National Weather Service Medford

# August 2016 Climate Summary



\*All data are considered preliminary and are subject to change per quality control standards performed at NCEI.

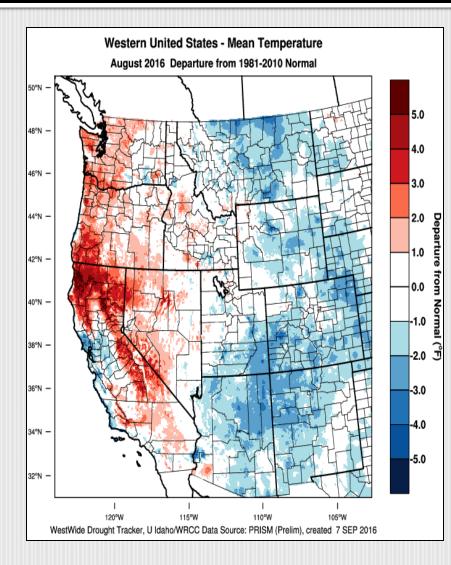
# August 2016 Weather Review

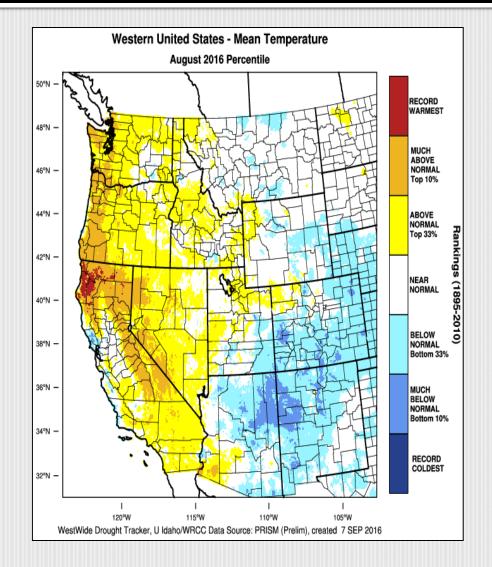
August 2016 saw a return to the above normal temperatures that have characterized the past few summers. A strong ridge of high pressure brought very warm to hot temperatures for the area during the middle of the month. The first round of the heat wave lasted from the  $11^{th} - 13^{th}$  during which many valleys west of the Cascades recorded triple digits. There was a slight reprieve in temperatures as an upper level trough moved through the area, but only down into the mid to upper 90's. The next round of the heat wave was even warmer than the first and much of the CWA experienced the warmest days of the year on the  $18^{th}$ ,  $19^{th}$ , and  $20^{th}$ . Many areas broke maximum temperature records during this time. With little relief overnight due to very warm overnight temperatures, this round of heat prompted Heat Advisories for the valleys west of the Cascades and valleys in northern California. On the  $21^{st}$ , the upper ridge flattened, and temperatures lowered somewhat but remained above normal for the next week. After 19 days of +90°F (in Medford), the synoptic pattern transitioned to that of a trough and temperatures dropped to below normal for the last few days of the month. Conditions were also extremely dry during August, along with gusty winds at times. These conditions, combined with receptive fuels, were very conducive to fire development and several wildfires were ignited during August.

#### Local Wildfires-

- The Withers fire near Paisley was ignited on the 17<sup>th</sup> and spread rapidly during the heat wave. As of August 22<sup>nd</sup>, the fire was 85% contained at 3,424 acres.
- The Cleveland Ridge Fire, near Shady Cove, was ignited on the 22nd, and brought some smoke to the Rogue Valley. As of August 27<sup>th</sup>, this fire was 80% contained at 530 acres.
- The Gap Fire, burning in the Klamath National Forest near Seiad Valley, CA started on the 27<sup>th</sup>. This fire spread
  rapidly and is still actively burning. Southwest flow aloft when the fire first started brought smoke northeast into the
  Rogue Valley and into the Klamath Basin. Once the pattern shifted to a more northerly flow aloft, smoke filled in the
  Scott and Shasta Valleys and filtered into the Klamath River Valley. As of September 8<sup>th</sup>, the fire was 65% contained
  at 31,069 acres.
- The Gold Canyon Fire, near Selma, started on the 30<sup>th</sup>, also brought smoke to the Rogue and Illinois Valleys.

