Monthly Climate Report

NWS Reno NV

Issued: 7/7/2025

Weather Synopsis & Highlights:

Temperatures in June finished between 3 to 6 degrees above average (Figure 1), which was in the top 10th percentile for most of the region. Precipitation in June finished below 25% of average for most of western Nevada, northeast California, and the eastern Sierra (Figure 2). There were localized areas where showers and storms produced enough precipitation for those locations to finish above average.

June began with above average temperatures, although highs eased back from the record warmth that closed out May, with this year's first Red Flag Warning carried over through the 1st, due to increasing winds and continued lightning threat. Highs through the first week of June were generally in the mid 80s-lower 90s for lower elevations, and 70s near the Sierra. Afternoon heating combined with a nearly stationary area of low pressure off the CA coast produced isolated showers and thunderstorms each afternoon mainly near the Sierra from the 1st-4th. On the 5th, the thunderstorms spread northward into far western NV, including a persistent storm that produced over 1.5" of rainfall in foothills west of Reno, and between 0.50-1.0" of rain across much of Reno near and south of I-80 (Photos 1, 2, and 3). Urban flooding with road closures resulted from this storm, along with a mudflow that closed a road in west Reno, which required towing of two vehicles which were stuck in the mud. Other storms on the 5th produced pockets of heavy rainfall around Minden and into northern Mono County.

The storm coverage decreased and returned closer to Sierra locations on the 6th and 7th, with a few storms again producing pockets of heavy rainfall, most notably for parts of I-80 just west of the CA-NV border. Then for the 8th-9th as the low pressure that sat off the CA coast finally moved inland, storm coverage expanded northward to include more of western NV and northeast CA. While rainfall was spotty with mainly light amounts, gusty outflow winds near 50 mph produced a dust storm across much of Pershing County in west central NV on the evening of the 8th, with visibility below ¼ mile for parts of I-80 near Lovelock. The final day of thunderstorm activity on the 10th was limited to northeast CA and far northwest NV and a small portion of eastern Mineral County, with the strongest storm over northern Lassen County producing radar estimated rainfall of over 2 inches. Temperatures also warmed up to the mid-upper 90s in lower elevations and lower-mid 80s near the Sierra from the 8th-10th. A couple of fires also started around the Reno-Sparks area on the 10th, with the larger fire on a hill near Spanish Springs burning about 115 acres before it was contained.

A drier weather pattern then set up from the 11th-18th, with breezy to gusty winds for most afternoons. Red Flag Warnings were in effect for the 13th and 16th due to increased wind gusts combined with very low humidity. Temperatures returned to near typical mid-June levels with highs mainly in the mid 80s-lower 90s in lower elevations and 70s near the Sierra from the 11th-17th, then warmed up briefly to the mid-upper 90s in lower elevations and lower-mid 80s near the Sierra on the 18th.

A significant change to the weather pattern then occurred from the 19th through the 22nd as a colder storm system reached the west coast and then moved inland. This storm produced stronger winds on the 19th and

especially the 20th (Photo 4), with Red Flag Warnings again in place. Wind gusts peaked near 50-55 mph, with gusts around 65 mph for wind prone areas of western NV on the 20th. A structure fire during the early morning hours of the 20th in Douglas County southeast of Gardnerville spread rapidly northeast due to the strong winds, eventually reaching parts of the Pine Nut mountains and burning almost 18,000 acres and was named the Conner Fire (Photo 5). Gusty winds continued on the 21st especially for areas south of US-50. However, a collapsing storm cell produced a strong downdraft and outflow over Lake Tahoe during the afternoon of the 21st, which led to unusually rough conditions on the lake. A boat carrying 10 people capsized near Emerald Bay, with 8 drowning fatalities.

While very warm temperatures continued on the 19th, a sharp cooling then took place, with highs only in the 60s-lower 70s for lower elevations and 50s-lower 60s near the Sierra for the weekend of the 21st-22nd. Scattered rain showers and a few thunderstorms also accompanied these cooler conditions, and even a light dusting of snow fell in the Sierra around Tahoe on the early morning of the 22nd (Photos 6, 7) . Temperatures then gradually warmed up for the final week of June, with highs returning to the 90s from the 26th through the end of the month. A few sites in west central NV returned to 100+ degree highs on the 29th and 30th. No significant precipitation or thunderstorm events occurred for the final week of June.

Hydrology:

Warm June temperatures lead to the meltout of the last four SNOTEL sites that still had measurable snow at the start of the month. The last SNOTEL to melt out was Independence Lake on the 29th, which was close to normal and about 10 days after its typical rival Leavitt Lake. Most Mountain and valley locations saw below normal precipitation for the month of June, but isolated heavy rains from thunderstorms had a few SNOTEL sites reporting near to above average in the Carson and Walker basins (Figure 3). As described in the weather section above, heavy rain during the evening of June 5th led to flooding near West 4th streets and Mayberry in Reno. Several weather stations in that area reported between 1.5 and 1.9” of rain, most of which fell in 45 minutes. The estimated rainfall recurrence interval for this event from the NOAA Atlas 14 was in excess of 100 year or a 1% chance of occurring in any given year.

End of June mountain soil moisture as measured by SNOTEL is near normal for the eastern Sierra and slightly below normal in the Humboldt basin (Figure 4). Spatially modeled soil is near to below normal for most areas (Figure 5). Streamflow for the month of June was mostly near normal, but several sites started to drop to below normal levels as watersheds dry out (Figure 6). Water year to date observed streamflows are generally above normal for NE California and somewhat below normal for the Carson and Walker watershed (Figure 7). Storage in major reservoirs remains near to above normal throughout the area (Figure 8).

Drought Update:

June weather conditions generally lead to early drying as demonstrated by early and rapid fire growth on the Conner fire and high atmospheric thirst of evaporative demand as indicated by the Evaporative Demand Drought Index (EDDI) (Figure 9). These generally dry and windy conditions led to expansion of D0 or abnormally dry on the US Drought Monitor map with most of the service area now in abnormally dry to moderate drought with the exception of parts of NE California which remain drought free (Figure10). Water year through June precipitation and temperatures can be found in figures 11 and 12 respectively.

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
rev.climate@noaa.gov 775-673-8100
https://www.weather.gov/rev/

Photos:

Photo 1: Thunderstorms during the evening of the 5th. Photo courtesy of NV Energy.

Photo 2: Thunderstorms produced upward of 1.6” of rain on the 5th, leading to local flooding. Photo courtesy of Tracy Moore.

Photo 3: Localized flooding on the 5th in west Reno. Photo courtesy of Nevada State Police.

Photo 4: Wind damage on June 20th at Virginia City. Photo courtesy of Joe Curtis.

Photo 5: Conner Fire on the 20th Photo courtesy of inciweb

Photo 6: Snowfall during the afternoon of the 22nd over Mount Rose Highway. Photo courtesy of Nevada DOT.

