

National Weather Service Medford

# July 2016 Climate Summary



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

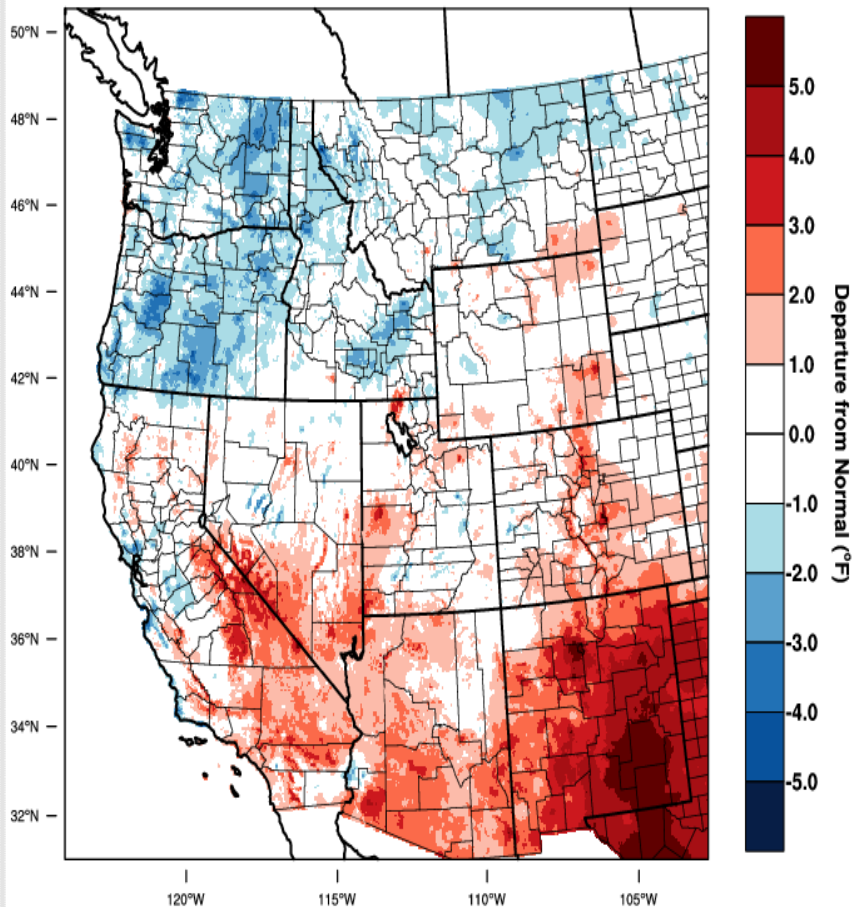
# July 2016 Weather Review

July 2016 will be remembered by most as a very mild summer month. The first week of July was dry and relatively normal as far as temperatures were concerned. After that, however, a broad upper level trough settled over the Pacific Northwest for the next two weeks, bringing cooler than normal temperatures and plentiful rainfall, at least by July standards. A slow moving cold front passed through the area during the 8th and 9th bringing most of July's normal total monthly precipitation in just 48 hours. In fact, Klamath Falls, North Bend and Roseburg all broke daily precipitation records during this time. After this front passed through, high temperatures remained cooler than normal, overnight temperatures were warmer than normal, and average temperatures ended up being around normal during the next two weeks. Once the upper level trough finally moved out, temperatures during the last week or so of July quickly returned to summer-like values, with some locations reporting record breaking temperatures.

# July 2016 Observed Temperatures

Western United States - Mean Temperature

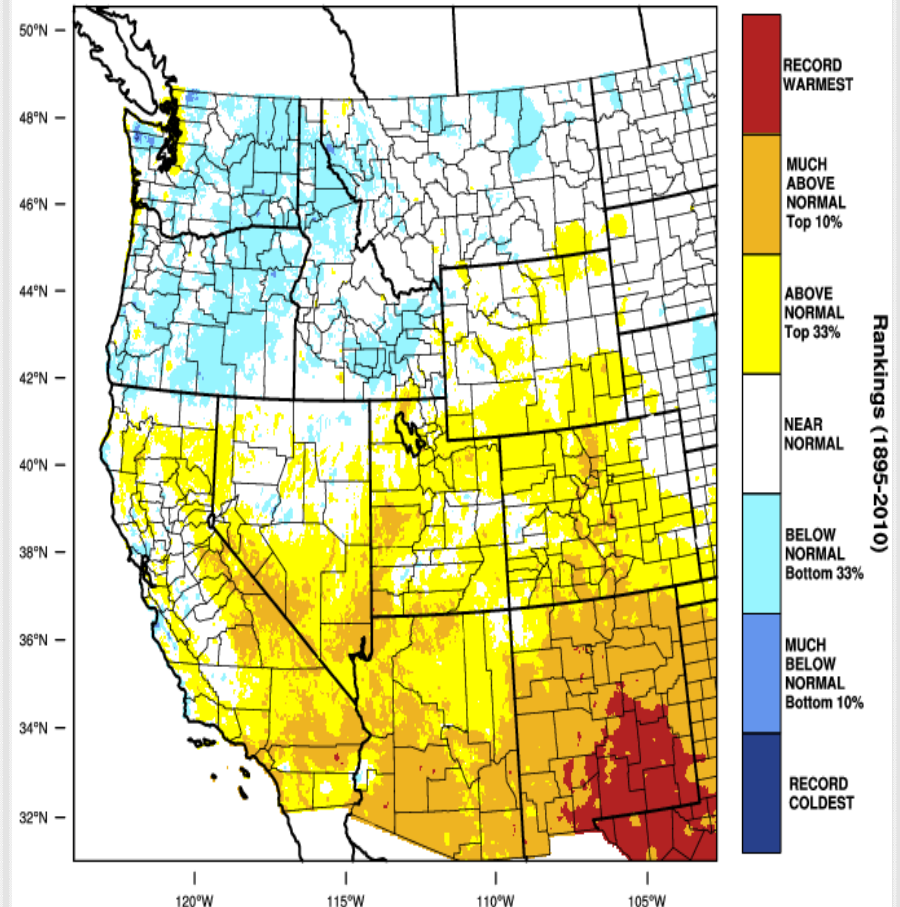
July 2016 Departure from 1981-2010 Normal