#### **August 2016 Observed Temperatures**





# **Average Temperatures**

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	59-4	+0.3	66.5	+1.1	52.4	-0.5
Roseburg	74.1	+4.0	90.8	+6.1	57-4	+1.9
Medford	77-3	+3.6	95.6	+4.9	59.1	+2.3
Klamath Falls	66.4	+1.5	87.0	+3.8	45-9	-0.7
Montague, CA	73-5	+2.8	94-5	+4.8	52.5	+0.9
Mt. Shasta City, CA	70.8	+4.2	90.7	+5.5	50.9	+2.9
Alturas, CA	67.3	+2.7	90.1	+3.7	44.5	+1.8

August 2016 Rankings	Average Temperature	Average Max	Average Min (warmest)
Roseburg	74.1° – 2 <sup>nd</sup>	90.8° – 1 <sup>st</sup>	57.4° – 7 <sup>th</sup>
Medford	77-3° – 2 <sup>nd</sup>	95.6° – 3 <sup>rd</sup>	59.1° – 4 <sup>th</sup>

#### Monthly Max & Min Temperatures

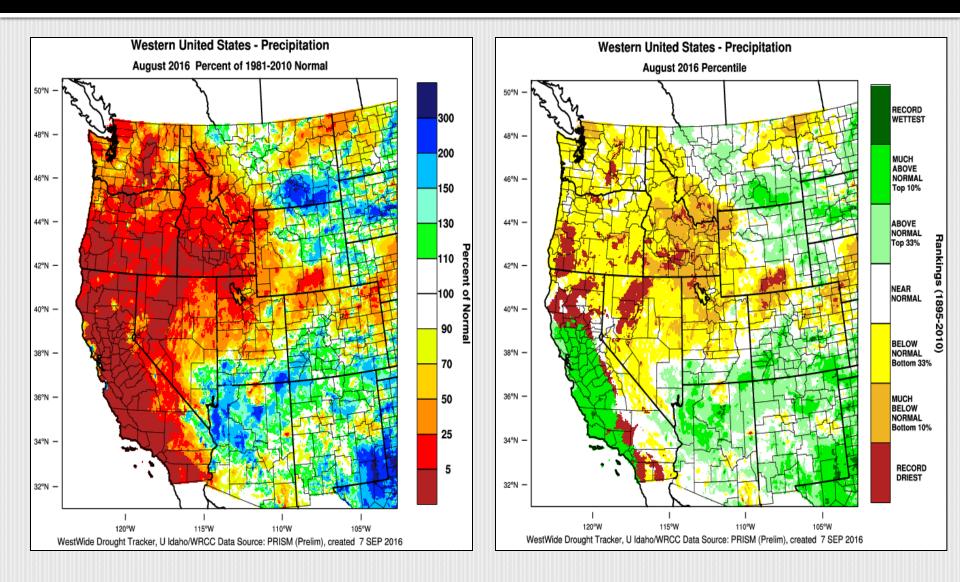
	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	91°	25 <sup>th</sup>	48°	24 <sup>th</sup> & 26 <sup>th</sup>
Roseburg	107°	19 <sup>th</sup>	51°	7 <sup>th</sup> & 23 <sup>rd</sup>
Medford	109°	19 <sup>th</sup>	51°	23 <sup>rd</sup>
Klamath Falls	96°	18 <sup>th</sup> & 19 <sup>th</sup>	38°	3 <sup>rd</sup>
Montague, CA	106°	19 <sup>th</sup>	45°	3 <sup>rd</sup>
Mt. Shasta City, CA	100°	19 <sup>th</sup>	45°	24 <sup>th</sup>
Alturas, CA	98°	19 <sup>th</sup>	37°	24 <sup>th</sup>

