



Photo by B. Hatchett

## Quarterly Report and Outlook

*Informe Trimestral y Pronóstico en línea*

[www.unr.edu/climate/climate-summary](http://www.unr.edu/climate/climate-summary)

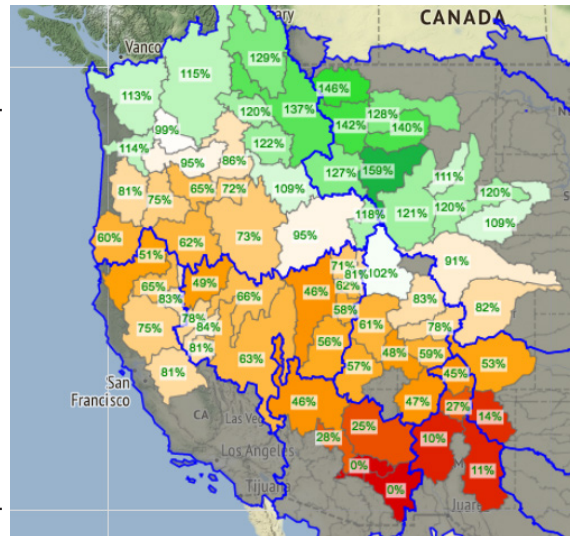
January - March 2018

## Notable Weather and Climate in Nevada

The first three months of 2018 were both remarkable and unremarkable. Across most of the region it was warmer than usual, both during the day and at night, but the warmth was not quite record setting. Statewide, only January 2018 was the third warmest on records, yet only the youngest weather stations set daily records. Across the state, however, many of us appreciated the mid-January warm spell. February and March experienced temperatures very close to the 20th century average. While there weren't any record lows, Las Vegas did get a touch of snow in late February. January was dry across much of the state, although a storm in the Las Vegas area delivered an inch or so of rain over just two days in January. February was dry just about everywhere, sparking fears that the winter would be dry. Fortunately, March brought some welcome rain and snow to the Sierra and northern Nevada.

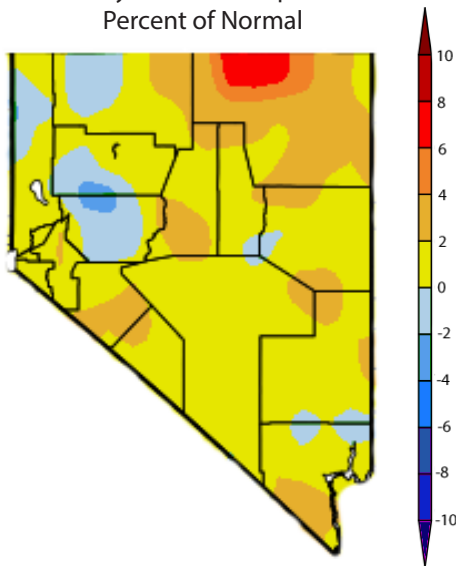
March rain and snow brought some snowpack relief in the Sierra Nevada and northeastern Nevada. Many of the major basins had less than 50% of their normal snowpack at the beginning of March. As of April 1, many basins in this region inched up over 60% or even 70% of normal snowpack. The southwest part of Upper Colorado River

April 1 Percent median snow-water equivalent

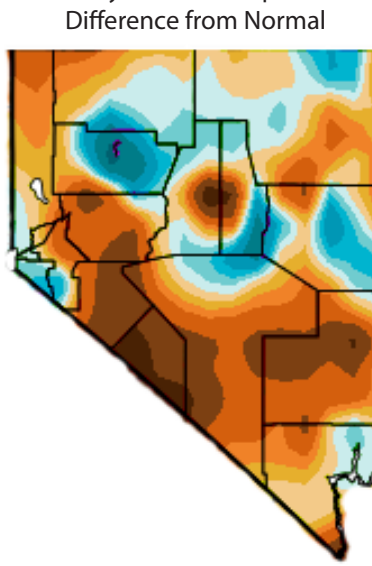


Basin, however, did not make any particular gains, and so current projections are that spring flows into Lake Powell will be just under 50% of average. For more information about snow pack, check out the NRCS at <https://www.wcc.nrcs.usda.gov/gis/snow.html>. If you want to catch the Colorado River updates, see <https://www.usbr.gov/lc/region/g4000/24mo.pdf>.