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 AUG 2016

Western United States - Mean Temperature

July 2016 Percentile



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 AUG 2016

# Average Temperatures

	<i>Average (°F)</i>	<i>Departure from Normal</i>	<i>Average Max (°F)</i>	<i>Departure from Normal</i>	<i>Average Min (°F)</i>	<i>Departure from Normal</i>
<i>North Bend</i>	61.0	+2.4	67.0	+2.5	55.0	+2.2
<i>Roseburg</i>	70.9	+0.6	83.8	-0.5	58.0	+1.8
<i>Medford</i>	74.1	0.0	89.8	-0.9	58.4	+1.0
<i>Klamath Falls</i>	65.0	-1.0	83.8	-0.1	46.2	-2.0
<i>Montague, CA</i>	72.3	-0.4	91.3	0.0	53.3	-0.8
<i>Mt. Shasta City, CA</i>	69.9	+2.0	87.9	+2.1	51.9	+1.9
<i>Alturas, CA</i>	67.0	+0.6	88.5	+0.5	45.5	+0.7

# Monthly Max & Min Temperatures

	<i>Max (°F)</i>	<i>Date(s)</i>	<i>Min (°F)</i>	<i>Date(s)</i>
<i>North Bend</i>	70°	23 <sup>rd</sup> & 25 <sup>th</sup>	48°	1 <sup>st</sup>
<i>Roseburg</i>	99°	29 <sup>th</sup>	53°	20 <sup>th</sup>
<i>Medford</i>	104°	28 <sup>th</sup> & 29 <sup>th</sup>	52°	11 <sup>th</sup>
<i>Klamath Falls</i>	98°	29 <sup>th</sup>	34°	11 <sup>th</sup>
<i>Montague, CA</i>	106°	29 <sup>th</sup>	40°	11 <sup>th</sup>
<i>Mt. Shasta City, CA</i>	102°	28 <sup>th</sup> & 29 <sup>th</sup>	41°	11 <sup>th</sup>
<i>Alturas, CA</i>	101°	29 <sup>th</sup>	31°	11 <sup>th</sup>

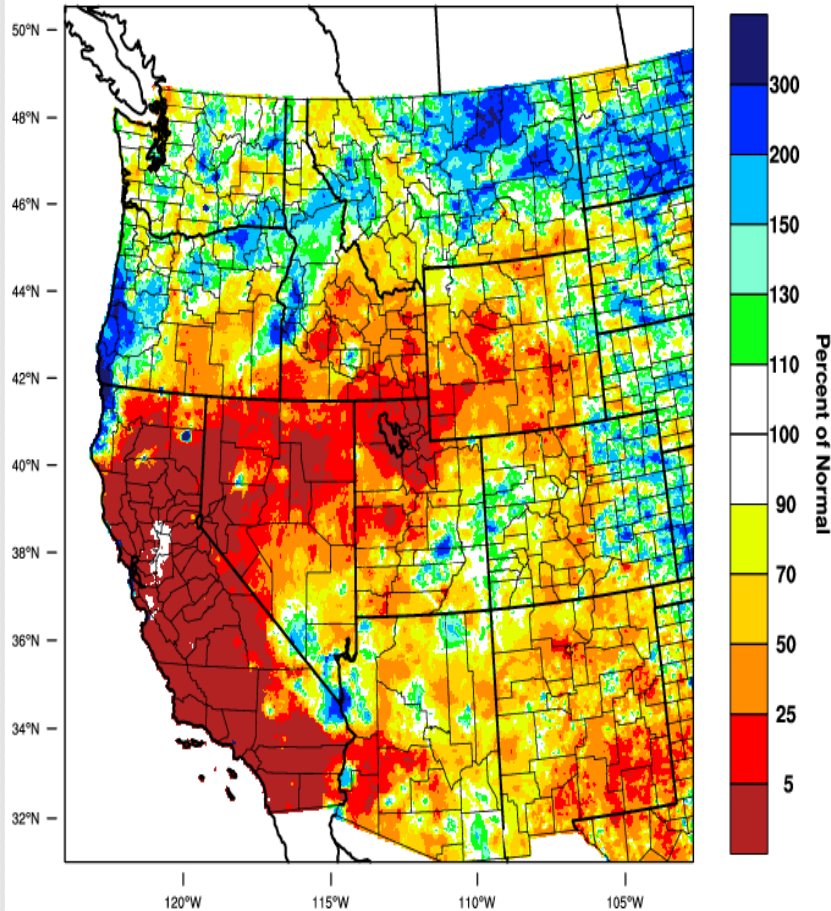
# Temperature Records

Record <u>High</u> Temperatures	Date/ Temperature (°F)	Date/ Temperature (°F)	Date/ Temperature (°F)
Klamath Falls	28 <sup>th</sup> / 97°	29 <sup>th</sup> / 98°	
Montague, CA	29 <sup>th</sup> / 106°		
Mt. Shasta City, CA	27 <sup>th</sup> / 99°	28 <sup>th</sup> / 102°	29 <sup>th</sup> / 102°