# **Temperature Records**

Record <u>High</u> Temperatures	Date/ Temperature (°F)	Date/ Temperature (°F)	Date/ Temperature (°F)	Date/ Temperature (°F)
Medford	18 <sup>th</sup> / 108°	19 <sup>th</sup> / 109°	20 <sup>th</sup> / 105°	
North Bend	25 <sup>th</sup> / 91°			
Roseburg	19 <sup>th</sup> / 107°	20 <sup>th</sup> / 101 <sup>0</sup>	26 <sup>th</sup> / 99°	
Klamath Falls	18 <sup>th</sup> / 96°	19 <sup>th</sup> / 96°	20 <sup>th</sup> / 95°	
Montague, CA	18 <sup>th</sup> / 104°	19 <sup>th</sup> / 106°	20 <sup>th</sup> / 103°	21 <sup>st</sup> / 99°
Mt Shasta City, CA	18 <sup>th</sup> / 99°	19 <sup>th</sup> / 100°		

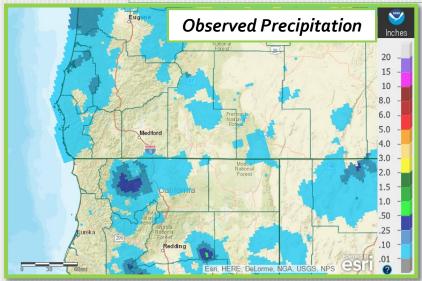
Record <u>Low</u> Temperatures	Date/ Temperature (°F)	
Klamath Falls	9 <sup>th</sup> / 39°	

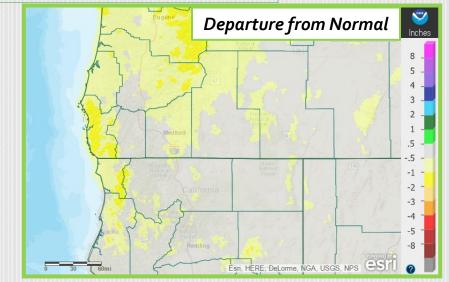
#### **August 2016 Observed Precipitation**



# Precipitation

	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	0.02	-0.60	0.01	31 <sup>st</sup>
Roseburg	0.00	-0.47	N/A	N/A
Medford	0.00	-0.40	N/A	N/A
Klamath Falls	0.00	-0.43	N/A	N/A
Montague, CA	0.02	-0.32	0.02	5 <sup>th</sup>
Mt. Shasta City, CA	0.00	-0.34	N/A	N/A
Alturas, CA	Т	-0.36	Т	22 <sup>nd</sup>



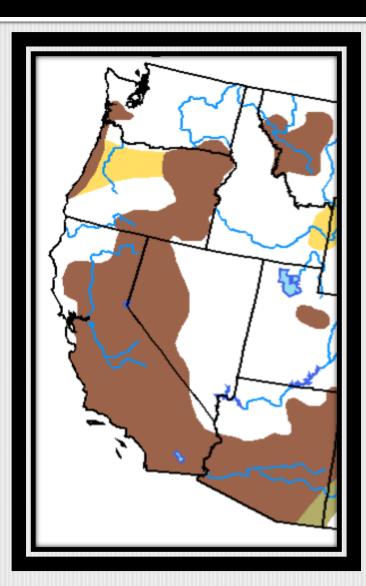


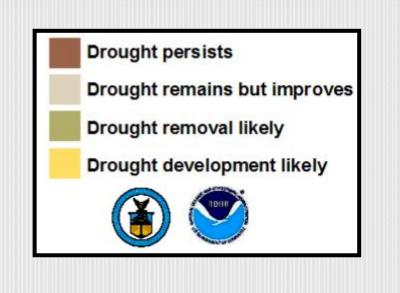
### **Crater Lake**

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 8/31/16	Highest Max/ Lowest Min
August	72.0°	43.0°	0.00″	0.0″	0″	82° on 19 <sup>th</sup> & 20 <sup>th</sup> / 35° on 9 <sup>th</sup>
Normal (1981-2010)	69.7°	40.5°	1.00″	0.0″	N/A	N/A



