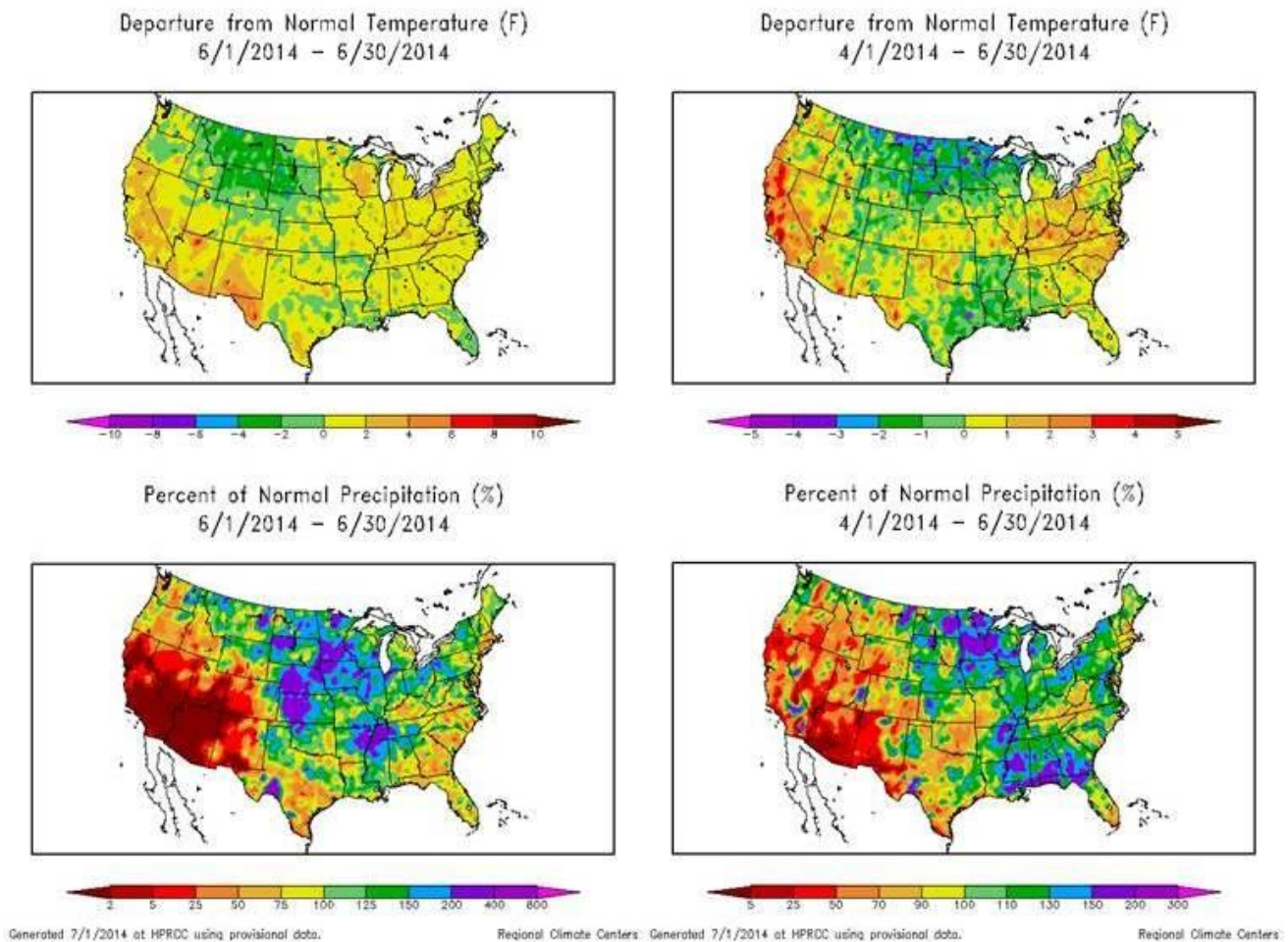


Weather and Climate Summary and Forecast Summer 2014

Gregory V. Jones
Southern Oregon University
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Conditions across the western US have continued warmer and drier than normal through June. Temperatures within the wine regions in the western and central valleys of California, western valleys of Oregon and across into eastern Washington during the month were approximately 1 to 4 degrees above normal (see figure below or attached). The northern Rockies and scattered areas in Texas and along the Gulf Coast were cooler than normal during June (mostly due to wetter than normal conditions), while the eastern US was warmer than normal. Although June brought some rain during the last week of the month, amounts were generally low except in the Cascades of Oregon and Washington. Nearly all of California and most of the southwest continue to have severe to extreme dry conditions (see figure below or attached). From the Rockies eastward large areas saw much above normal precipitation while portions of the southeast were quite dry in June.



The April through June period continued the run of warmer than average conditions over the western US with only a few areas east of the Cascades and Sierra Nevadas being slightly cooler than normal. Much of the Rockies, Great Plains and upper mid-west continued to have a cooler than normal spring, while areas in the eastern US were warmer than normal (see figure below or attached). California again saw the greatest warmer than normal

departures from average during April through June. Overall spring precipitation was greater than normal across much of the eastern US and drier than normal across the majority of the western US. Noted exceptions of moderately wet conditions were seen in portions of northwestern Oregon and western and eastern Washington.

In Oregon temperatures in McMinnville, Milton-Freewater, Roseburg and Medford ranged from 0.8 to 2.1°F warmer than average leading to 2014 growing degree-days that are similar or slightly above the 2013 values on this date (see attached). All four locations in the attached plot are running 25-50% above their long term average for the first three months of the growing season during (1981-2010).

The general forecasts for the spring and early summer have largely held true with continued warm and dry conditions in the western US. Currently the 6-10, 8-14 day, and 30 day outlooks tilt the odds to this trend continuing with normal to warmer than normal and drier than normal conditions over the west. During July expect the wax and wane of periods that are much warmer than normal with slight cool downs sprinkled in between. Any rainfall that comes in July is likely going to be from the start of monsoon moisture building over the desert southwest bringing the increased likelihood of thunderstorms northward. However, these tend to be hit or miss, so not much precipitation is expected.

The longer term forecast extended out to 90 days (July-Aug-Sept) from the Climate Prediction Center forecast is also tilting the odds to continued warm and dry over the west. El Niño conditions in the tropical Pacific are continuing to develop, but not likely to peak until later in the fall or early winter. El Niño does not have a clear signal over the western US, with weak events not affecting the region much if at all, while stronger events tend to make things warmer and drier in the PNW and warmer and wetter from the Oregon-California border southward. Only time will tell how this years predicted El Niño development will ultimately play out.

In summary, all evidence continues to point to a warmer and drier than average growing season across the west.

Gregory V. Jones, PhD
Environmental Science and Policy
Southern Oregon University
1250 Siskiyou Blvd
Ashland, OR 97520
541-552-6758
gjones@sou.edu