Record <u>Low</u> Temperatures	Date/ Temperature (°F)
Klamath Falls	11 <sup>th</sup> / 34°
Montague, CA	11 <sup>th</sup> / 40°
Alturas, CA	11 <sup>th</sup> / 31°

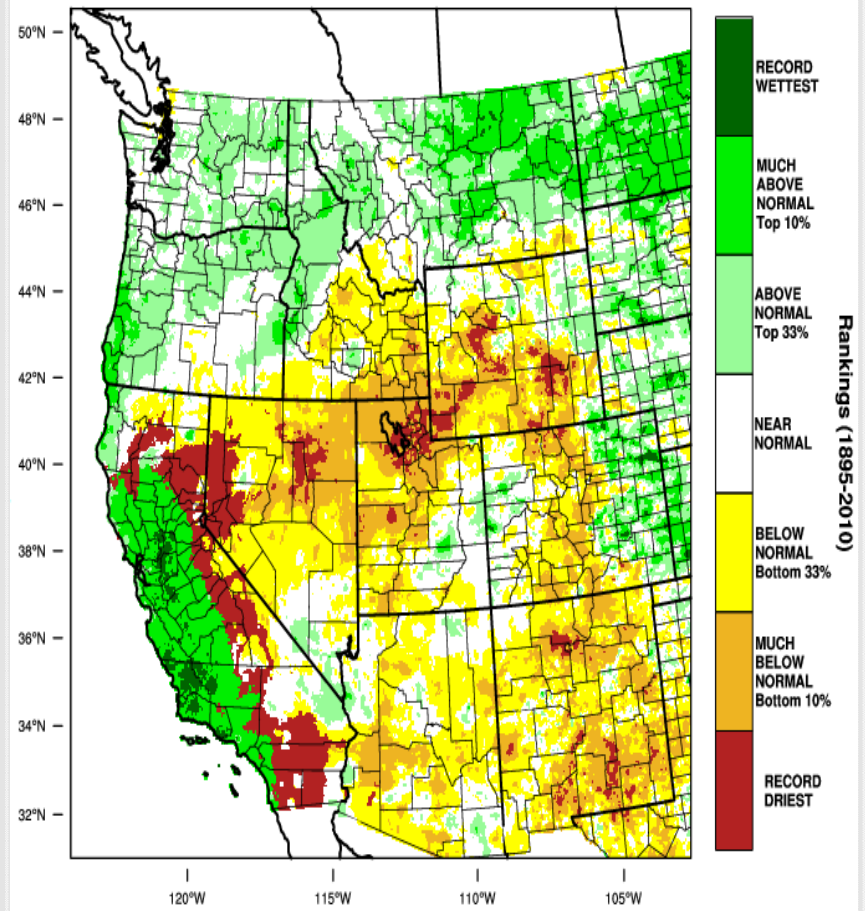
# July 2016 Observed Precipitation

Western United States - Precipitation  
July 2016 Percent of 1981-2010 Normal



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 AUG 2016

Western United States - Precipitation  
July 2016 Percentile



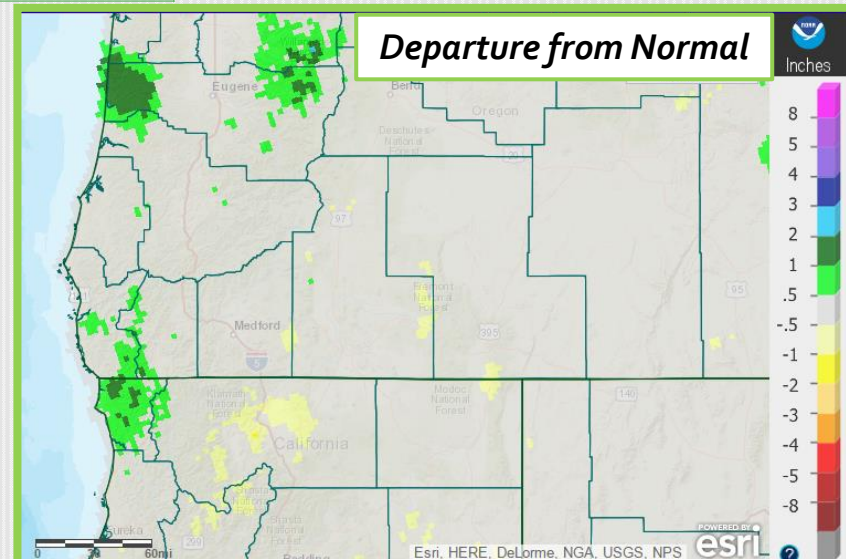
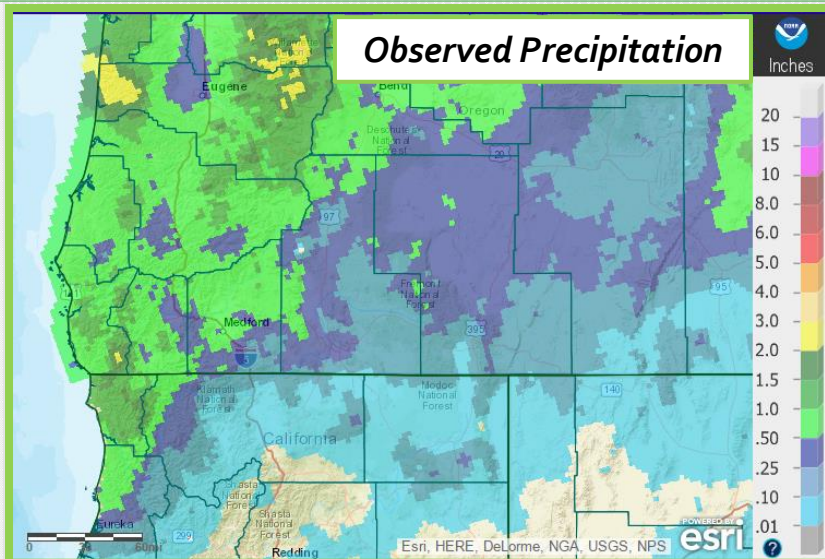
WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 AUG 2016