# **Drought Outlook: September**



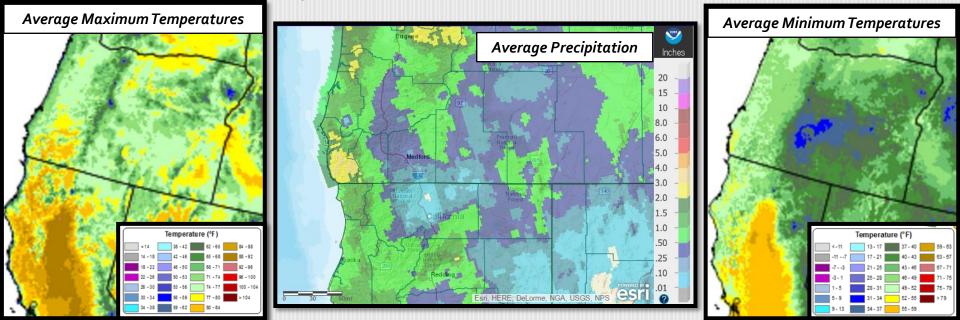


Valid for September 2016 Released August 31, 2016

http://www.cpc.ncep.noaa.gov/products/expert\_assessment/ month\_drought.png

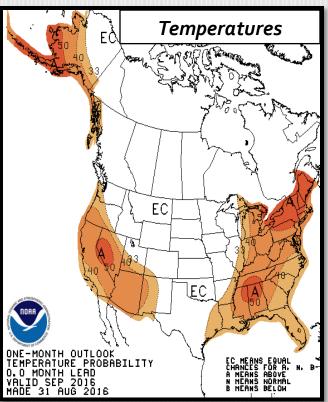
# Looking Ahead: Normals for September (1981-2010)

September typically marks the end of summer both astronomically and meteorologically. Longer nights and shorter days yield cooler conditions than August and the chance of rainfall increases, especially during the 2nd half of the month. Typically, daily high temperatures are in the 80s in the interior valleys west of the Cascades, in the 70s across the valleys east of the Cascades, and in the 60s and 70s in the mountains and along and near the coast. Daily low temperatures reach frosty low to mid 30s in much of Klamath and northern Lake Counties, and 35-45°F for most of the rest of the area from the Cascades eastward. 40s and lower 50s are normal west of the Cascades, with the warmest nights typically along the Curry County coast at 52-55°F, on average. Precipitation is usually half an inch or more for most of the forecast area, with an inch or more for the higher terrain of the Cascades westward and in the Umpqua Basin and coastal counties. 3-4 inches is normal in the wetter portions of the Coastal Mountains. Northeast and east winds related to enhanced seasonal pressure gradients can result in periods of cool nights and warm days in the valleys along with low relative humidities. This pattern often yields relatively warm days along and near the coast.



### September 2016 Outlook

Despite the cooler than normal start to September, there is high confidence in warmer than normal temperatures for the month, as a whole. It is also expected to be drier than normal. Overall, it appears that high temperatures will most likely be on par with normals for the second half of August. Mostly dry conditions will yield larger diurnal temperature swings, so overnight lows are likely to be less anomalously warm. The overall pattern favors near to above normal amounts of northeast and east wind days, so expect warmer and drier conditions than normal to be most notable in the mountains, especially the coastal mountains of southwest Oregon and northwest California and at the coast.



#### Expected Impact, September 2016:

Forecast conditions for the second half of September for August-like conditions means that fire season is likely to continue across the forecast area through the end of the month. While this is not unusual, September has yielded the end of fire season in some past years- even recent ones. While it is not impossible for the 2016 Fire Season to end in the latter portion of September, it currently appears unlikely. An increased possibility of more northeast and east wind events also supports higher than normal fire spread potential. Lightning potential looks to be minimal this month, which is typical of September. Altogether, it appears that summer will continue through this month, albeit with the cooler nights/mornings that come along with the longer nights.

