

# **Monthly Climate Report**



Issued: 09/12/2023 Includes previous Drought update (DGT) and Hydro Report (E5)

#### Synopsis:

NWS Reno

Temperatures: Mixed bag of above average and below average temperatures. North of I-80, most areas were 1-3 degrees above average, while south of I-80 most areas were from near average to 2 degrees below average (Figure 1). Reno's average temperature for the month of August was 76.2, 1.1 degrees above normal, mainly due to milder nights for much of the month. No 100 degree days occurred, with the highest temperature of 98 degrees on the 16th.

Precipitation was well above average (150% to greater than 300% above average), mainly from the tropical remnants of Hurricane Hilary. Reno's total precipitation was 0.42", which was 0.18" above normal.

- A climate.gov (link) to tropical storm history in CA.

#### Weather Events:

Isolated thunderstorms early in the month were most notable on the 3rd, producing outflow gusts of 45-60 mph in parts of northwest NV, which eventually produced areas of blowing dust with visibility down to 1-2 miles around Fallon.

Dry conditions returned for a few days through the 10th, then periods of monsoon moisture brought daily chances of showers and thunderstorms from the 11th through 19th. The storms were mainly held south of US-50 or along the Sierra at first, before eventually spreading northward. While isolated locations received heavy wetting rainfall, there were no significant flooding impacts. Gusty winds brought areas of blowing dust most notably to Lovelock on the 14th (visibility down to ¼ mile) and . 17th (visibility down to about 2 miles).

The main show of August was the remnants of Hurricane Hilary impacting the entire area August 20-21. Hilary was much more impactful for our neighboring offices to our south and east. For our area, it mostly provided beneficial rain (Figure 3), helping to minimize fire spread. High temperatures were also much cooler than average from the 20th-22nd, mainly in the 60s to mid 70s.

The rest of the month closed out with mainly dry conditions and temperatures warming to near average. Periods of increased breezes returned at times, with areas of haze spreading overhead from fires in northwest CA and Oregon.

## Hydrology:

No flooding was reported in the month of August in the NWS Reno Service area. Heavy rain did fall on the eastern portion of the Tamarack burn in Douglas County on August 18th and moved enough sediment to plug a culvert, but did not cause any flooding. Rainfall from the remnants of Hurricane Hilary resulted in minor rises in area creeks and streams. Streamflows throughout the area were above normal for August (Figure 4)

Reservoir storage conditions are above average for the end of August in all major reservoirs (Figure 5). As expected, storage has decreased over the month of August, but decreases have generally been less than average for the month.

#### Drought/Climate Update:

Water year precipitation remains well above average for the area (Figure 6). At this point in September, Reno currently has the second wettest water year on record, and needs 0.65" for the rest of the month to break the record. Several other locations including Minden and Yerrington have already broken the water year precipitation records. The US drought monitor currently depicts the entire NWS Reno service area as drought-free (Figure 7), which aligns well with the strong positive anomaly indicated by the Palmer Drought Severity Index (PDSI) (Figure 8).

### 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 Drought Tracker WRCC Enso page WRCC Monthly Climate Summaries Evaporative Demand Drought Index US Seasonal Drought Outlook

Contact NWS Reno Climate Team <u>rev.climate@noaa.gov</u> 775-673-8100 <u>https://www.weather.gov/rev/</u>

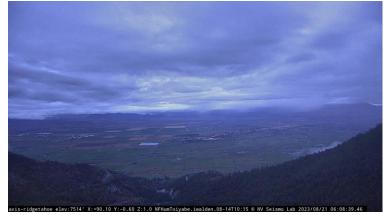
#### Photos:



Dramatic sunset enhanced by thunderstorm activity, looking southeast from NWS Reno on 8/12.

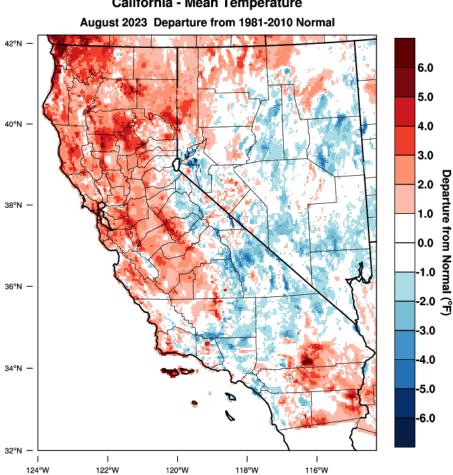


Lightning photos from mid-August thunderstorms in June Mountain (left) and Reno (right)



A cloudy gloomy view of the Carson Valley from remnant tropical moisture of Hurricane Hilary, morning of 8/21.

### Figures:

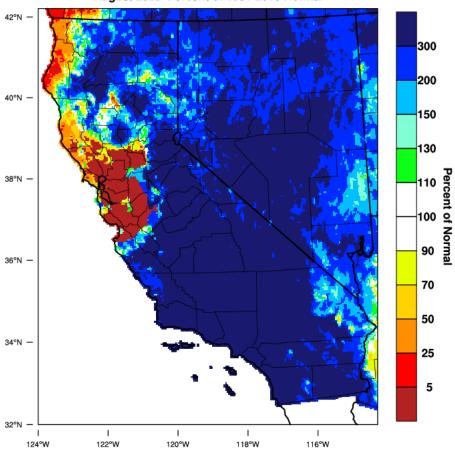


## California - Mean Temperature

WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 SEP 2023

Figure 1. Departure from normal temperatures for August 2023. Data courtesy of WestWideDroughtTracker (WWDT)

#### California - Precipitation August 2023 Percent of 1981-2010 Normal



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 SEP 2023

Figure 2. Percent of normal precipitation for August 2023. Data courtesy of WestWideDroughtTracker (WWDT)

