

The cool spring over the western US has continued into the summer with near historical records for one of the coolest years to date over the region. Monthly temperature departures from normal for McMinnville, Milton-Freewater, Roseburg, and Medford from November 2010 through August 2011 show the very cool spring and early summer (Figure 1). August made a turn around with conditions statewide that were warmer than normal. However, the growing season (April through October) is still 1-2°F below normal across the state.

Growing degree-day (GDD) accumulations for these four locations in Oregon from April 1st to September 10th remain at historic lows. Current GDD values range from 1616 for McMinnville, to 1983 for Roseburg, to 2336 for Medford, and to 2342 for Milton-Freewater (as of September 10th). These values represent from +9% to -3% of the heat accumulation in the cool 2010 vintage and 13-15% lower than the 2000-2010 average GDD.

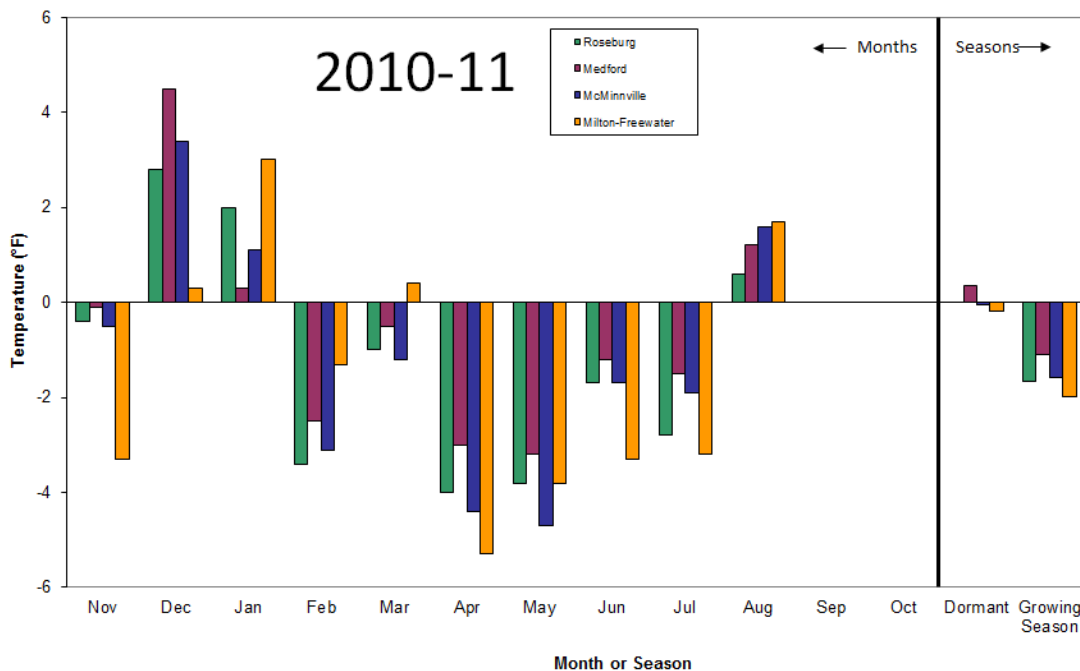


Figure 1: This chart represents a summation of daily temperature departures by month, the dormant period (Nov-Mar) and the growing season (Apr-Oct) from the four NWS stations (www.noaa.gov).

Monthly precipitation amounts for the same four locations in Oregon show moderate swings between a dry November, a wet December, and dry January and February (Figure 2). However, March through July was wetter than normal throughout Oregon with August being the first month since February that was drier than normal statewide (Figure 3).