Photo 7: Snowfall on Mount Rose Ski area June 22nd. Photo courtesy of Mount Rose Ski Resort.

Figures:

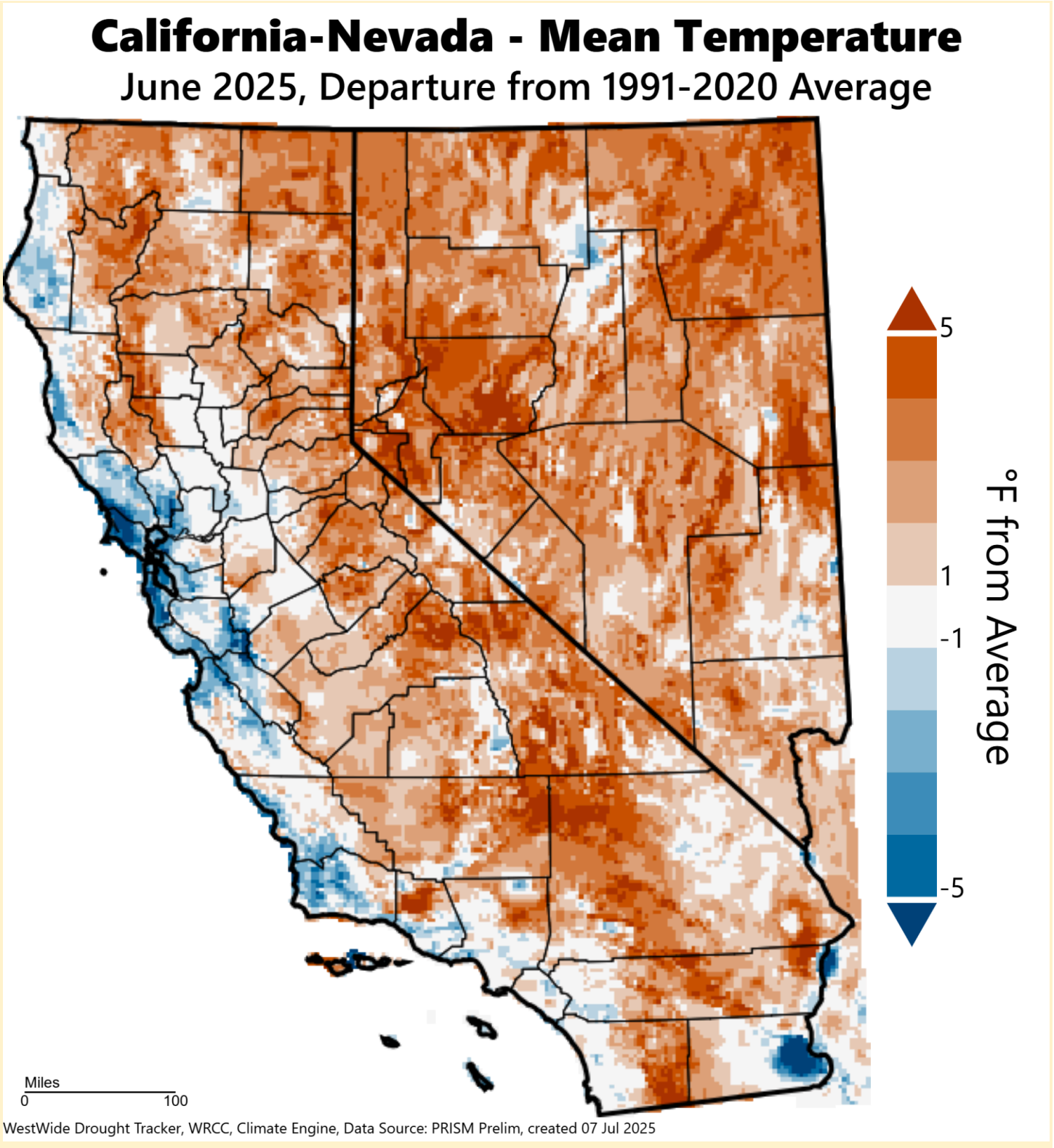


Figure 1: Departure from normal temperatures for June 2025.(WWDT)