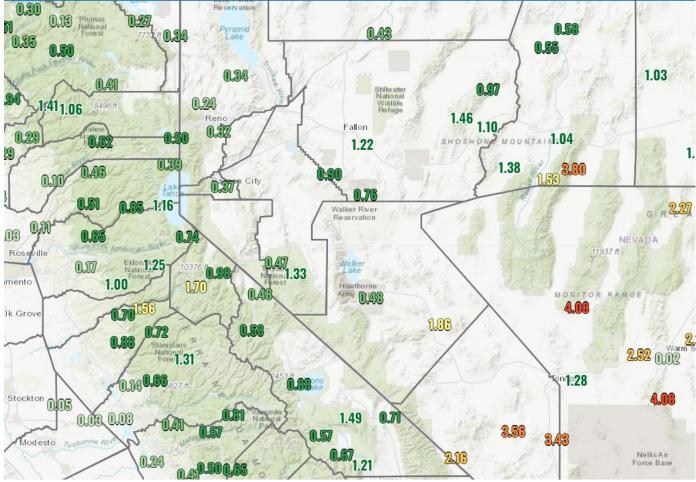
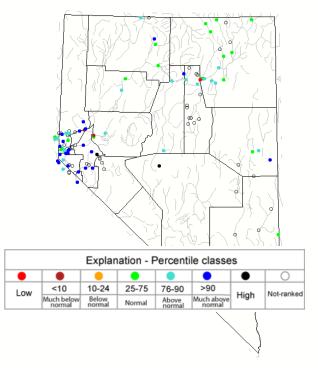


Figure 3. Three day observed precipitation for August 19-21st during tropical storm Hilary.



#### **≥USGS**

Figure 4: August <u>Monthly USGS streamflow</u> Note, the only red dot in western NV is the Truckee Canal which is closed for construction.

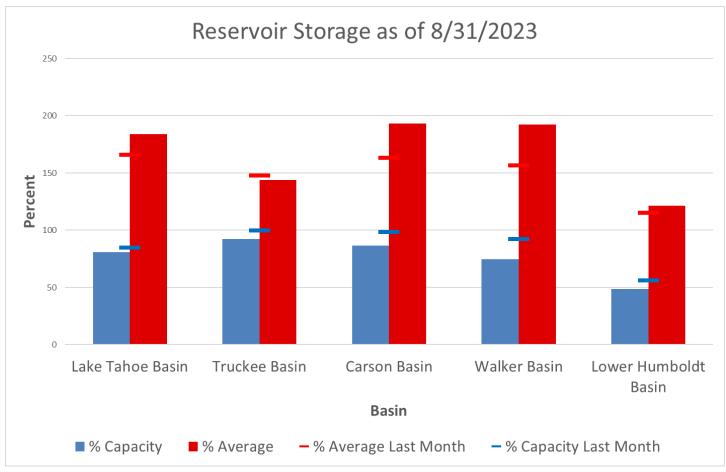


Figure 5: End of month reservoir storage relative to capacity and average for this month and last month.

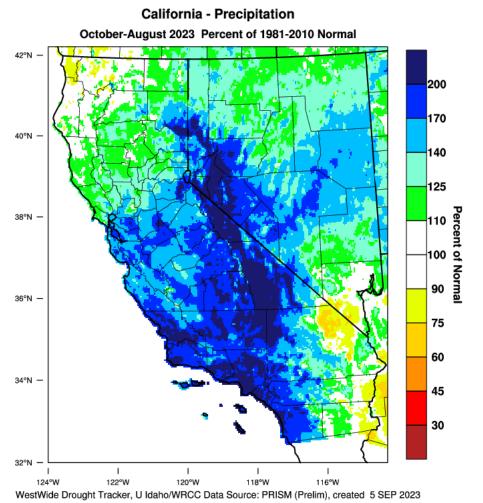


Figure 6: Current water year to date precipitation percent of normal. Data courtesy of WestWideDroughtTracker (<u>WWDT</u>)

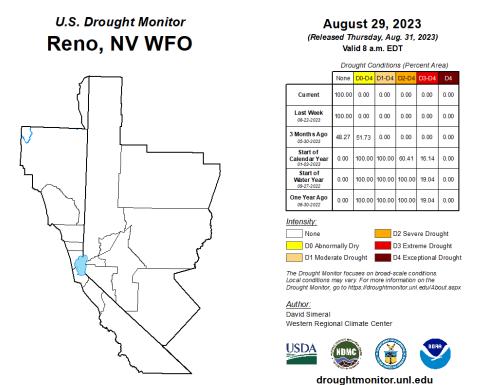
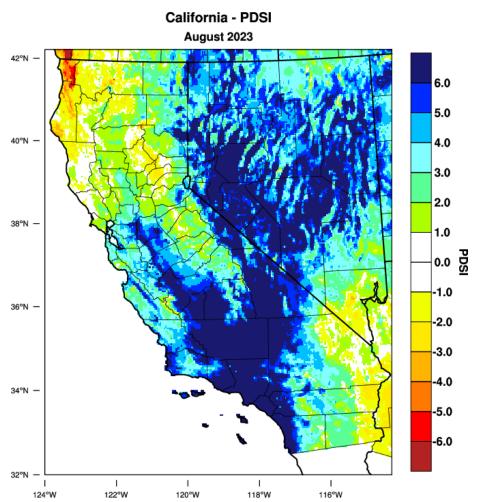


Figure 7: End of August Drought Monitor Status (no drought!) for NWS Reno Service area.(Drought Monitor).



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 SEP 2023 Figure 8: Current Palmer Drought Severity Index at the end of August. Data courtesy of WestWideDroughtTracker (WWDT)