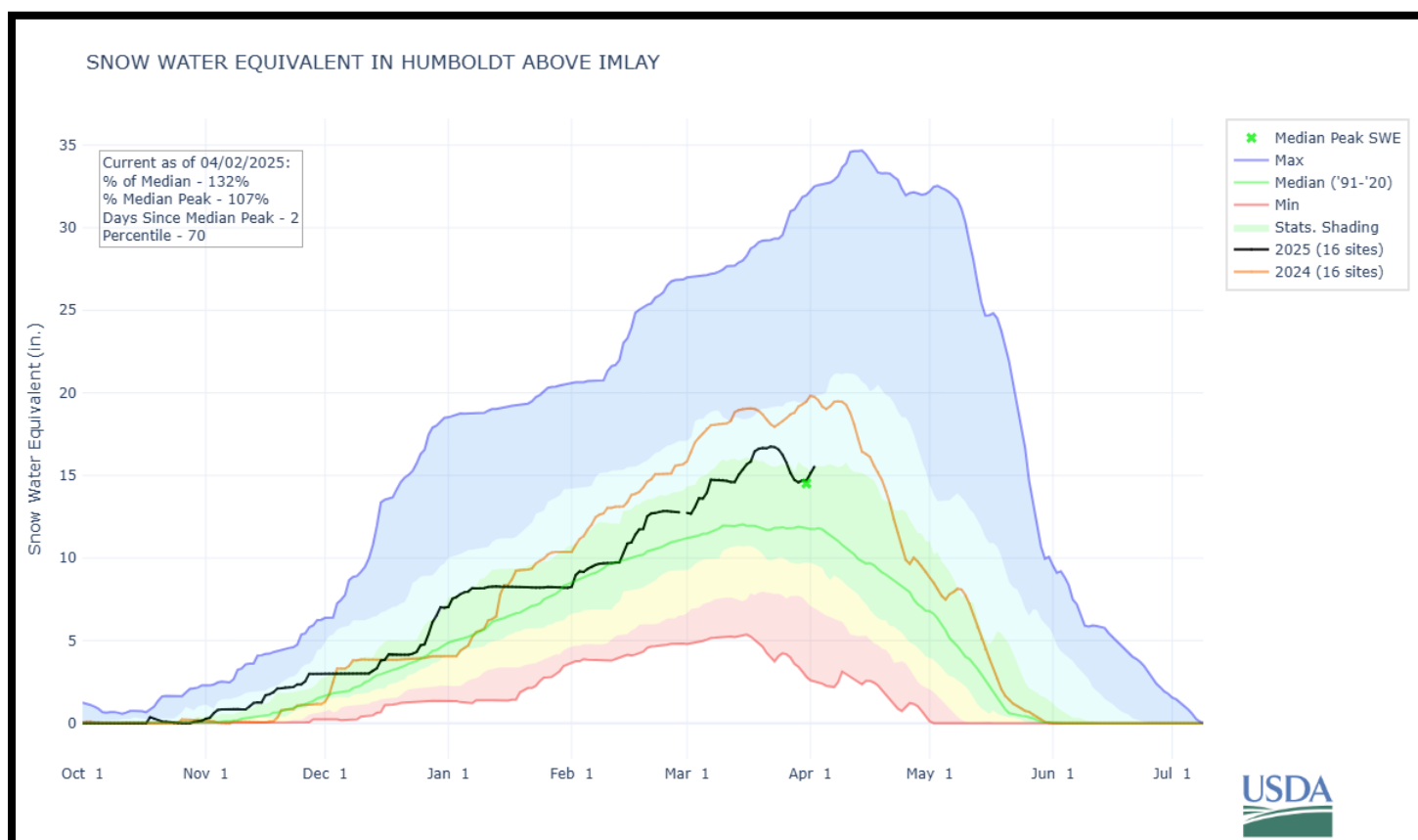
