

Nevada Drought Update: March 2025

3 March 2025

G. Dmitruk and B. Perry - Nevada State Climatologist

Late winter storms bring relief to the northwest portion of the state and mountain basins statewide. Las Vegas ends its 214-day dry streak, but Exceptional Drought (D4) emerges in eastern Clark County.

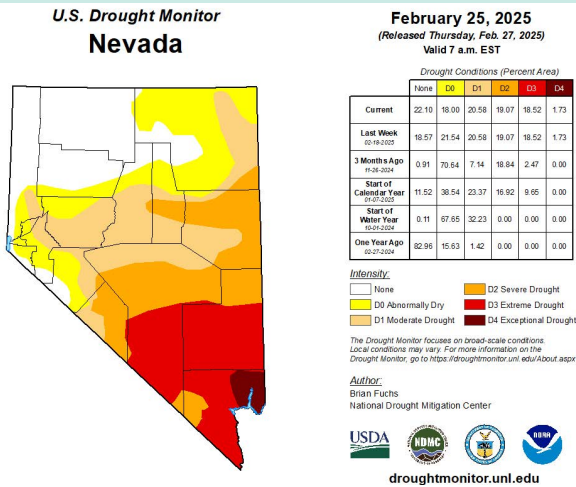


Figure 1. U.S. Drought Monitor for Nevada on 25 February 2025.

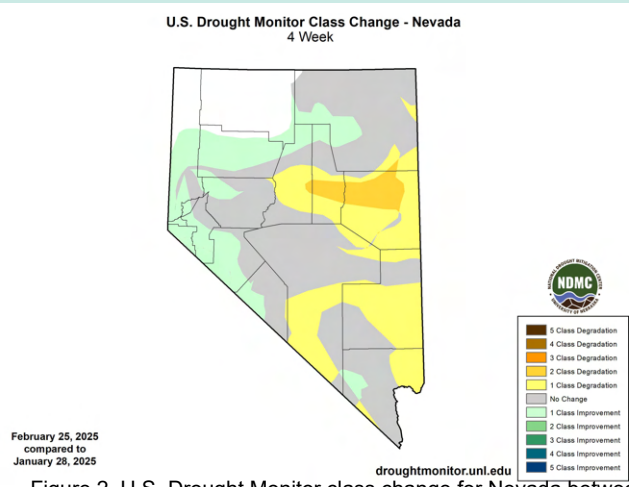


Figure 2. U.S. Drought Monitor class change for Nevada between 28 January 2025 and 25 February 2025.

February delivered much-needed precipitation to northern and eastern Nevada through numerous winter storms, improving drought status in these regions. However, drought continues to affect most of the state, with drought status persisting or worsening in the south, central, and northeastern regions. As of 25 February 2025, nearly 60% of Nevada was impacted by drought (a 6% increase from last month), and 18% by abnormally dry conditions (Table 1). Conditions in eastern Clark County are particularly dire, as exceptional (D4) drought status was declared the first week of February, and little precipitation since has resulted in no improvement (Fig. 1). Extreme Drought (D3) surrounds this area, impacting a larger area of Lincoln, Nye, and Clark counties from last month (from 10.6% to 18.5%). Moving northward, drought status improves to Severe (D2) over Esmeralda, White Pine, northern Nye and northern Lincoln counties. Moderate (D1) Drought status affects east Elko, Churchill, Mineral, Lyon, Lander, and Eureka counties. Abnormally Dry (D0) conditions impact a significantly lower percentage of Nevada, as increased storm activity through the month brought above-normal precipitation and improved drought status from much of the southern Tahoe region and the counties of Washoe, Humboldt, and Pershing. Although the weather systems improved drought class conditions in the Northwest and areas surrounding the Sierra Nevada Mountains, drought worsened in the east, degrading by one class in the south, and by two classes in central Nevada (Fig. 2).