# Precipitation

	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	0.90"	+0.40"	0.49"	10 <sup>th</sup>
Roseburg	0.77"	+0.35"	0.64"	7 <sup>th</sup> – 8 <sup>th</sup>
Medford	0.45"	+0.17"	0.36"	8 <sup>th</sup> – 9 <sup>th</sup>
Klamath Falls	0.42"	-0.06"	0.42"	8 <sup>th</sup>
Montague, CA	0.05"	-0.40"	0.05"	8 <sup>th</sup>
Mt. Shasta City, CA	T	-0.39"	T	8 <sup>th</sup>
Alturas, CA	0.05"	-0.29"	0.05"	9 <sup>th</sup> – 10 <sup>th</sup>

## Record Daily Precipitation

	New Record	Date	Old Record	Year
North Bend	0.49"	10 <sup>th</sup>	0.19"	1932
Roseburg	0.52"	8 <sup>th</sup>	0.30"	1974
Klamath Falls	0.42"	8 <sup>th</sup>	0.20"	1933





Public Information Statement  
 National Weather Service Medford OR  
 558 AM PDT Sat Jul 9 2016

...48-hr Rainfall Reports...

Location	Amount	Time/Date	Provider
...California...			
...Modoc County...			
8 E Adin	0.30 in	0400 AM 07/09	MESOWEST
...Siskiyou County...			
12 SW Happy Camp	0.42 in	0445 AM 07/09	RAWS
1 NW Somes Bar	0.23 in	0516 AM 07/09	RAWS
Collins Baldy Raws	0.12 in	0431 AM 07/09	RAWS
2 SW Klamath River	0.11 in	0522 AM 07/09	RAWS
Bolam	0.09 in	0503 AM 07/09	RAWS
5 WSW Macdoel	0.09 in	0517 AM 07/09	RAWS
Montague 5 NE	0.05 in	0453 AM 07/09	AMOS
8 SW Scott Bar	0.04 in	0502 AM 07/09	RAWS
...Oregon...			
...Coos County...			
8 ENE Sitkum	0.93 in	0435 AM 07/09	RAWS
Signal Tree Raws	0.81 in	0435 AM 07/09	RAWS
Bald Knob #2	0.80 in	0439 AM 07/09	RAWS
1 S Bandon	0.50 in	0400 AM 07/09	MESOWEST
8 SW Myrtle Point	0.47 in	0513 AM 07/09	RAWS
4 NNW Myrtle Point	0.46 in	0520 AM 07/09	CWOP
North Bend Fcws	0.36 in	0455 AM 07/09	AMOS
7 W Coquille	0.33 in	0513 AM 07/09	RAWS
2 ESE Coos Bay	0.26 in	0700 AM 07/08	COCORAHS
Coos Bay	0.23 in	0635 AM 07/08	COCORAHS
...Curry County...			
2 ESE Gold Beach	2.09 in	0513 AM 07/09	RAWS
Harbor	1.86 in	0300 AM 07/09	MESOWEST
Red Mound Raws	1.66 in	0521 AM 07/09	RAWS
Quail Prairie #2 Raws	1.64 in	0439 AM 07/09	RAWS
Brookings Airport	1.62 in	0456 AM 07/09	AMOS
5 NE Brookings	1.28 in	0524 AM 07/09	CWOP
15 W Glendale	0.77 in	0441 AM 07/09	RAWS
Agness	0.63 in	0439 AM 07/09	RAWS
1 E Ophir	0.52 in	0700 AM 07/08	COCORAHS
3 NE Harbor	0.45 in	0700 AM 07/08	COCORAHS
...Douglas County...			
Roseburg Municipal Airport	0.72 in	0453 AM 07/09	ASOS
Winchester	0.58 in	0700 AM 07/08	COOP
Sutherlin	0.57 in	0800 AM 07/08	COCORAHS
Roseburg Kqen	0.52 in	0800 AM 07/08	COOP
Lookingglass	0.49 in	0800 AM 07/08	COOP
Cinnamon	0.49 in	0432 AM 07/09	RAWS
Riddle	0.43 in	0700 PM 07/08	COOP
Mt. Yoncalla Raws	0.42 in	0458 AM 07/09	RAWS
Diamond Lake	0.30 in	0400 AM 07/09	MESOWEST
Reedspport	0.28 in	0516 AM 07/09	CWOP
Drain	0.27 in	0930 AM 07/08	COOP
Toketee Falls	0.23 in	0700 PM 07/08	COOP

...Jackson County...