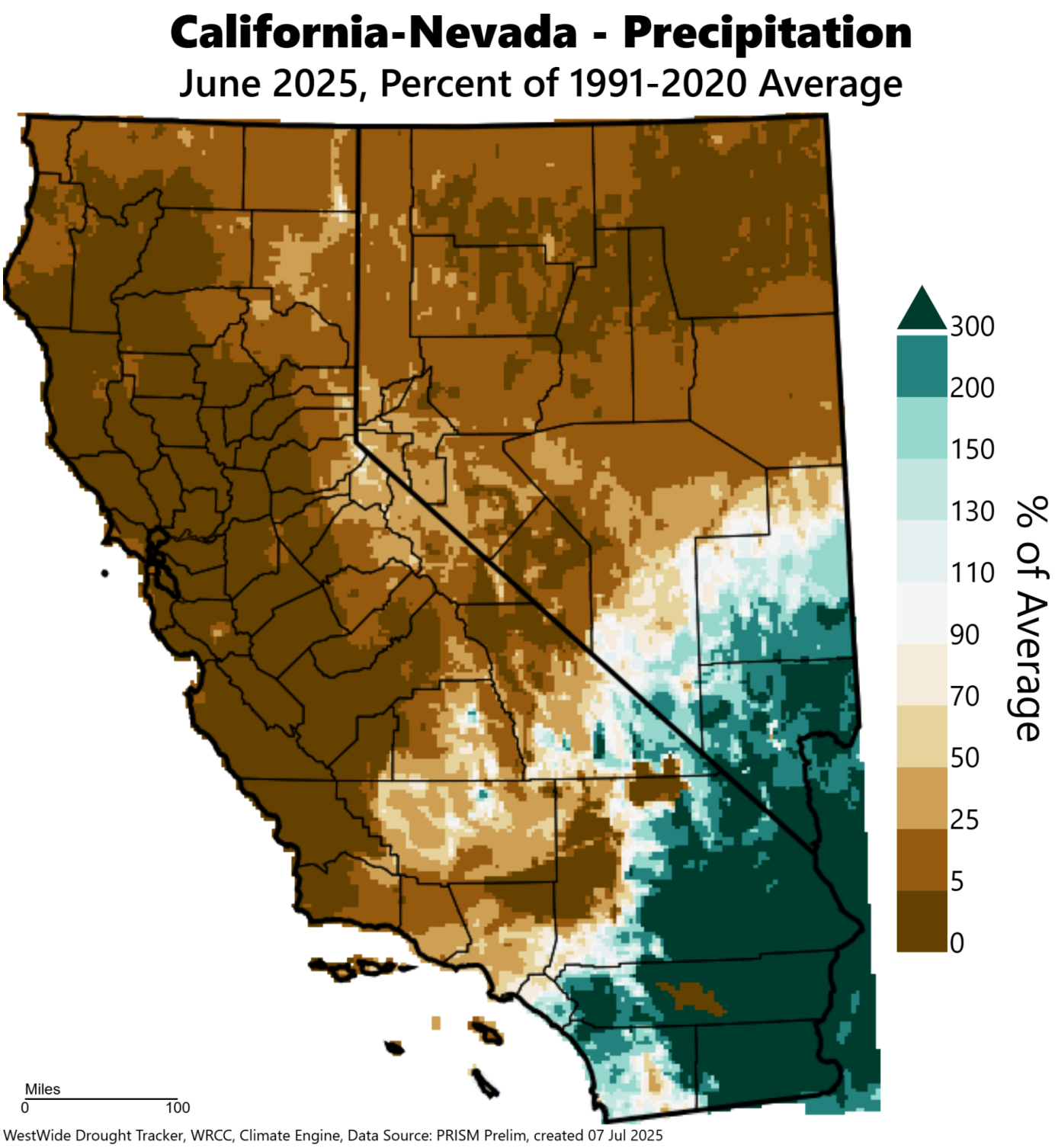


Figure 2: Percent of normal precipitation for June 2025. (WWDT)

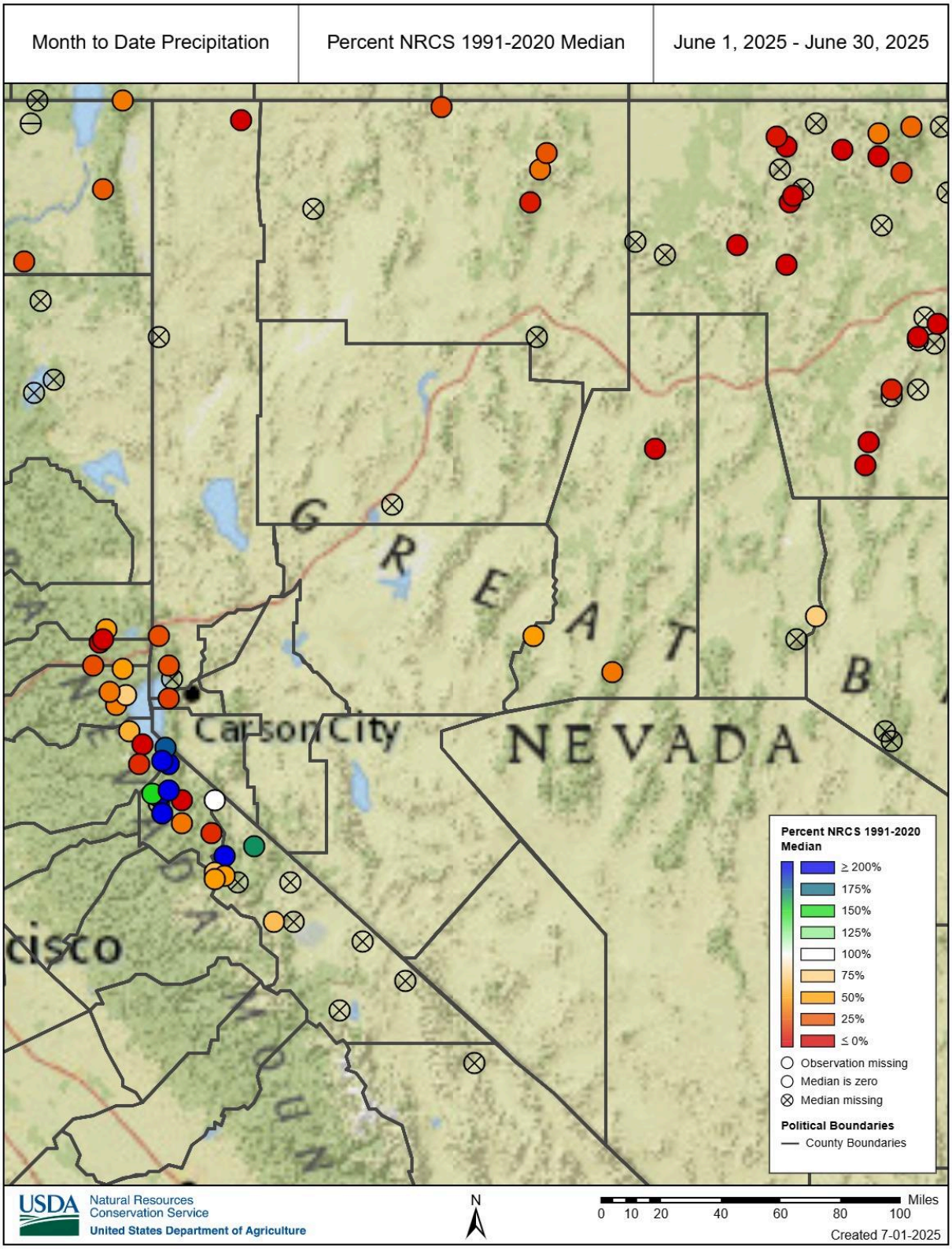
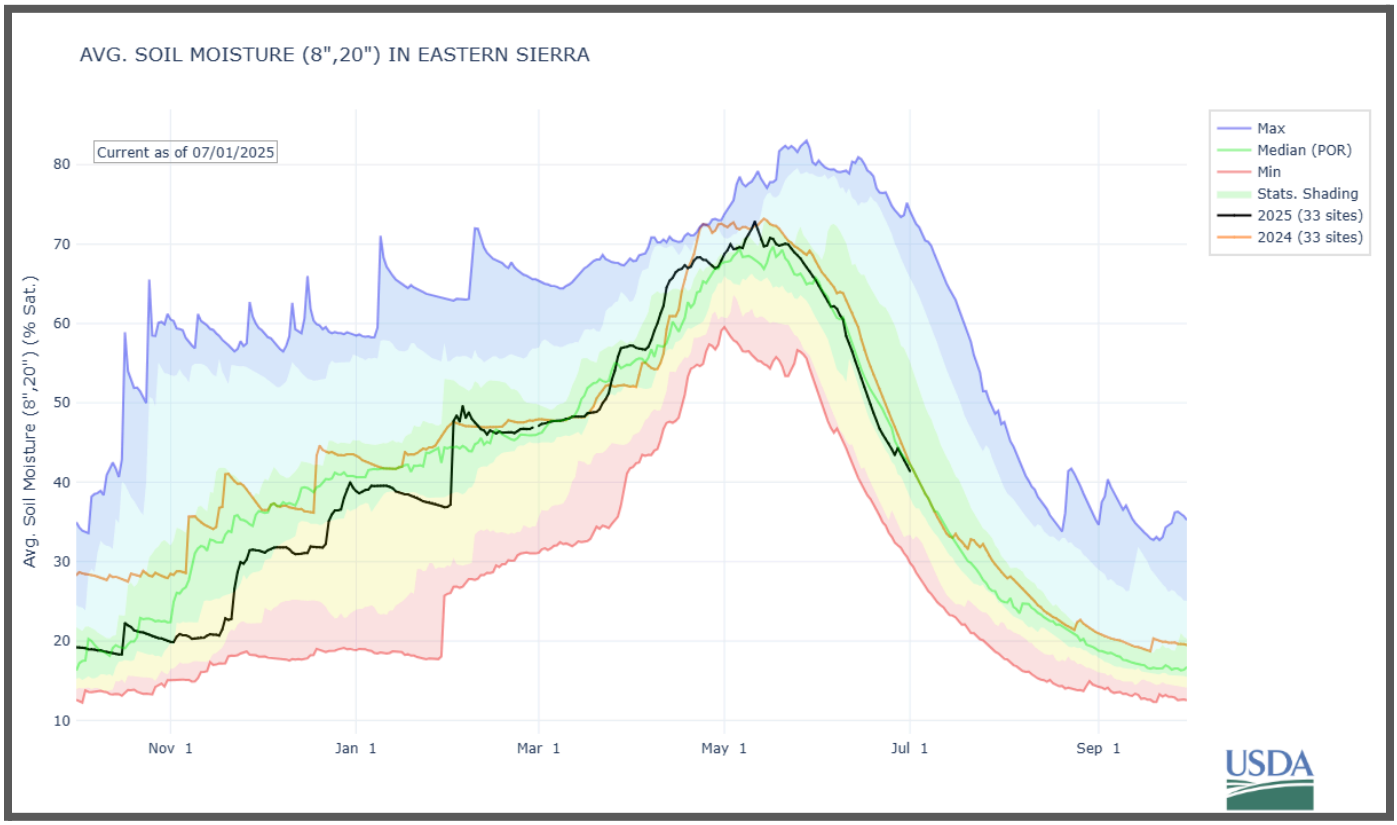