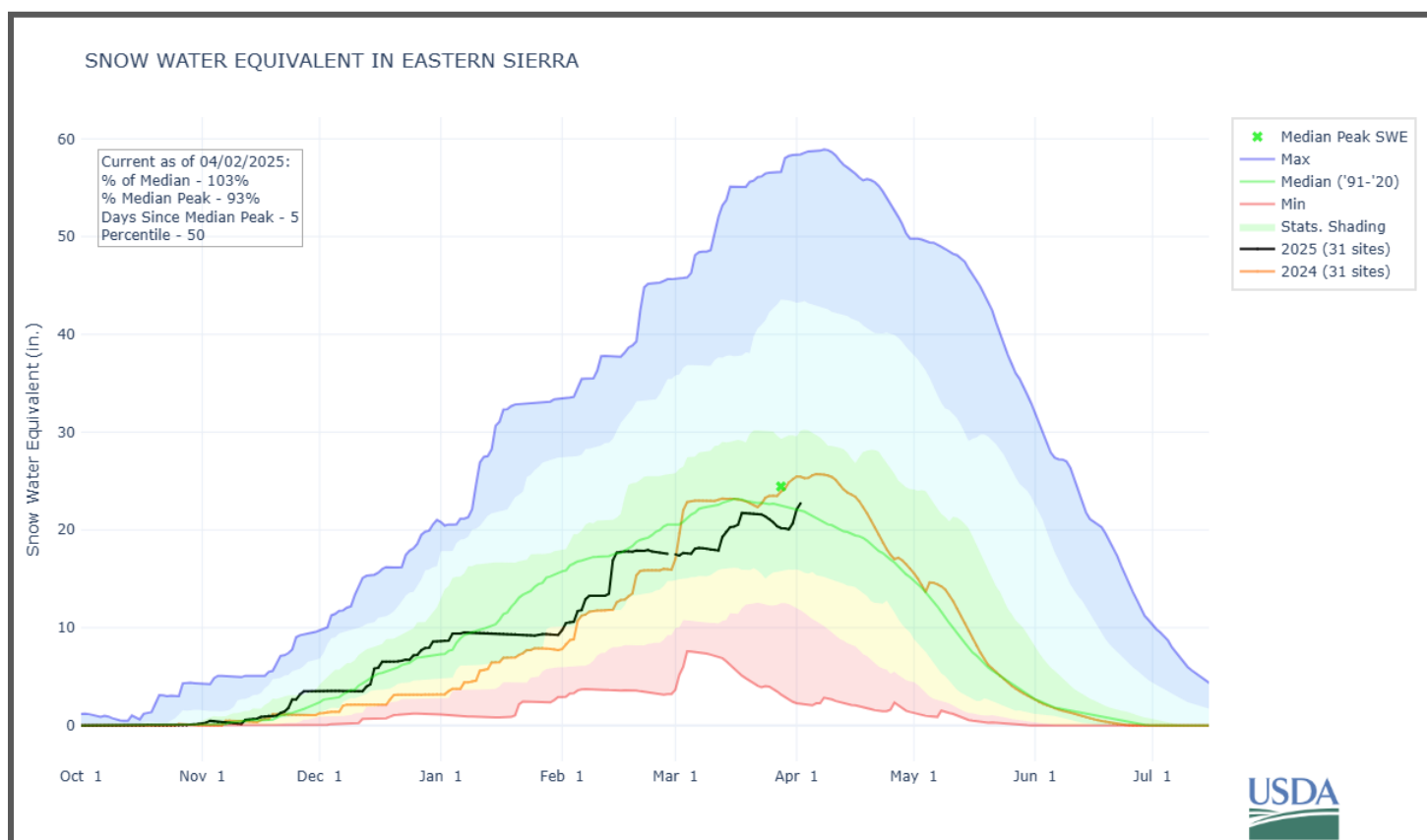