6 SE Prospect	0.68 in	0439 AM 07/09	RAWS
Evans Creek Raws	0.64 in	0458 AM 07/09	RAWS
5 NNW Eagle Point	0.53 in	0522 AM 07/09	CWOP
1 WSW Central Point	0.52 in	0523 AM 07/09	CWOP
Mount Stella	0.48 in	0439 AM 07/09	RAWS
2 SSE Ashland	0.36 in	0312 AM 07/09	RAWS
Medford, Or	0.33 in	0453 AM 07/09	ASOS
4 NNW Rogue River	0.31 in	0700 AM 07/08	COCORAHS
1 ENE Jacksonville	0.29 in	0300 AM 07/09	MESOWEST
Squaw Peak	0.20 in	0439 AM 07/09	RAWS
1 NE Howard Prairie	0.20 in	0400 AM 07/09	MESOWEST
5 NNW Gold Hill	0.19 in	0700 AM 07/08	COCORAHS

...Josephine County...

1 N Wolf Creek	0.90 in	0400 AM 07/09	MESOWEST
Sexton Summit	0.50 in	0456 AM 07/09	ASOS
1 NNW Merlin	0.43 in	0800 AM 07/08	COCORAHS
Grants Pass	0.39 in	0521 AM 07/09	CWOP
Illinois Valley	0.38 in	0452 AM 07/09	RAWS
Onion Mountain Raws	0.34 in	0445 AM 07/09	RAWS
Provolt Seed Orchard Raws	0.32 in	0459 AM 07/09	RAWS
2 WSW Williams	0.30 in	0515 AM 07/09	CWOP
2 W Wilderville	0.27 in	0700 AM 07/08	COCORAHS
1 SW Provolt	0.23 in	0800 AM 07/08	COCORAHS

...Klamath County...

18 NNE Howard Prairie	1.40 in	0400 AM 07/09	MESOWEST
2 SW Crater Lake	1.30 in	0400 AM 07/09	MESOWEST
17 NNE Bly	0.70 in	0400 AM 07/09	MESOWEST
4 ESE Worden	0.51 in	0800 PM 07/08	MESOWEST
Klamath Falls/Kingsley Field	0.42 in	0453 AM 07/09	ASOS
Hoyt Creek Raws	0.35 in	0442 AM 07/09	RAWS
9 WSW Sprague River	0.30 in	0400 AM 07/09	MESOWEST
2 SW Altamont	0.22 in	0400 AM 07/09	MESOWEST
5 W Chiloquin	0.22 in	0300 AM 07/09	MESOWEST
8 SE Howard Prairie	0.19 in	0440 AM 07/09	RAWS
2 N Beatty	0.14 in	0300 AM 07/09	MESOWEST
Gerber	0.11 in	0445 AM 07/09	RAWS

...Lake County...

13 W Paisley	0.30 in	0400 AM 07/09	MESOWEST
Summer Lake Raws	0.13 in	0438 AM 07/09	RAWS
9 SSW Paisley	0.12 in	0444 AM 07/09	RAWS
12 ESE Bly	0.10 in	0400 AM 07/09	MESOWEST
Strawberry Raws	0.05 in	0503 AM 07/09	RAWS
Cabin Lake	0.03 in	0506 AM 07/09	RAWS
Lake County Airport	0.01 in	0455 AM 07/09	AMOS

Observations are collected from a variety of sources with varying equipment and exposures. Not all data listed are considered official.

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NWS Medford OR  
 IRIS System

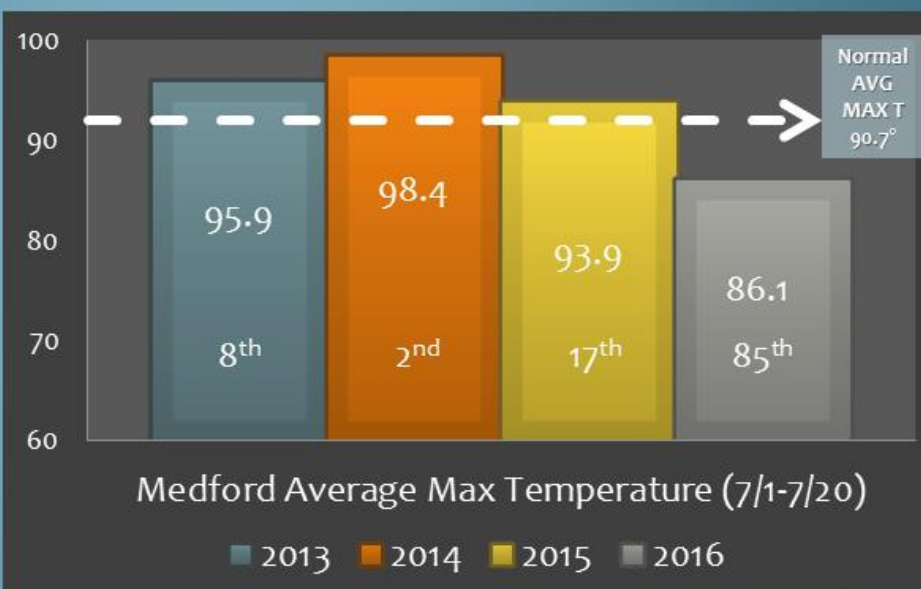
A collection of  
 48- hour rainfall  
 totals from the  
 slow moving cold  
 front that passed  
 through during  
 the 8<sup>th</sup> – 10<sup>th</sup> of  
 July.