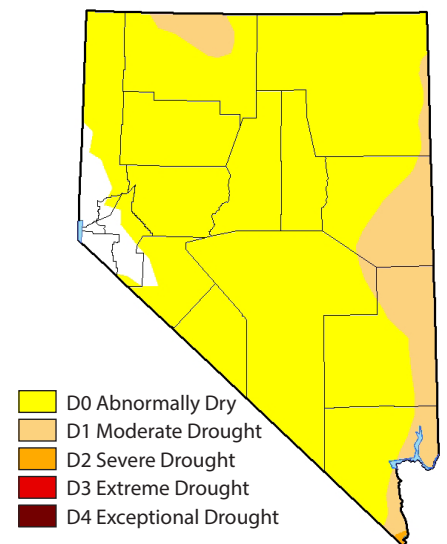
January - March Precipitation  
Percent of Normal



January - March Temperature  
Difference from Normal



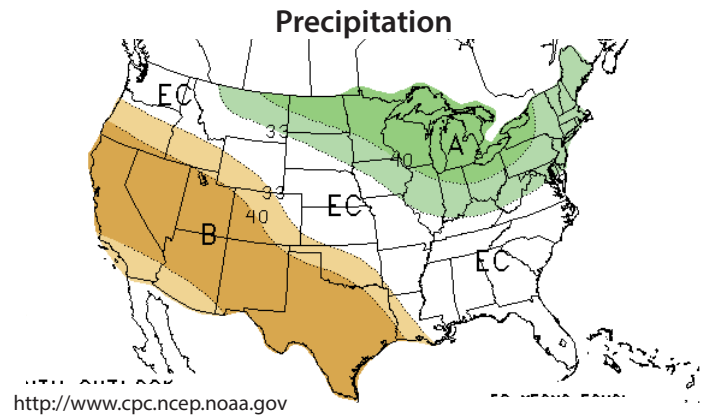
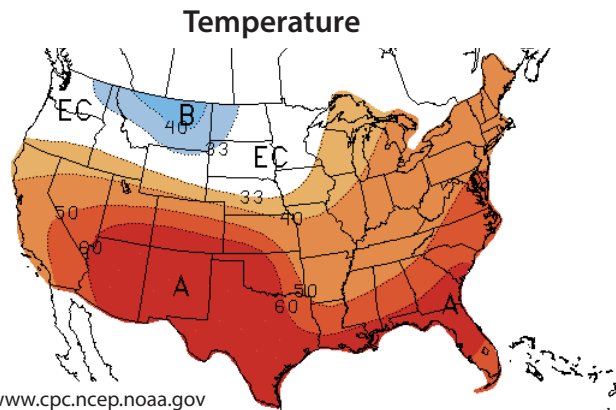
April 3 Drought Monitor



<http://www.hprcc.unl.edu/maps.php?map=ACISClimateMaps#>

<http://droughtmonitor.unl.edu>

## Outlook for April - June and beyond



The Climate Prediction Center projects a 50-60% chance that southern Nevada will be warmer than normal from April through June, with slightly lower odds (33-50%) of a warmer than normal spring north of Interstate 50. The entire state has a 40-50% chance of being drier than normal (and thus a 50-60% chance of receiving normal or above normal precipitation). Into the summer (July - September), forecasts continue to suggest that warmer than normal conditions are likely. Precipitation forecasts are nebulous, however, with roughly similar odds of below normal, above normal, or normal precipitation. Of course, the summer months tend to be dry over much of the state, anyway. As always, if you're looking for more precise estimates of the likelihood that precipitation will be over or under some specific values, you can check out the tool at [http://www.cpc.ncep.noaa.gov/products/predictions/long\\_range/POECalc/index.php](http://www.cpc.ncep.noaa.gov/products/predictions/long_range/POECalc/index.php).

## In-depth

### *Climate Resilience Planning in Reno*

Drought is as much a part of Nevada as silver or sagebrush. It's something Nevadans have always had to accommodate. In recent years, growing cities mean that there are more and more people depending on our less-than-dependable rain and snow.

It's also been warm. There have been 13 years with state-wide annual average temperatures 2°F or more above the 20<sup>th</sup> century average. Nine of them have occurred in the past 20 years. Fifteen years have been 1.4°F or more below average. None of them have occurred in the past 20 years.

So, clearly some accommodations might need to be made in planning. Will Reno, where people used to cool off by opening the windows, need to think about alternate strategies and responses for heat? Will Las Vegas need to consider even bolder water conservation strategies? One way to plan for this is to develop a Climate Resilience Plan, which identifies climate hazards and helps planners define their

priorities and take measures to combat challenges.

Reno is in the midst of this process right now and will likely wrap up the process by the end of this year. Researchers at the Desert Research Institute, funded by the Southwest Climate Adaptation Science Center have compiled background climate information and future climate scenarios for the entire state and will make them available to Nevada's communities (large and small), land management, and wildlife agencies in Nevada. Students and faculty at the University of Nevada, Reno have investigated the city's carbon emissions and studied flooding and heat waves to provide in-depth local information for decision makers. The City of Reno has lead the charge so that Reno can respond to whatever the climate throws at it.

If you want more information about the process, please contact Lynne Barker, the Reno Sustainability Manager.