Figure 4. [NRCS Snow Water Equivalent](#) for the combined Tahoe, Truckee, Carson and Walker basins with WY 2025 in black and WY 2024 in orange (Top, and Humboldt bottom).

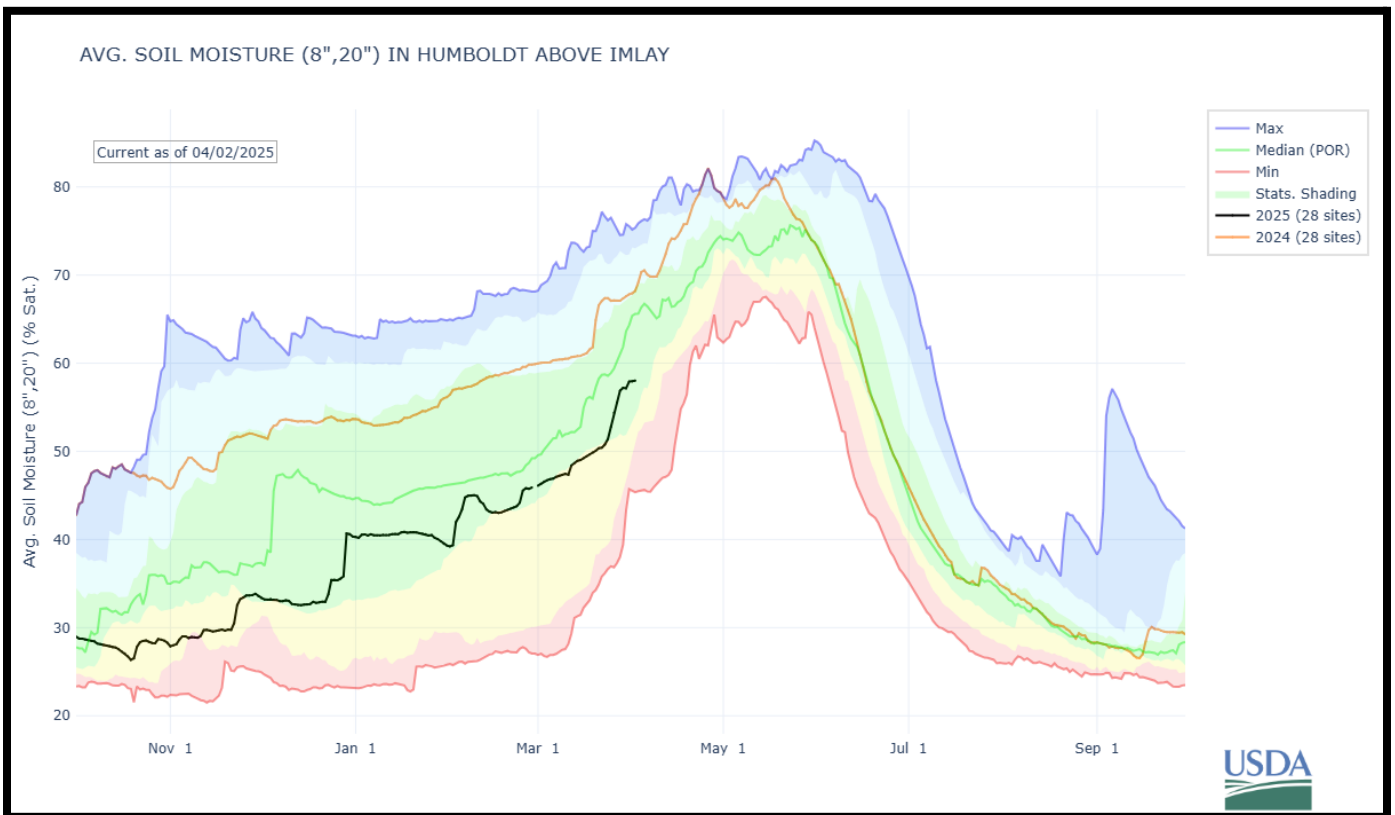
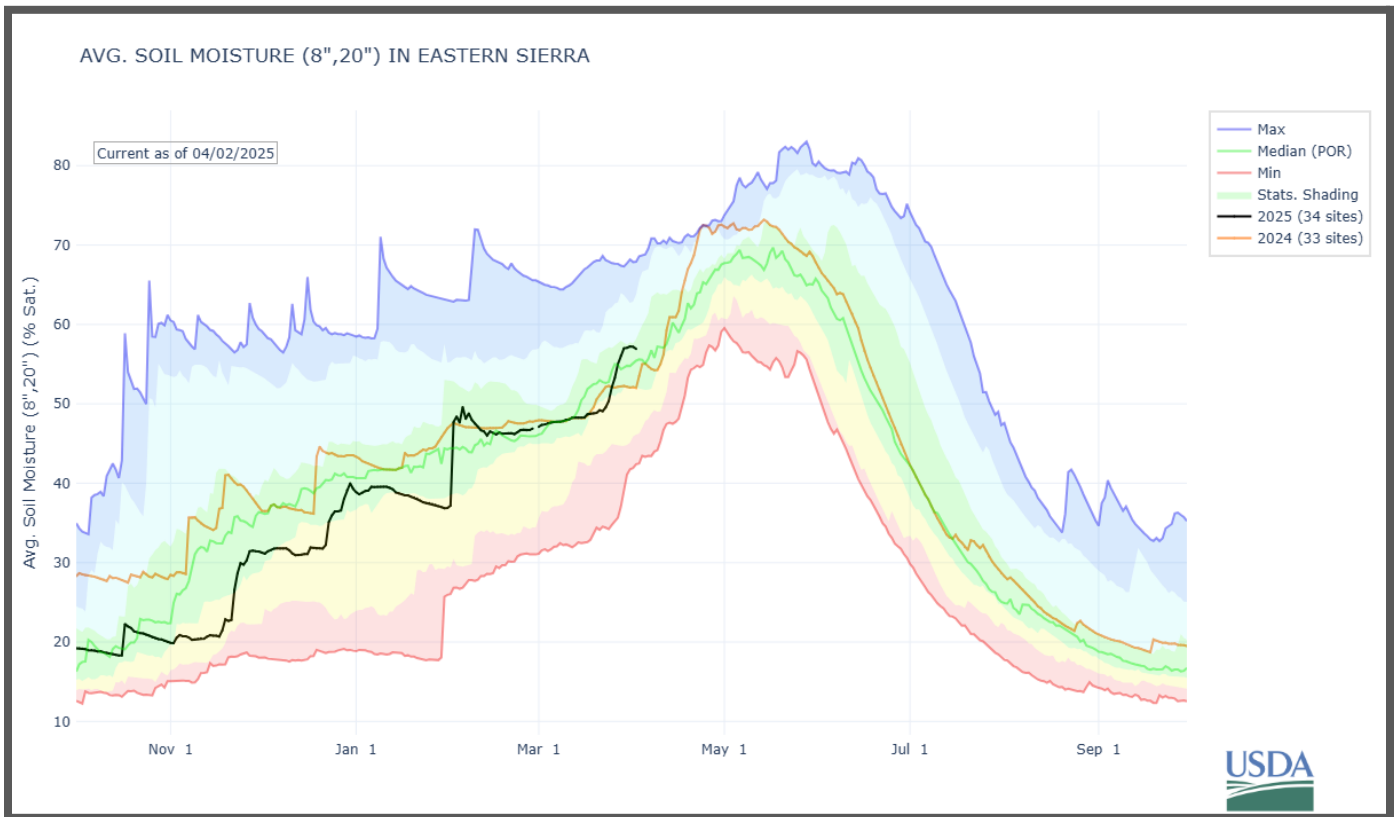
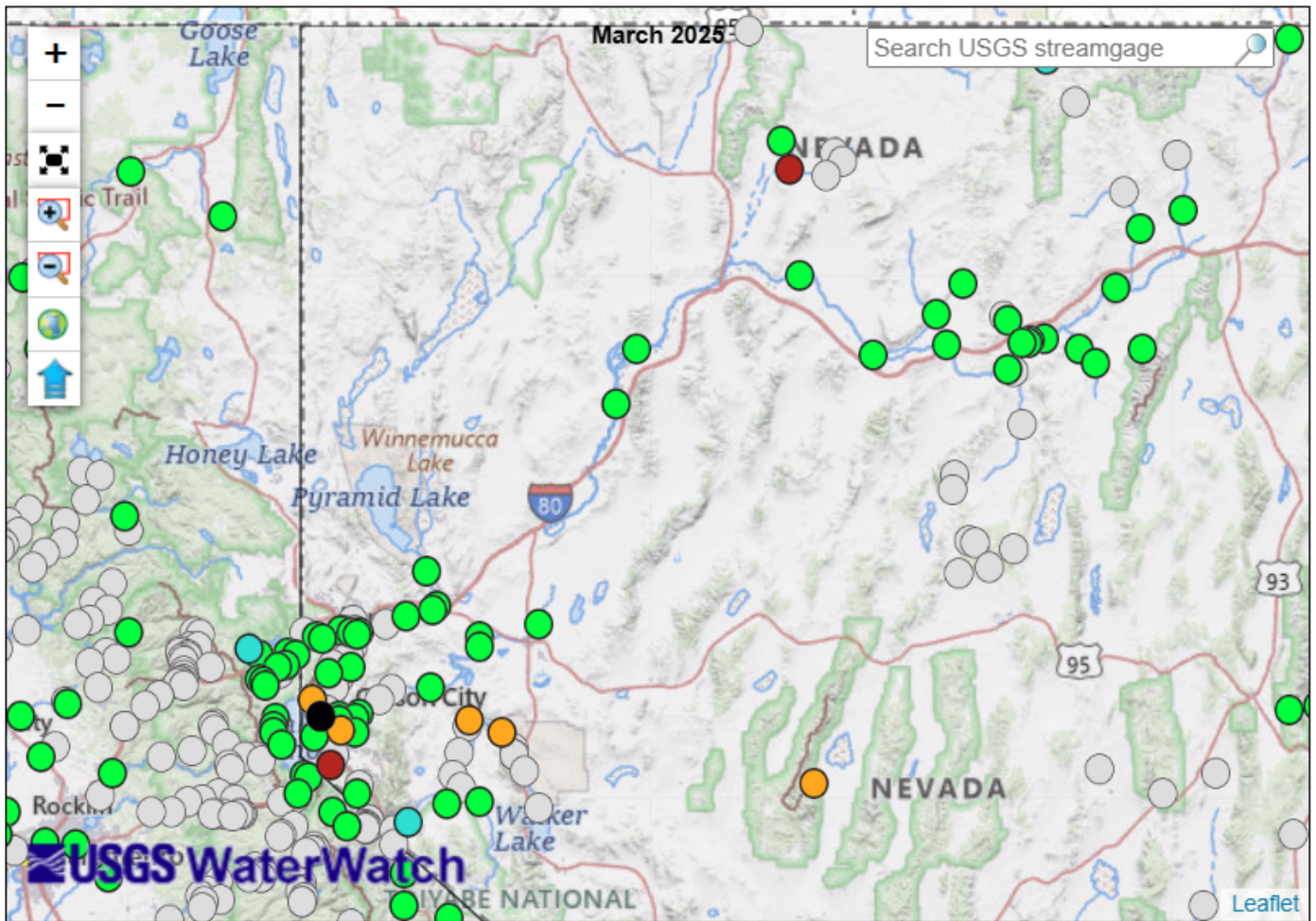