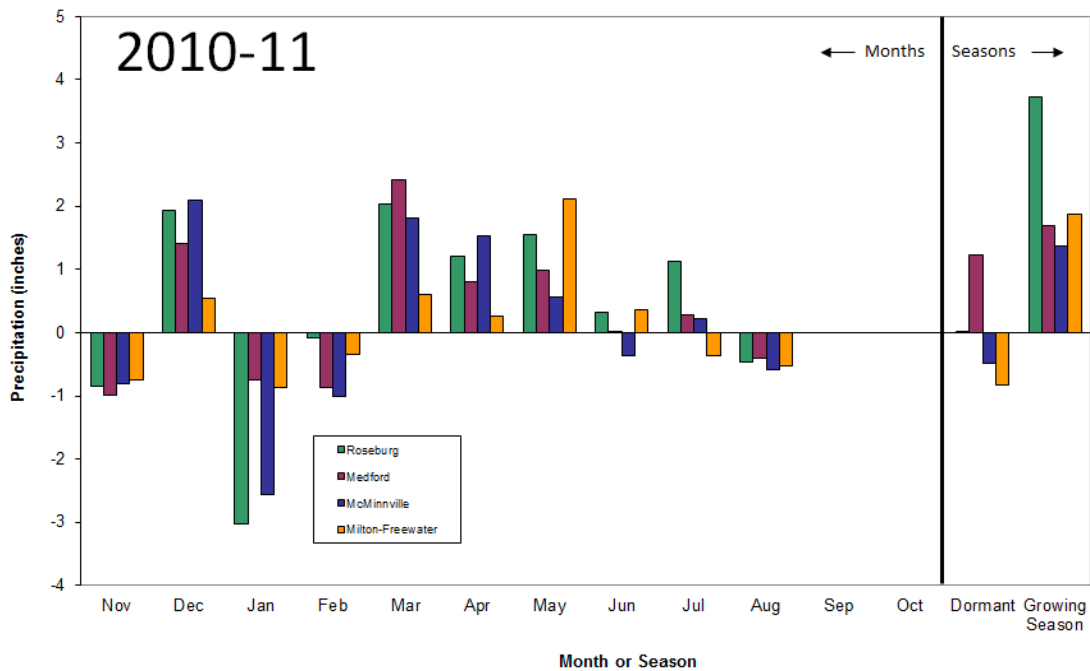
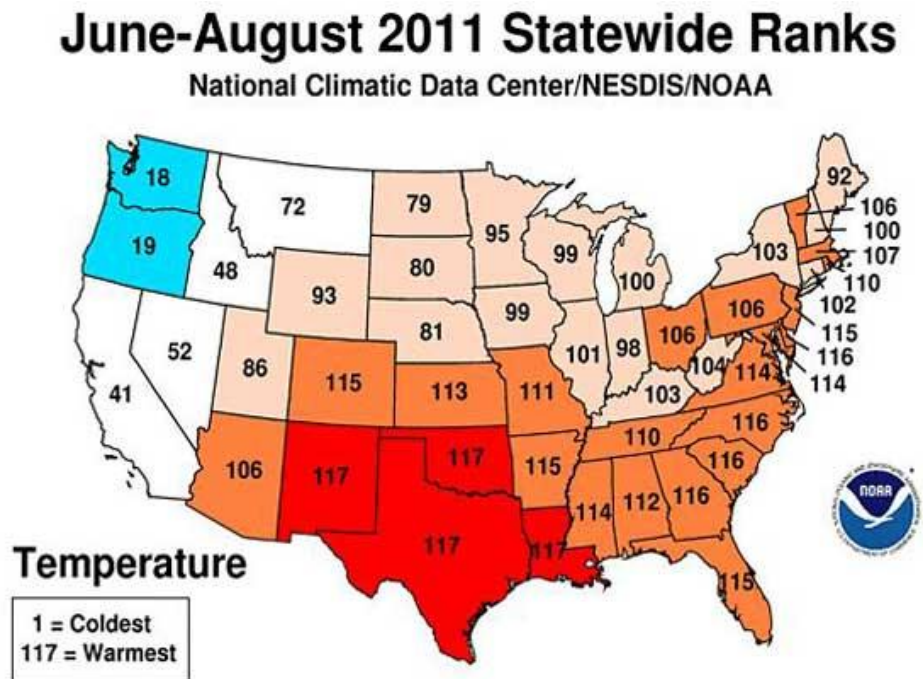


Figure 2: This chart represents the summation of daily precipitation departures by month, the dormant period (Nov-Mar) and the growing season (Apr-Oct) from the four NWS stations (www.noaa.gov).

Comparing the western US to the rest of the country shows that the west has experienced a very cool summer ranking as low as 18th out of 117 years (Oregon) while the majority of the rest of the US has experienced one of the warmest summers on record (Figure 3).