Temperatures throughout Nevada in February were mostly above their historical averages. Temperatures decreased in Sheldon National Wildlife Refuge and Hays Canyon Range, but rose in all other areas of the state, particularly in the west and south (Fig. 3). Most regions experienced temperatures 1-3°F above normal (compared to temperatures recorded during the same 30-day time period between 1991 and 2020). The most anomalous warming occurred in the southern mountain ranges, such as Grant Range and the area around Charleston Peak where mean temperatures were over 6°F normal. Widespread precipitation fell across the northern half of the state; and more notably in the South, the Spring Mountains and Las Vegas finally received precipitation (Fig. 4). The metropolis registered a staggering 214-day dry spell, which finally ended early morning on 13 February 2025 -- but this did not exceed the record of 240 days without precipitation, set in 2020. Despite this, precipitation totals for the central and southern territories were far below normal, reaching as low as 0% of normal values across the Great Basin and Carson Sink. Areas boarding the Sierra Nevada Mountain Range around Tahoe to the west, and along the northern border throughout Washoe, Humboldt, and Elko counties saw much above normal levels. Long Valley in the extreme northwest observed the most anomalous precipitation, recording over 300% above normal.

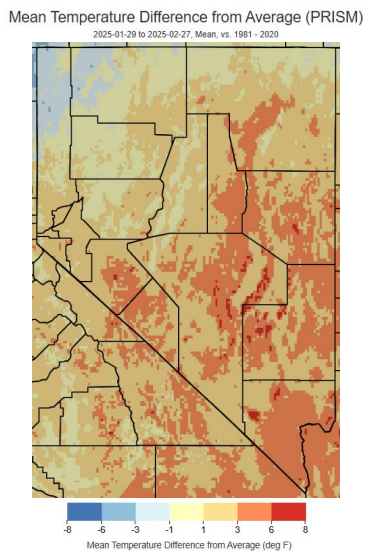


Figure 3. Mean temperature departure for past 30 days (29 January 2025 – 27 February 2025) compared to climatology between 1981 - 2020. Source: PRISM 4km Daily; Climate Engine.

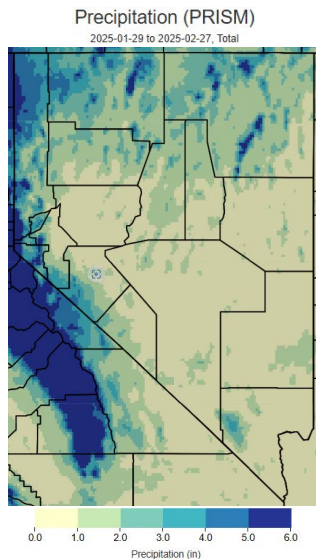


Figure 4. Total precipitation (in.) for Nevada for past 30 days (29 January 2025 – 27 February 2025) compared to climatology between 1981 - 2020. Source: PRISM 4km Daily; Climate Engine.

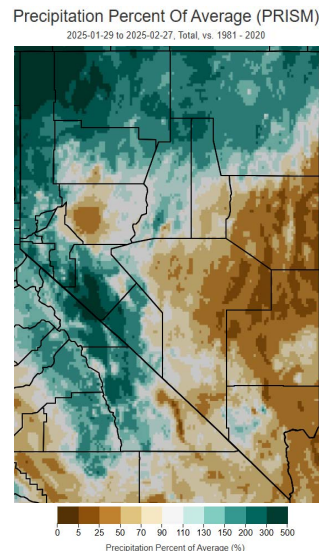


Figure 5. Total precipitation departure for past 30 days (29 January 2025 – 27 February 2025) compared to climatology between 1991 - 2020. Source: PRISM 4km Daily; Climate Engine.

Table 1. Percent of Nevada in each drought class from the U.S. Drought Monitor.