Figure 5: [NRCS SNOTEL soil moisture](#) for the combined Tahoe, Truckee, Carson and Walker basins (top), and Humboldt basin (bottom) indicated in black for the first four months of water year 2025. Water year 2024 is plotted in orange for additional perspective.

Map of monthly streamflow compared to historical streamflow for the month of the year



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Figure 6: [USGS Monthly average streamflow](#) for March.

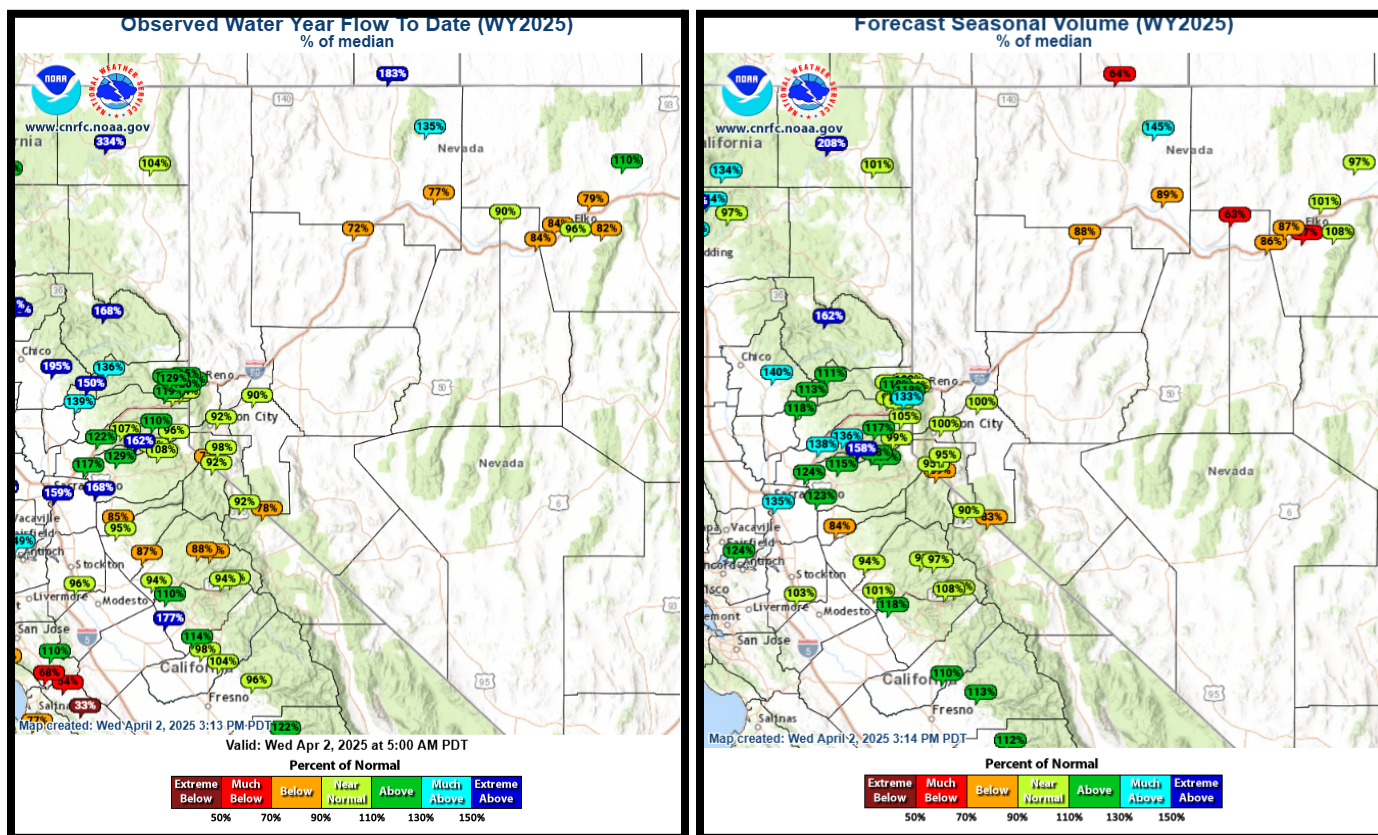


Figure 7. Left figure [CNRFC](#) Water year 2025 observed flow to date and right figure [CNRFC April-July](#) forecast volume both as % of median, both as of April 2nd.