Climate and Weather Outlook:

The thermal trough that has been along the coast and brought the warm conditions the past week or so has pushed inland and will bring slightly cooler, more seasonal, conditions over the next week. As the trough moves inland there is a potential for isolated thunderstorms over southern Oregon and northern California over the next couple of days. The 6-10 day forecast from the Climate Prediction Center (CPC) calls for a transition to more zonal flow over Washington and Oregon, with temperatures slightly above normal and precipitation below normal for this time of year. The 8-14 day forecast from the CPC indicates a slight shift to average temperatures and a higher probability of some precipitation, which continues through to the end of September. The CPC's forecast for the next 90 days is showing seasonal conditions with temperatures remaining near average and the probability of precipitation increasing through the period.

Given the numbers for GDD for the four Oregon locations as of September 10th and the forecast above for average temperature conditions through the end of October, heat accumulation would end up being: 1983 for McMinnville, 2493 for Roseburg, 2892 for Medford, and 2849 for Milton-Freewater. This scenario would produce a 2011 vintage that is roughly equal to 2010 in GDD, but still 9-11% lower than the 2000-2010 average GDD.

NOAA has just released an update on the winter forecast and has indicated that La Niña conditions in the tropical Pacific have returned. La Niña, which contributed to extreme weather around the globe during the first half of 2011, is forecast to gradually strengthen and continue into winter. La Niña conditions in the tropics combined with continued cooler than normal waters off the west coast (up to 4-8°F cooler than normal), have been the main influences in the cool conditions in the western US the last two years. While NOAA will issue its official winter outlook in mid-October, this forecast update on La Niña points to a winter with continued drier than normal conditions across the southern tier of the United States and wetter than normal conditions in the Pacific Northwest and Ohio Valley. "This means drought is likely to continue in the drought-stricken states of Texas, Oklahoma and New Mexico," said Mike Halpert, deputy director of the Climate Prediction Center. "La Niña also often brings colder winters to the Pacific Northwest and the northern Plains, and warmer temperatures to the southern states."

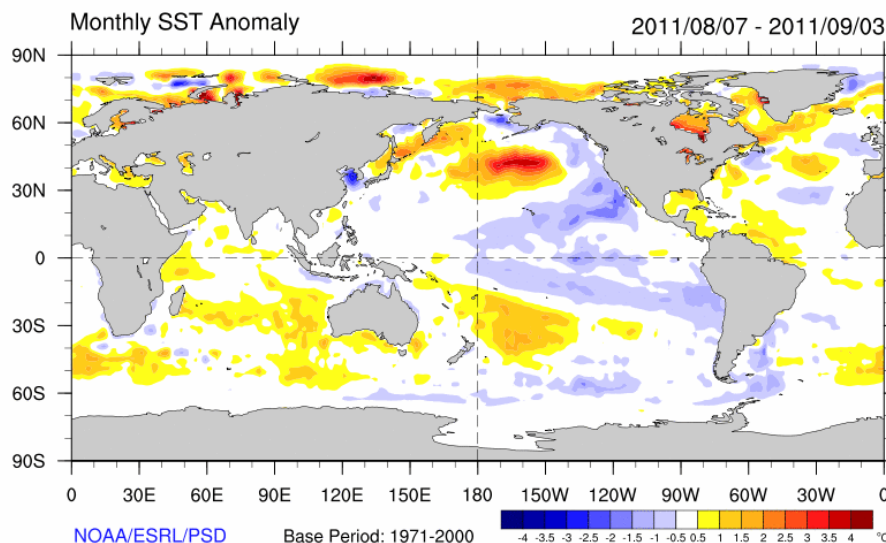


Figure 4: Map of sea surface temperature anomalies over the most recent 30 day period available. (Source: NOAA).

For More Information:

Climate Prediction Center: 6-10 and 8-14 day to monthly and seasonal temperature and precipitation forecasts (<http://www.cpc.ncep.noaa.gov/products/predictions/>)

Climate Prediction Center: ENSO discussion and forecast

(http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/ensodisc.html)

National Oceanographic and Atmospheric Association: General overview of the climate of the US
(<http://www.nesdis.noaa.gov/>)

Climate Impacts Group: PDO, ENSO, and seasonal forecasts for the PNW

(<http://cses.washington.edu/cig/fpt/seasonalfc.shtml>)

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