Figure 3. NRCS SNOTEL mountain precipitation as a % of median for the month of June.



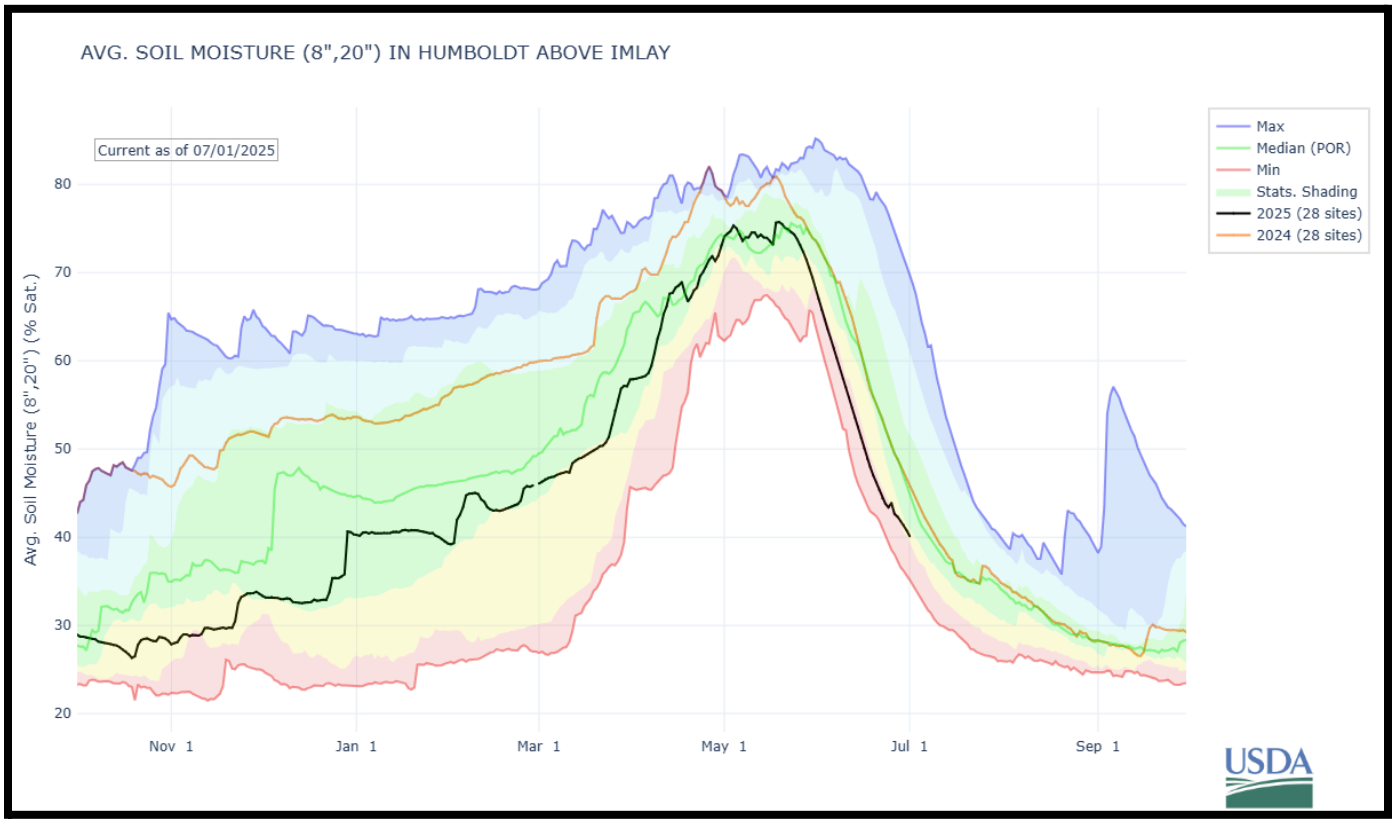


Figure 4: NRCS SNOTEL soil moisture for the combined Tahoe, Truckee, Carson and Walker basins (top), and Humboldt basin (bottom) indicated in black for the water year 2025 to date. Water year 2024 is plotted in orange for additional perspective.