# Graphic created on July 21<sup>st</sup> to show how July 2016 to date compared to climatology for Medford.

## This feels like the mildest July ever! Is it?

### July 2016 Ranking to date (7/20) out of 105 yrs:

- 22<sup>nd</sup> **coolest** daily high temperatures.
- 21<sup>st</sup> **warmest** overnight low temperatures.
- 50<sup>th</sup> **coolest** average temperatures (day and night averaged together, daily).
- 50<sup>th</sup> out of 105 years on record indicates that the average temperatures to date are right around... *average*.

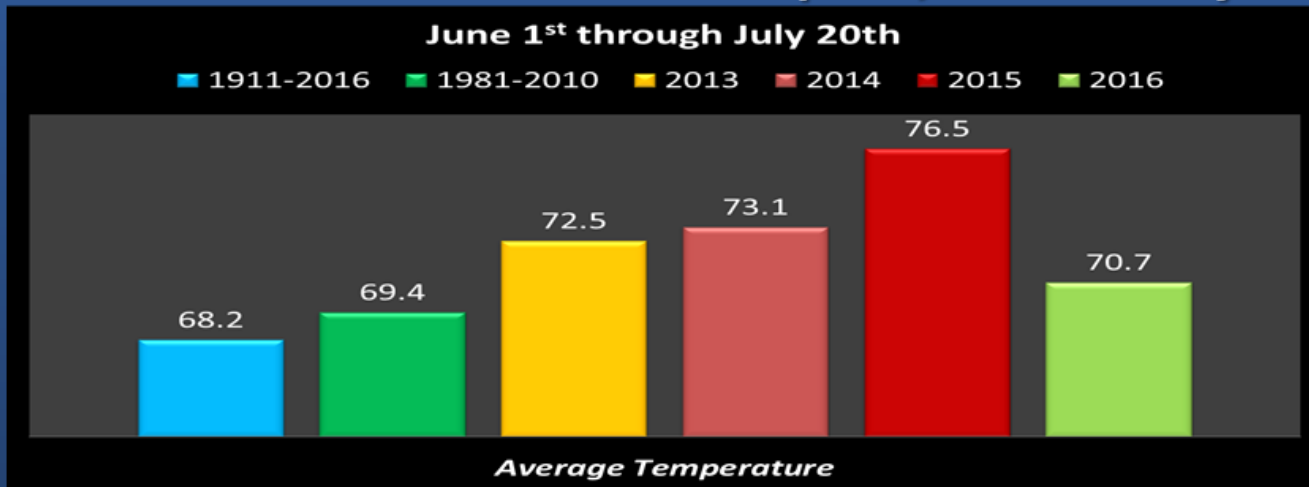


### Why has it felt so mild then?

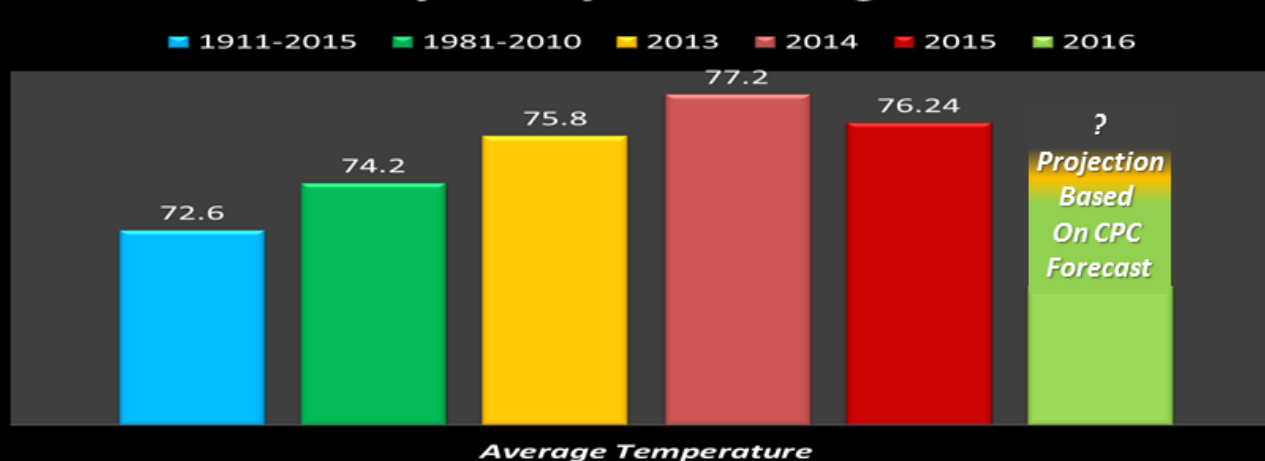
- The previous 3 Julys (through the 20<sup>th</sup>) have been among some of the warmest on record, so this July has felt relatively cool.
- July 2016 (through the 20<sup>th</sup>) is the 3<sup>rd</sup> coolest since 2000.