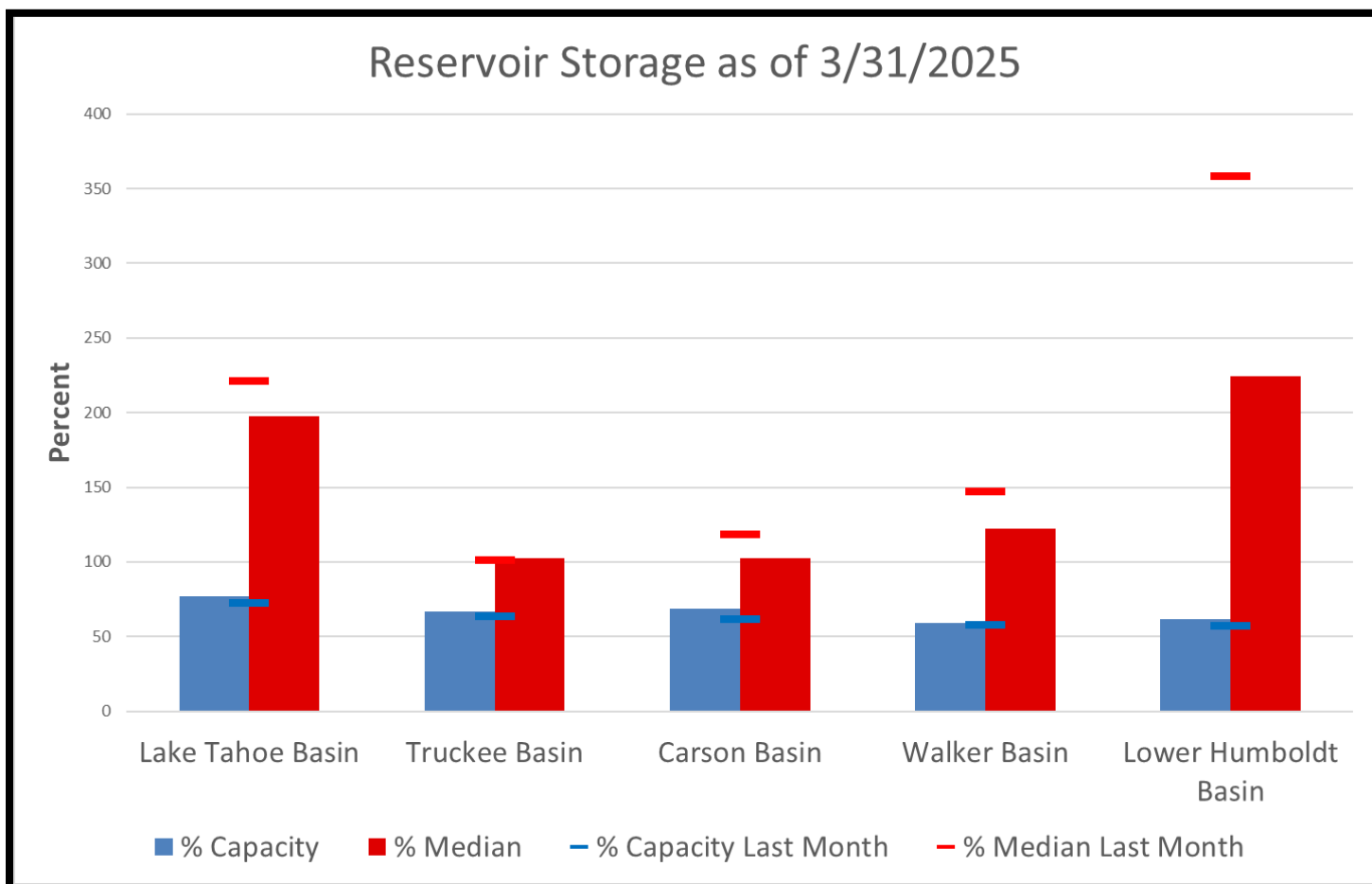


Figure 8. End of March reservoir storage relative to capacity and **median*** for this month and last month. (*note reference was recently updated to NRCS 1991-2020 median values)