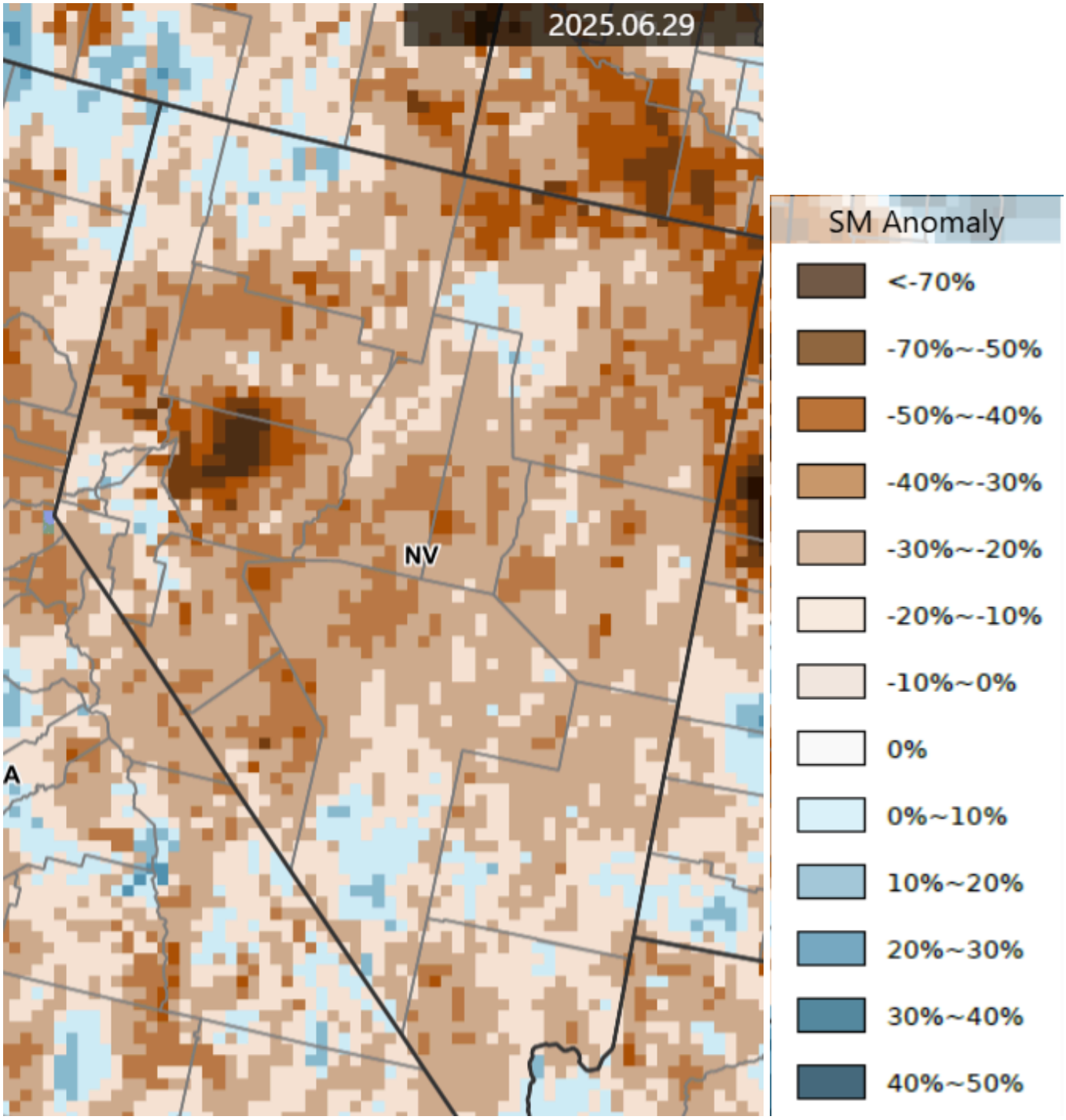
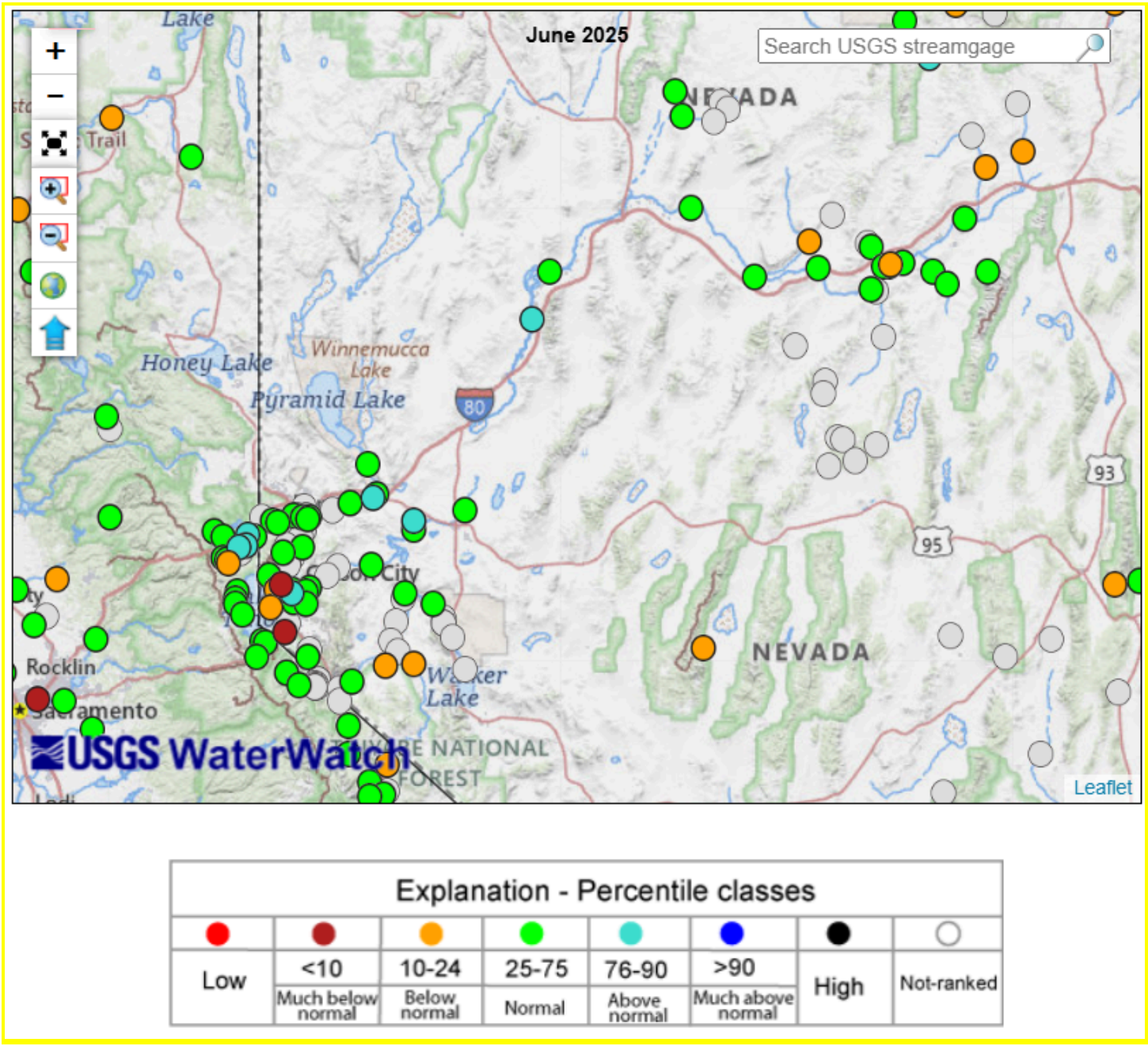


Figure 5. Crop-CASMA Soil Moisture Anomaly 06/29/2025



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 streamflow for June.