Date	28 May 2024	27 August 2024	26 November 2024	25 February 2025
None	97	1	1	22
Abnormally Dry- D0	3	93	71	18
Moderate Drought- D1	0	5	7	21
Severe Drought- D2	0	1	19	19
Extreme Drought- D3	0	0	2	18
Exceptional Drought- D4	0	0	0	2

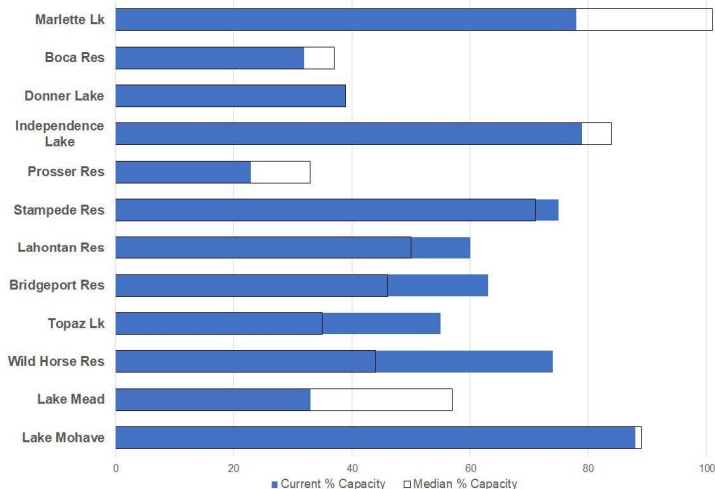


Figure 5. Reservoir storage capacity on 1 March 2025. Source: NRCS National National Water and Climate Center.

Median reservoir storage levels remained mostly steady through February. The largest change was seen from Marlette Lake in Carson City, dropping from near-100% median capacity at the beginning of the month, to 77% at present (Fig. 6). Lake Mead and Donner Lake continue to be markedly below median percent levels. Numerous water sources are above median percent capacity, including Topaz Lake and the Stampede, Lahontan, Bridgeport, and Wild Horse Reservoirs (Fig. 6). An active storm pattern throughout the month of February brought drought relief to many of the basins throughout northern Nevada. Consequently, snow water equivalent (SWE) values have risen substantially over basin-wide averages from last month (Fig. 7). The month began with a storm system that replenished the mountain snow of the Northern Great Basin, bringing its SWE values from 102% to 131%. This was followed later by more active weather later in the week, bringing rain and snow to Lake Tahoe and the Carson City area. More precipitation fell on Valentine's Day weekend, raising all basin levels in Nevada and bringing The Silver State's overall SWE readings back within median range. At present, basin-averaged SWE values are well above median values (114-143%) in northern Nevada, below median (72-90%) in the eastern Sierra Nevada and western Nevada, and well below median (39%) in the Spring Mountains in the extreme south (Fig. 8). Despite the southernmost basin enduring levels far below median values, this is a vast improvement from last month, when it was only 4%.

Looking to the monthly outlooks provided by the National Weather Service Climate Prediction Center, temperatures across Nevada are expected to be nearly normal for March -- that is to say, there is an equal chance for temperatures to be above or below historic values (Fig. 9). The exception to this forecast lies in the northwest corner of the state, where the region can expect a 33-40% chance that temperatures will be cooler than normally experienced for the month of March. The precipitation outlook for Nevada mirrors the temperature outlook, with predictions of near-normal rates being expected as we enter climatological spring (Fig. 10). Equal chances for above or below normal precipitation are projected for nearly all the state, except for the northwest corner where there is a 33-40% probability for above normal precipitation, and the southeast corner, where there is a 33-40% chance for below normal precipitation. In terms of drought, although development through March is unlikely for the northwest third of the state, all other regions can expect drought conditions to persist through the month.