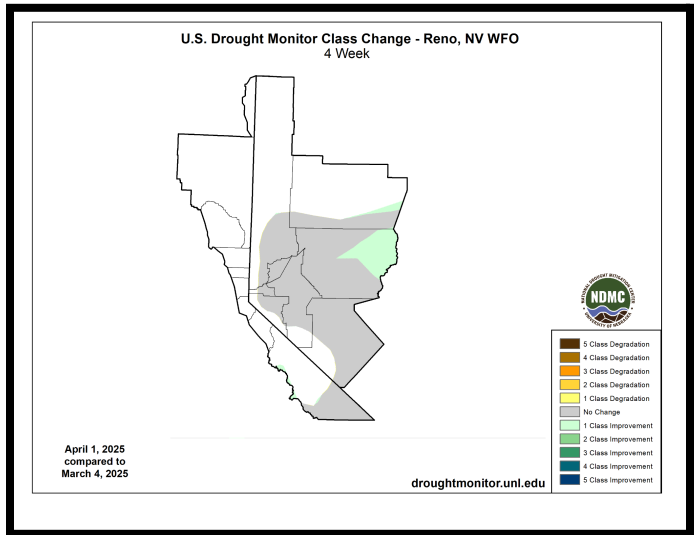
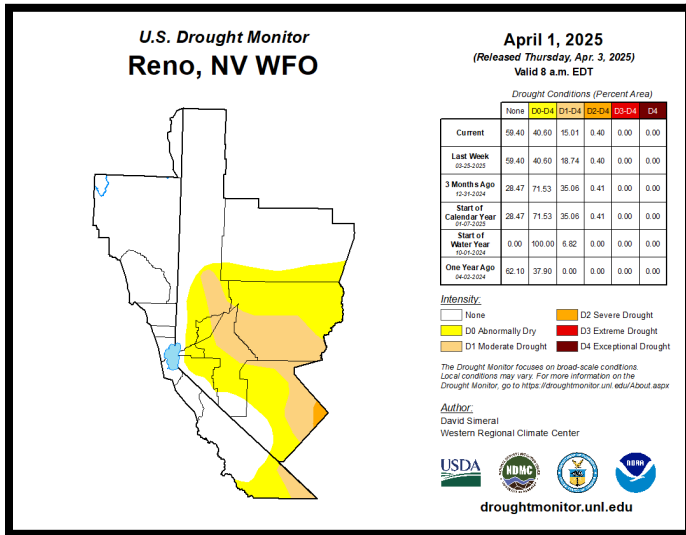
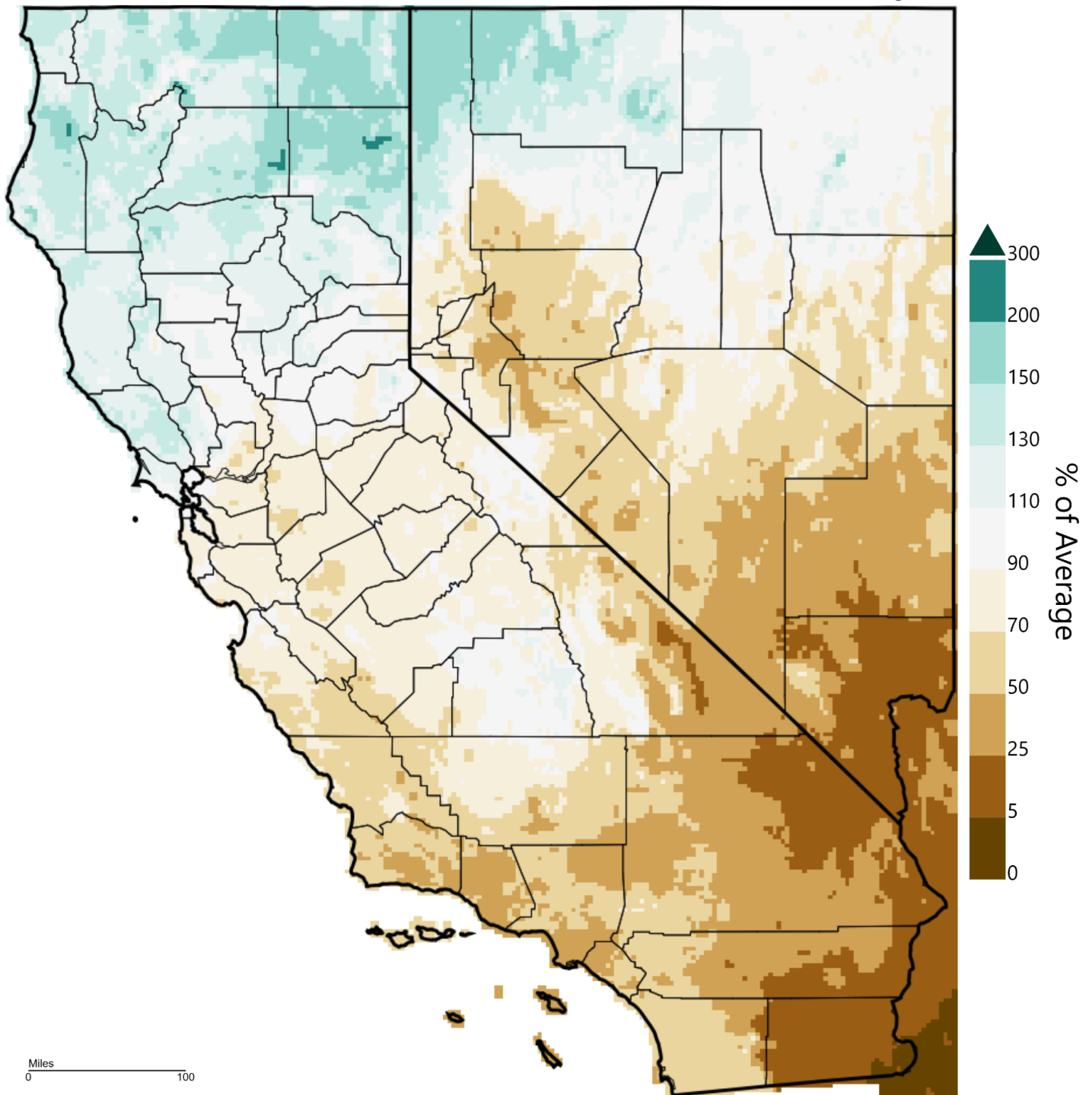


Figure 10: April 1 Drought Monitor Status and 4 week change map. Check for updates at: [Drought Monitor](https://droughtmonitor.unl.edu).