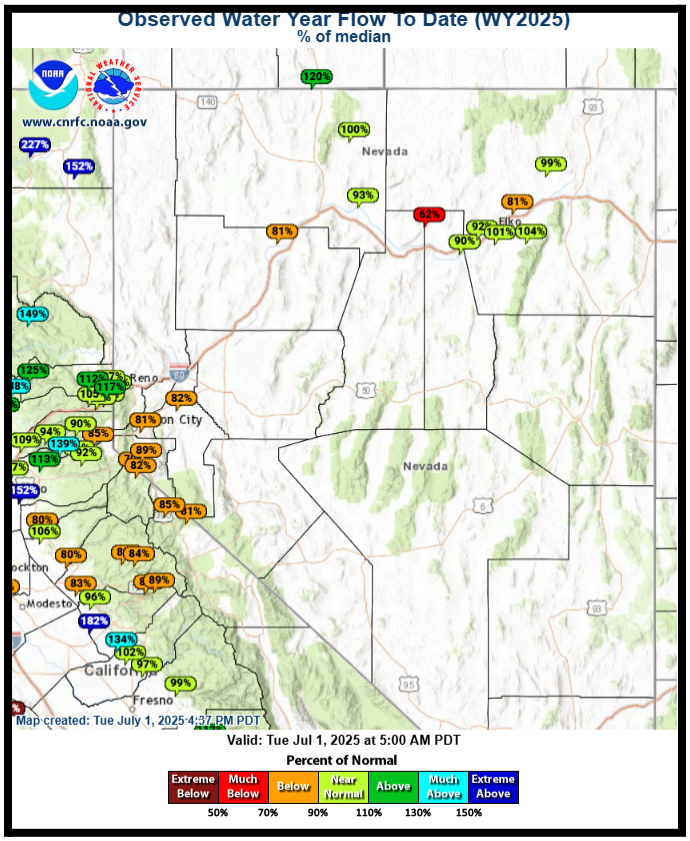


Figure 7. CNRFC Water year 2025 observed flow to date.

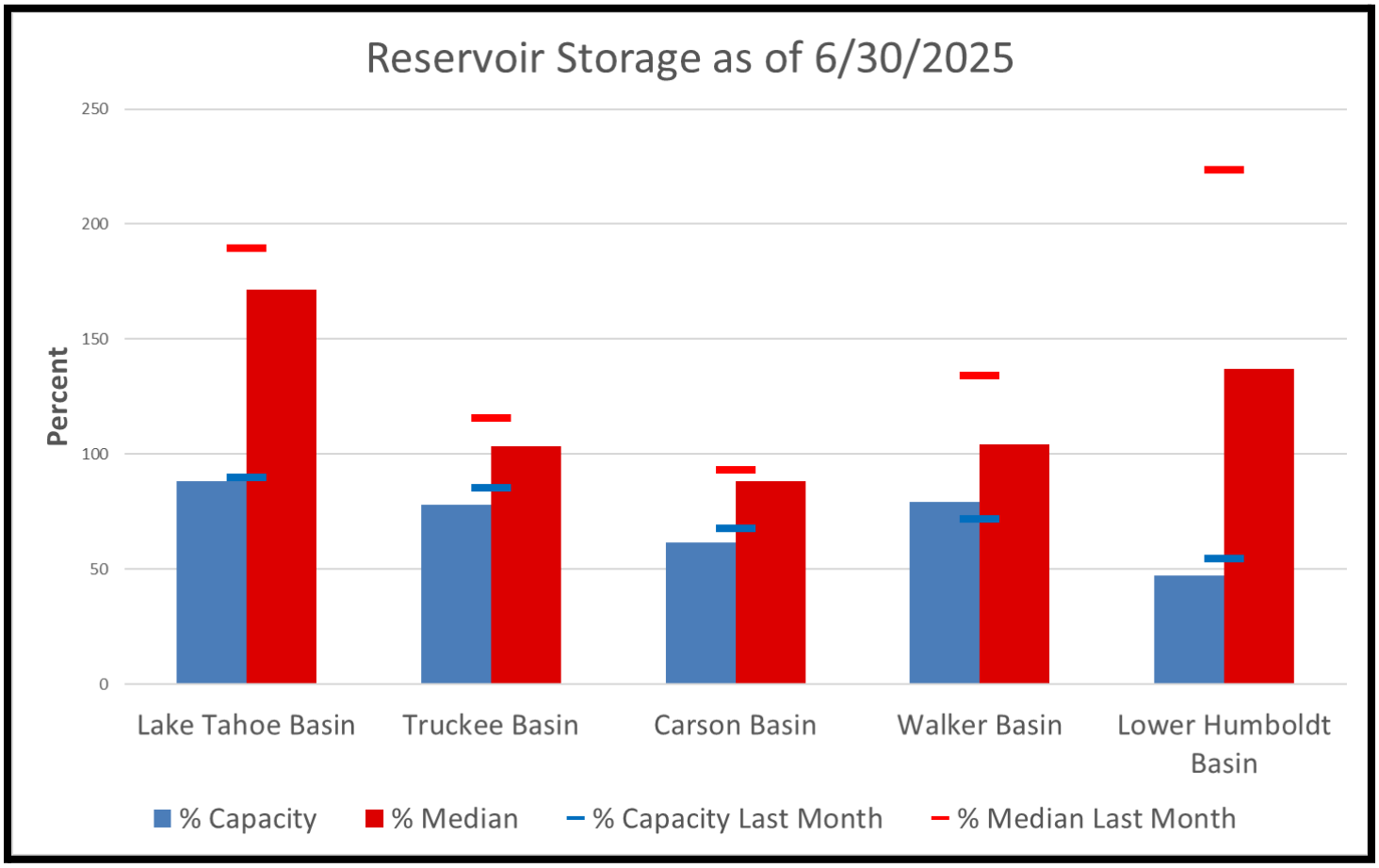


Figure 8. End of June reservoir storage relative to capacity and **median*** for this month and last month. (*note reference was recently updated to NRCS 1991-2020 median values)