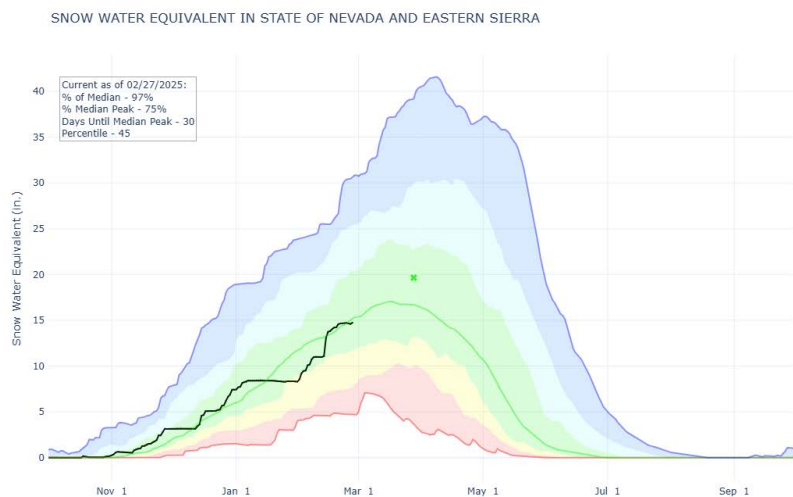


Figure 7. Time series graph depicting minimum, median, maximum, and current year levels of Snow Water Equivalent (SWE) in inches for the Eastern Sierra and Nevada based on measurements from the Snow Telemetry (SNOTEL) network of stations. Source: USDA Natural Resources Conservation Service.

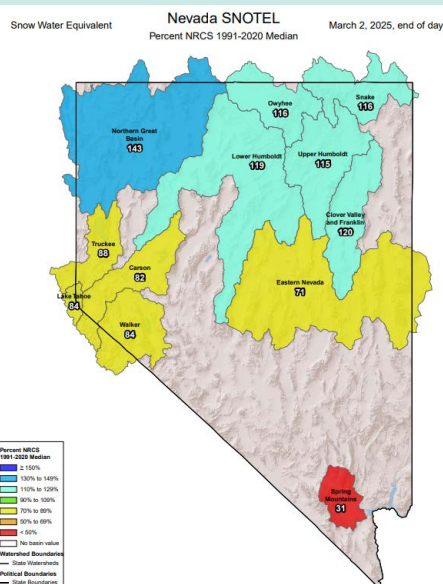
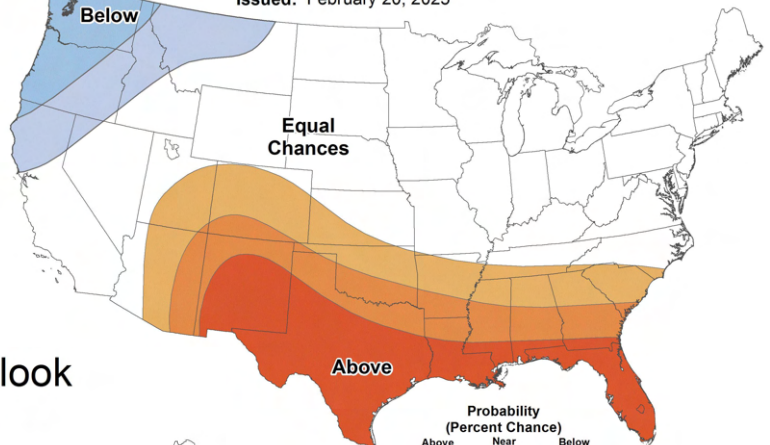


Figure 8. Snow Water Equivalent (SWE) percent of 1991-2020 median values for major watersheds for 3 March 2025 based on measurements from the Snow Telemetry (SNOTEL) network of stations. Source: USDA Natural Resources Conservation Service.

Monthly Temperature Outlook

Valid: March 2025
Issued: February 20, 2025

Figure 9. U.S. monthly temperature outlook for March 2025. Source: NOAA National Weather Service (NWS) Climate Prediction Center (CPC).