# Graphic created July 21<sup>st</sup> showing how summer to date compared to climatology for Medford

## How Does This Summer Compare, Historically?



## Outlook for July 21<sup>st</sup> – August 31<sup>st</sup>:

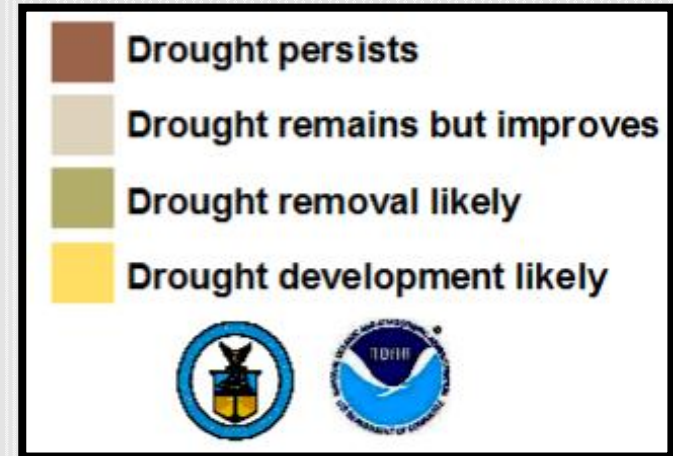
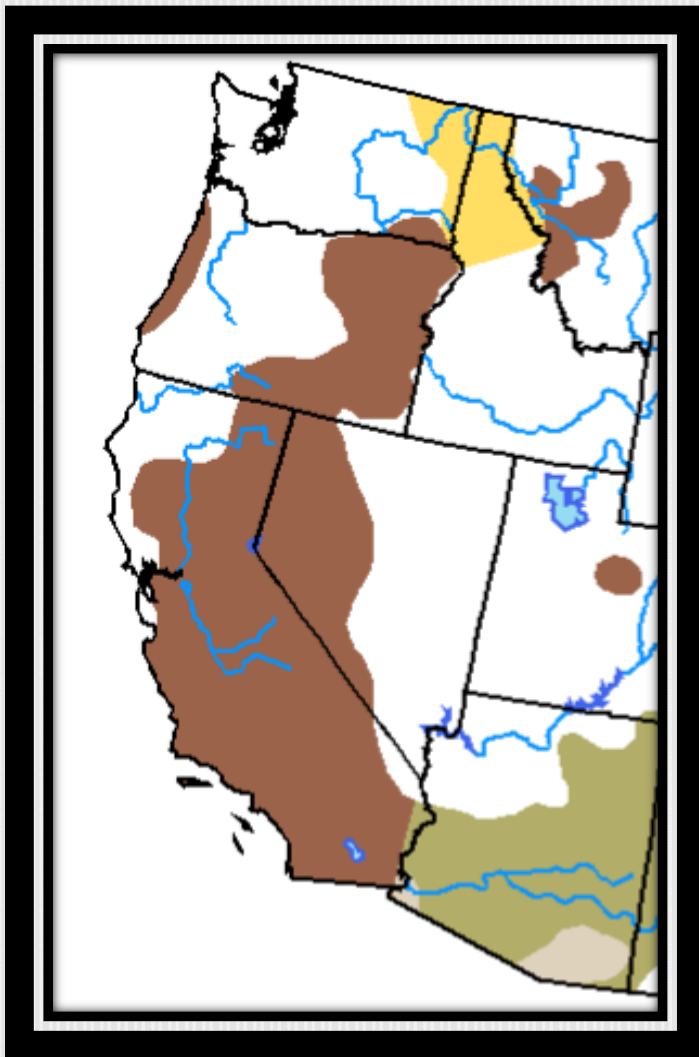


# Crater Lake

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 6/30/16	Highest Max/ Lowest Min
July	66.5°	40.1°	1.49"	0.0"	0"	83° on 30 <sup>th</sup> / 31° on 11 <sup>th</sup>
<b>Normal (1981-2010)</b>	68.7°	40.5°	1.03	0.10	N/A	N/A