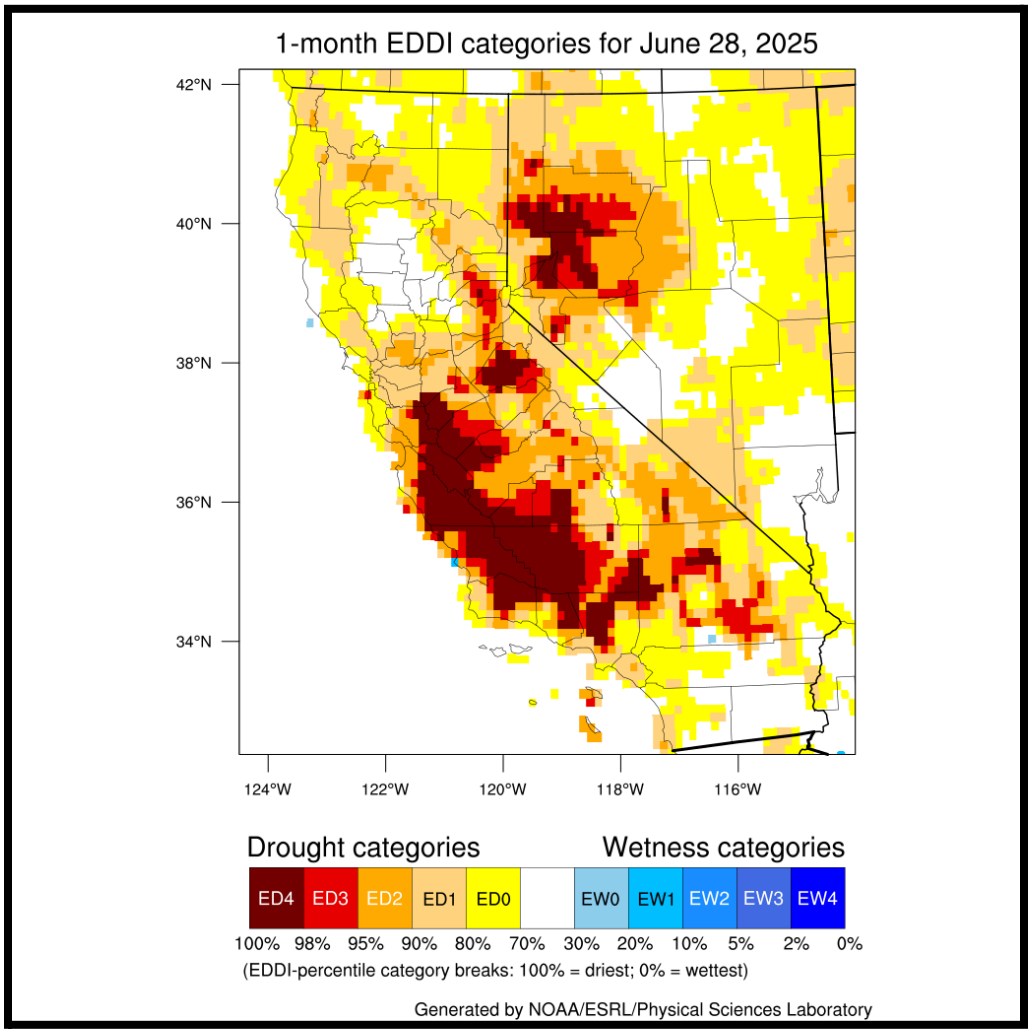
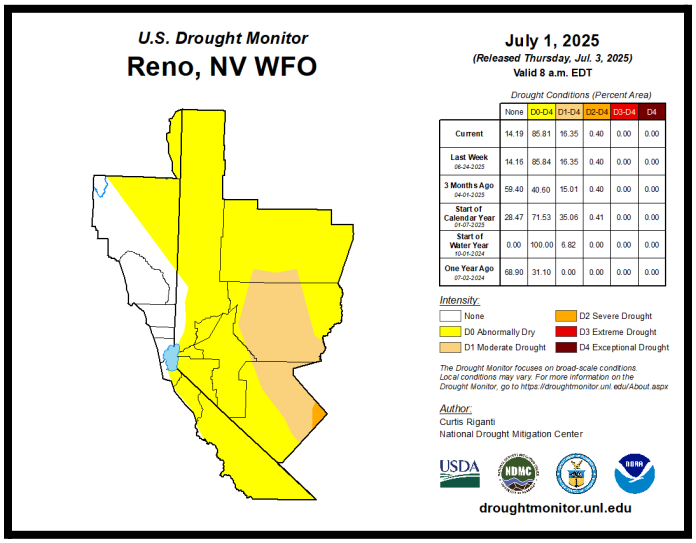


Figure 9. Evaporative Demand Drought Index (EDDI) for June.



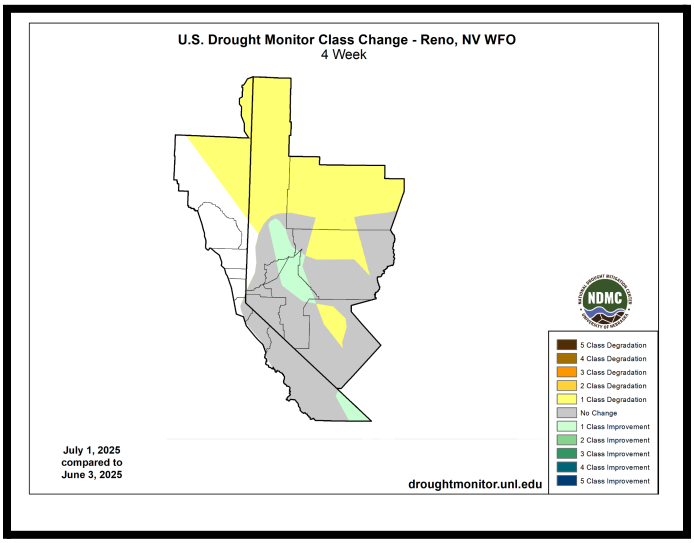


Figure 10: July 1st. Drought Monitor Status and 4 week change map. Check for updates at: Drought Monitor.