California-Nevada - Precipitation

October 2024 - March 2025, Percent of 1991-2020 Average

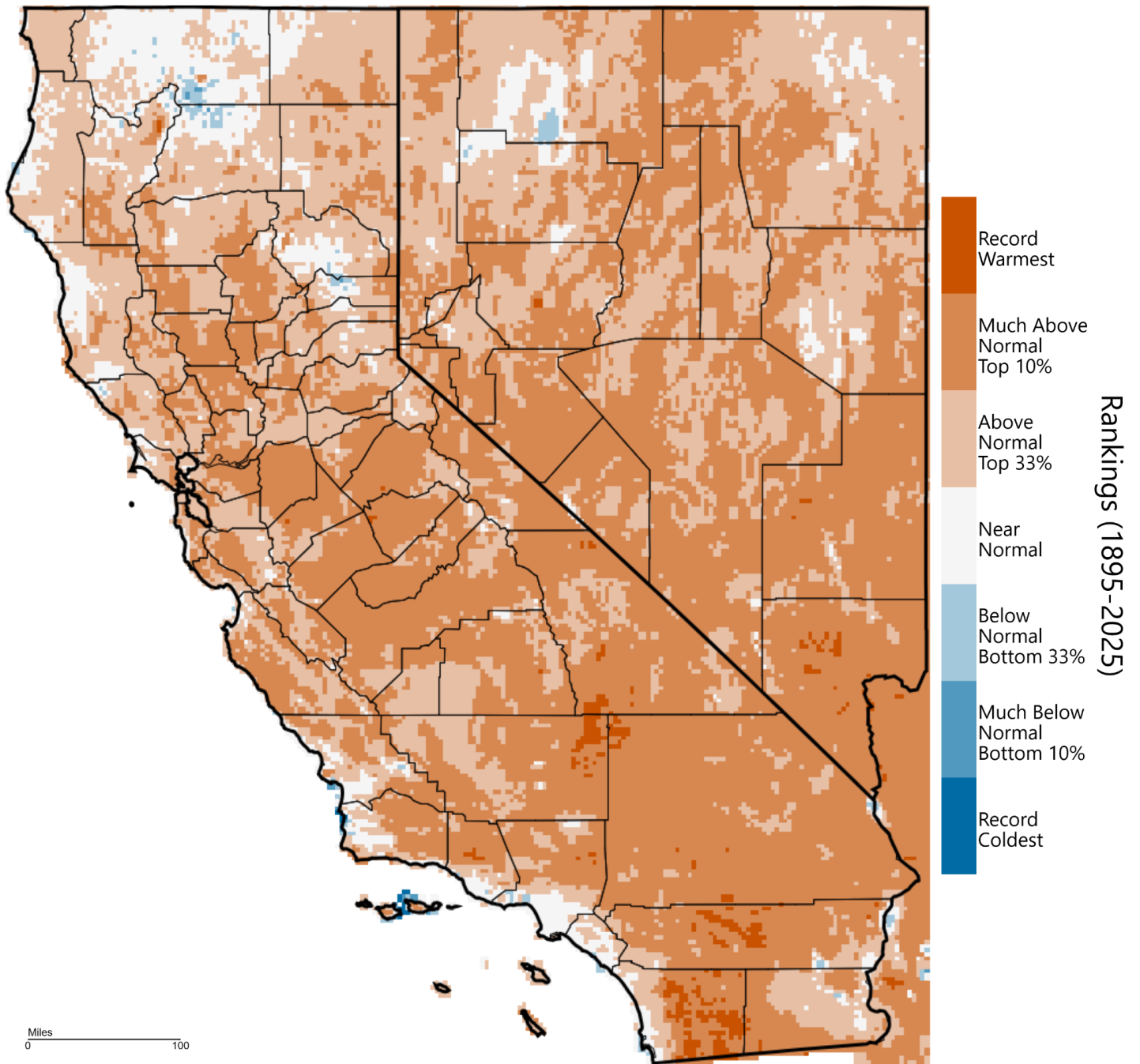


WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Apr 2025

Figure 11: Water year to date precipitation. Courtesy of West Wide Drought Tracker. ([WWDT](#))

California-Nevada - Mean Temperature

October 2024 - March 2025, Percentile



WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Apr 2025

Figure 12: Water year to date temperatures. Courtesy of West Wide Drought Tracker. ([WWDT](#))