# Drought Outlook: August

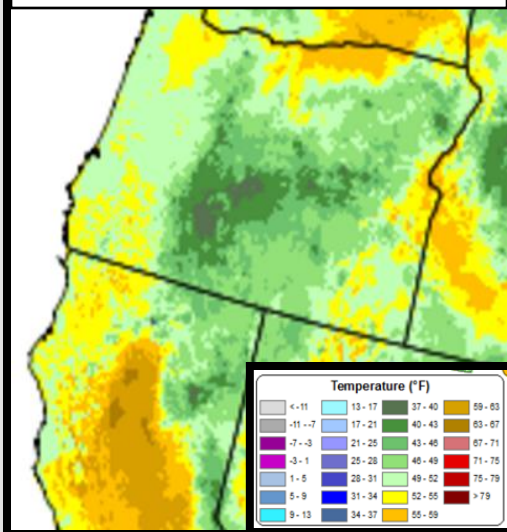


***Valid for August 2016  
Released July 31, 2016***

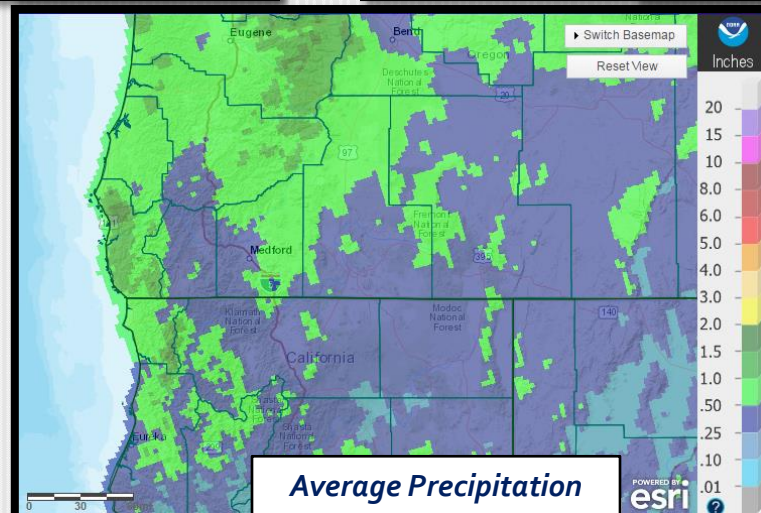
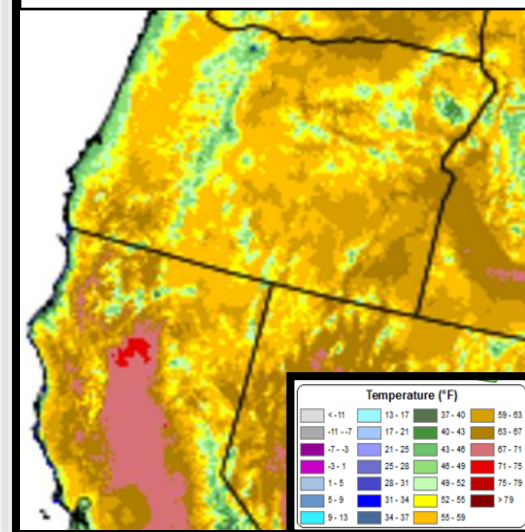
# Looking Ahead: Normals for August (1981-2010)

August is typically one of the top two driest dry season months, but is not as dry, compared to July, west of the coastal mountain ranges and for other locations in the forecast area. High temperatures are very warm, low temperatures are cool, and precipitation is minimal. All of the forecast area usually receives, on average, an inch or less of precipitation in August. Exceptions include: portions of the coastal mountain ranges, the higher terrain of Siskiyou county west of the Klamath River, and the higher terrain of eastern Douglas county. Valley high temperatures are typically in the 80s to lower 90s. Nights are usually cool, with average minimum temperatures in the 40s for east side valleys, and 50s for west side valleys.

*Average Minimum Temperatures*



*Average Maximum Temperatures*

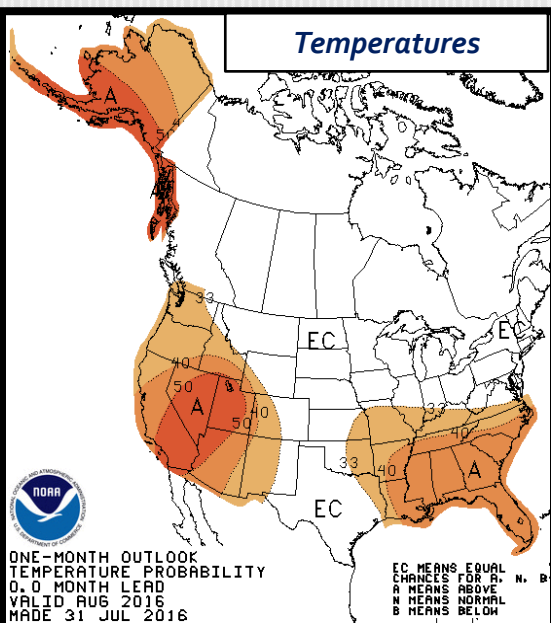


*Average Precipitation*

# August 2016 Outlook

The forecast for August 2016 is for a slightly increased chance of above average temperatures. Model guidance suggests temperatures will be near normal for the first half of the month, and then slightly above normal for the latter half of the month. Thus, there's reasonably high confidence that temperatures will be at to slightly above normal for the month.

For precipitation, there's an increased chance for below normal precipitation over the northeastern portion of the forecast area from about northeastern Douglas County, Siskiyou Summit, and Medicine Lake northeastward. Overall, model guidance indicates an increased chance of below average precipitation over the entire forecast area. Of course, because August normals are so low for precipitation, it won't take much to meet or exceed normal – even one good thunderstorm could do it. Model guidance is also hinting at the potential of at least marine layer light rain and drizzle during the 2nd and 3rd weeks of the month (Aug 7-20th) for the coast and Umpqua Basin. Large scale anomalies indicate showers and thunderstorms could also occur in this time period across other portions of the area as well, coinciding with near to cooler than normal conditions. This is important because any wetting precipitation this time of the year will reduce the large fire threat for at least a few days. Confidence is high that the month as a whole will be drier than normal. However, confidence is low in precipitation related details beyond that due to the convective nature of the precipitation, how far out the forecast is, and model differences.



**Expected Impact, August 2016:**

As we'd usually expect, August will continue to bring with it an increasing concern for wildfires. A recent trend in the models for the possibility of stronger low pressure troughing in the 8/7-8/14 time frame will likely limit fire potential some during the month. However, ongoing seasonal dryness and little or no precipitation will continue to cause fire concerns. On the bright side, it appears that the threat for lightning this month, as a whole, is lower than normal. Altogether, it looks like a pretty typical August., though a bit on the warmer and drier side of normal.