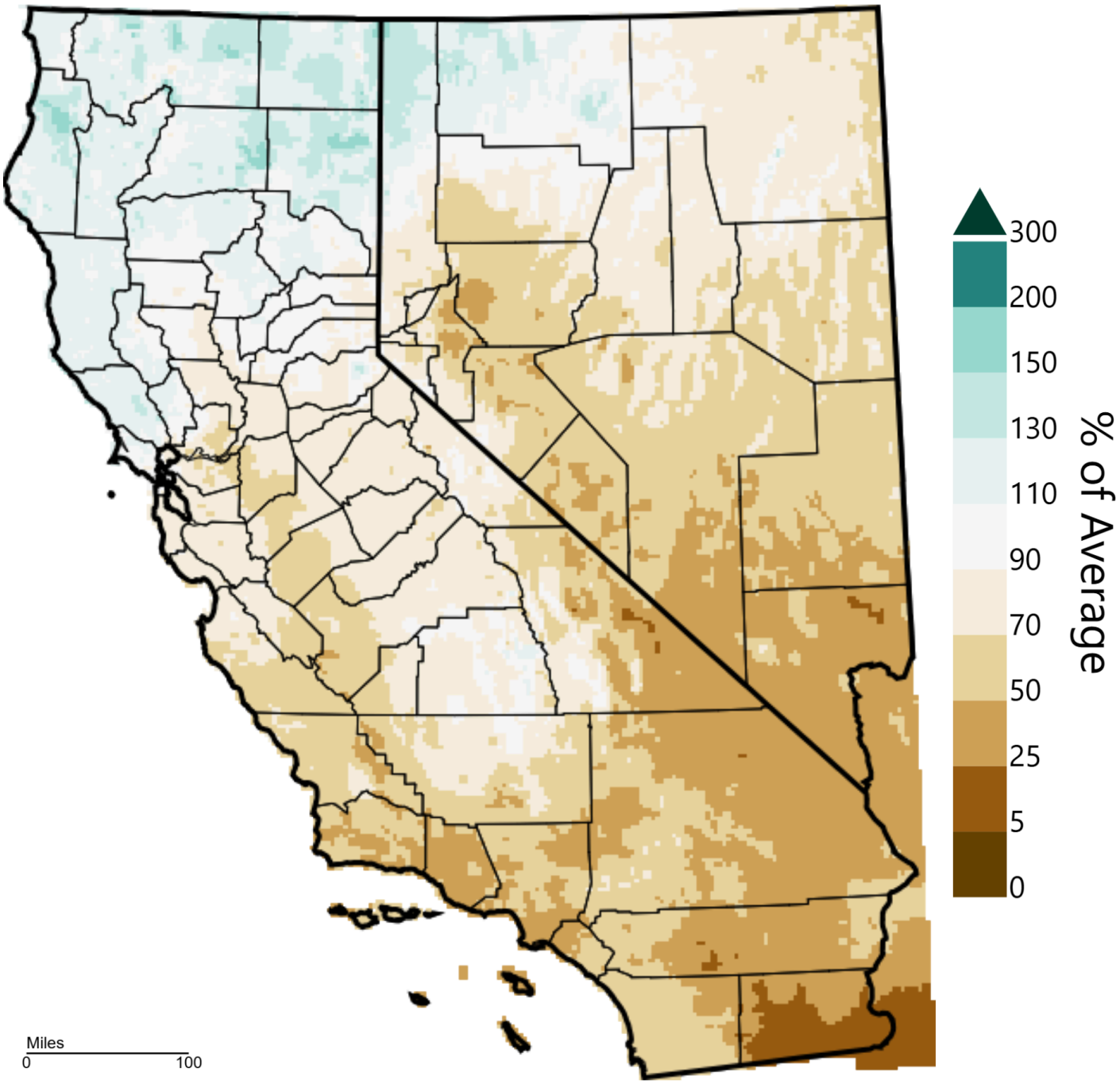


Figure 11: Water year to date precipitation. Courtesy of West Wide Drought Tracker. (WWDT)

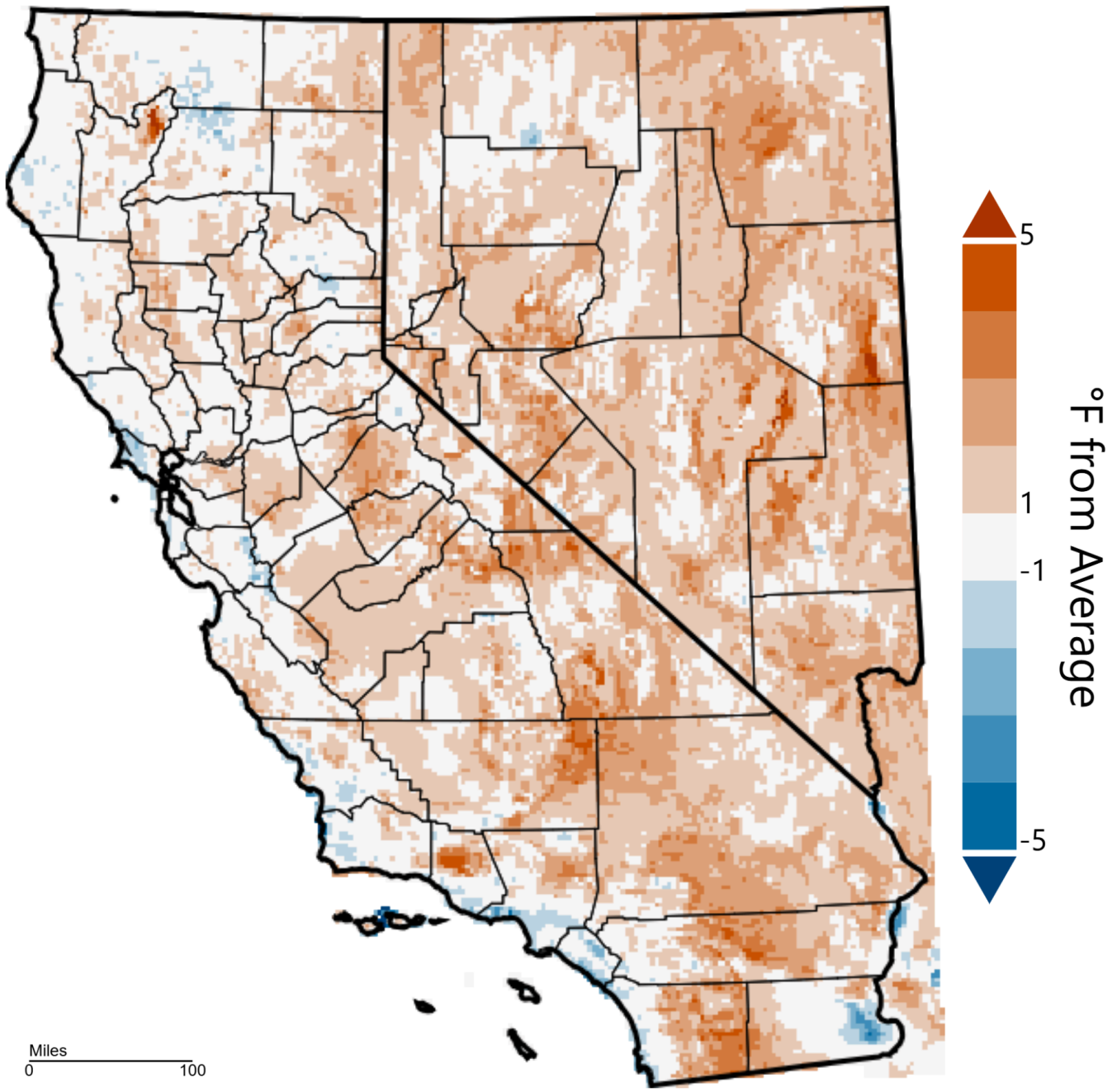


Figure 12: Water year to date mean temperatures percentile ranking. Courtesy of West Wide Drought Tracker. (WWDT)