Monthly Precipitation Outlook

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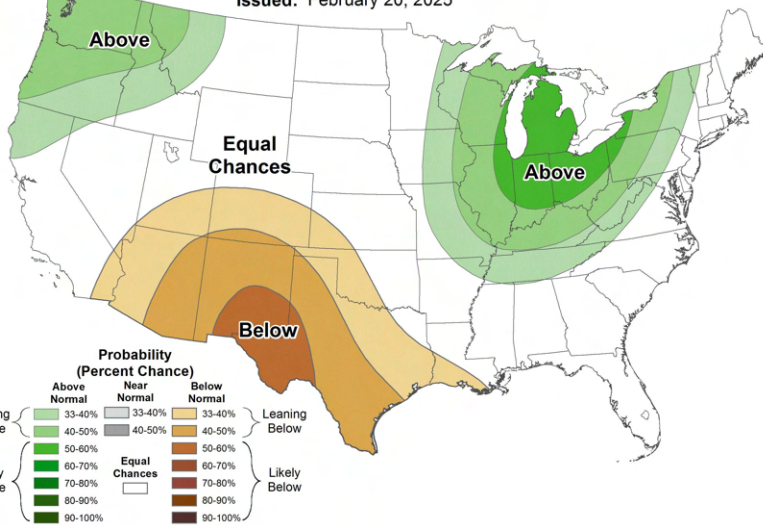
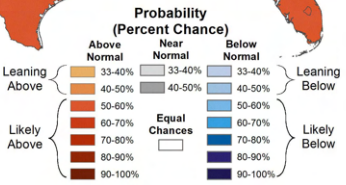
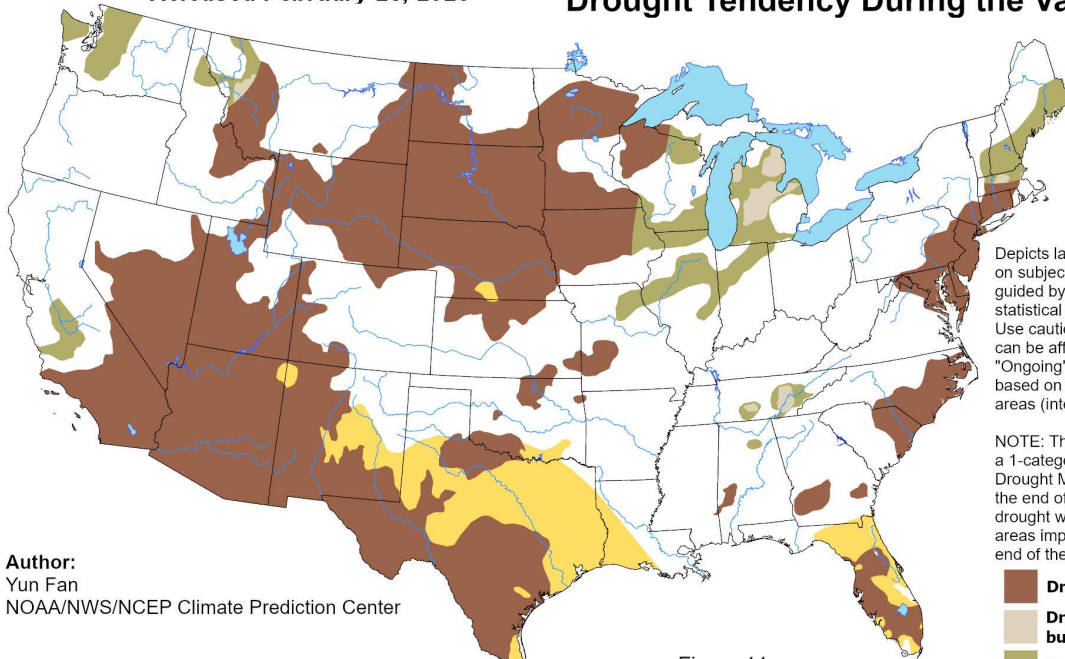


Figure 10. U.S. monthly precipitation outlook for March 2025. Source: NOAA National Weather Service (NWS) Climate Prediction Center (CPC).

U.S. Monthly Drought Outlook

Drought Tendency During the Valid Period

Valid for March 2025
Released February 28, 2025



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

- Drought persists
- Drought remains, but improves
- Drought removal likely
- Drought development likely
- No drought

Author:
Yun Fan
NOAA/NWS/NCEP Climate Prediction Center

Figure 11. U.S. monthly drought outlook for March 2025. Source: NOAA National Weather Service (NWS) Climate Prediction Center (CPC).