National Weather Service Medford

# June 2017 Climate Summary

DI. LATHER ST

\*These data are preliminary and have not undergone final QC by NCEI. Therefore, these data are subject to revision. Final and certified climate data can be accessed at the <u>National Centers for Environmental Information (NCEI)</u>.

# June 2017 Weather Review

Overall, June 2017 was warmer and drier than normal. The exception was along the coast south of Cape Blanco and portions of the east side where conditions were wetter than normal thanks to a late season storm.

The first week of June featured near normal to slightly warmer than normal temperatures as high pressure dominated the weather. Conditions quickly turned cooler and wetter by the second week of the month as a late season storm moved through the area. This system brought temperatures more typical of late April than mid-June and also brought a widespread wetting rain to the area. Temperatures fell to 15 to 20 degrees below normal and many areas saw close to record daily minimum high temperatures on the 10<sup>th</sup> and 11<sup>th</sup>. Snow levels were down as low as 5,000 feet with this system and Crater Lake National Park Headquarters reported 3 inches of total snowfall during this time. This late season system was slow to move out. This resulted in temperatures remaining below normal for the remainder of the week and also maintained showers east of the Cascades where some locations ended the month with above normal precipitation.

Once this system finally exited the area just after mid-month, conditions quickly returned to more summer like weather. Dry conditions prevailed and temperatures turned much warmer away from the immediate coast. While extreme heat was ongoing in central California, inland temperatures in northern California and southern Oregon held to around 10 to 15 degrees above normal and overnight temperatures cooled enough to provide relief from the high daytime heat. Within a few days, however, temperatures rose even further as the heat wave stretched into the forecast area. Valleys west of the Cascades recorded the first triple digits of the season and many areas set new daily records during this heat wave. To end the heatwave, a thunderstorm outbreak occurred and over 1800 lightning strikes occurred over the forecast area. These thunderstorms caused widespread power outages and multiple fire starts around the Medford area. Thankfully, the fires in town were quickly put out during initial attack efforts.

To finish out the month, the upper level pattern turned more zonal and thus moderated temperatures during the last week of June 2017.

# June 2017 Observed Temperatures



# **Average Temperatures**

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	58.2	+2.1°	64.1	+2.4°	52.2	+1.7°
Roseburg	66.1	+2.2°	77.8	+1.8°	54-4	+2.6°
Medford	70.0	+3.2°	84.2	+2.6°	55.8	+3.8°
Klamath Falls	61.4	+3.2°	78.5	+4.5°	44.2	+1.9°
Montague, CA	66.5	+2.7°	83.7	+3.4°	49-3	+2.0°
Mt. Shasta City, CA	64.7	+3.2°	80.4	+3.3°	49.0	+3.1°
Alturas, CA	63.7	+4.3°	81.8	+4.1°	45.6	+4.6°

#### **Monthly Max & Min Temperatures**

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	73°	23 <sup>rd</sup>	43°	5 <sup>th</sup>
Roseburg	103°	24 <sup>th</sup>	45°	5 <sup>th</sup> & 14 <sup>th</sup>
Medford	107°	24 <sup>th</sup>	45°	<b>11</b> <sup>th</sup>
Klamath Falls	96°	19 <sup>th</sup>	30°	13 <sup>th</sup> & 14 <sup>th</sup>
Montague, CA	102°	19 <sup>th</sup>	35°	10 <sup>th</sup>
Mt. Shasta City, CA	98°	19 <sup>th</sup>	31°	10 <sup>th</sup>
Alturas, CA	97°	19 <sup>th</sup> & 25 <sup>th</sup>	35°	5 <sup>th</sup> & 11 <sup>th</sup>

	Record High / Date	Old Record/Year	<u>Record</u>		Record High / Date	Old Record/Year
Roseburg	94°/23 <sup>rd</sup>	93°/1940	<u>Temperatures</u>	Mt Shasta City	98°/19 <sup>th</sup>	93°/1961
Roseburg	103°/24 <sup>th</sup>	97°/1940		Mt Shasta City	97°/24 <sup>th</sup>	96° / 2006
Klamath Falls	96°/19 <sup>th</sup>	91°/1988		Montague	102°/19 <sup>th</sup>	99°/1961
Klamath Falls	94°/24 <sup>th</sup>	Ties with 2006		Montague	101°/24 <sup>th</sup>	Ties with 2006

# June 2017 Observed Precipitation



# **June Precipitation**

	Total	Departure from Normal	Greatest 24-hr Total	Date(s)	Record Daily				
North Bend	2.18″	+0.23″	0.62″	8 <sup>th</sup>	Precipitation				
Roseburg	0.83″	-0.30″	0.25″	10 <sup>th</sup>		ICCIP	, icac		
Medford	0.50″	-0.12″	0.21″	8 <sup>th</sup>		New Record	Date	Old Record	Year
Klamath Falls	0.29″	-0.75″	0.19″	31 <sup>st</sup> – 1 <sup>st</sup>	Montaque	0.16"	a a th	0.08"	2000
Montague, CA	0.43″	-0.28″	0.21″	8 <sup>th</sup>	Mt Chasta	0.10		0.00	2009
Mt. Shasta City, CA	1.33″	+0.13″	0.69″	11 <sup>th</sup>	City	٥.69″	<b>11</b> <sup>th</sup>	Ties	2009
Alturas, CA	1.16″	+0.26″	0.34″	11 <sup>th</sup>					
Image: description Image: description   Image: description Image: description <th>Inches   8   5   4   3   2   1   .5   -1   -2</th>									Inches   8   5   4   3   2   1   .5   -1   -2

-3

-8

0

es

Esri, HERE, Garmin, NGA, USGS, NPS

Redding

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esri

Esri, HERE, Garmin, NGA, USGS, NPS

#### **Reservoir Status**



PROVISIONAL DATA - SUBJECT TO CHANGE!

### **Reservoir Status**



Reservoir statuses are as of July 6<sup>th</sup>, 2017. Current levels suggest water supply is looking good, thanks to two consecutive strong water years over the majority of the forecast area.

\*Currently unable to access California Reservoir conditions. We hope to have the data available for next month's summary. Until then, please visit the following website for current reservoir status: http://cdec.water.ca.gov/cgiprogs/reservoirs/RES

#### Fuel & Fire Potential Status as of July 5<sup>th</sup>, 2017

Fire danger, as of July 5<sup>th</sup>, varies substantially across the area, from Low-Moderate along the coast and in the Umpqua Basin, to High-Very High elsewhere across the Medford Fire Weather Zones. After a very wet winter and spring, June was warmer than normal with substantial precipitation in some areas, but not others. The marine layer has been frequent along the coast and in the Umpqua Basin despite some warm spells. Most notably, a recent stretch of prolonged above normal temperatures inland from the coastal ranges since mid-June has caused substantial drying of all fuels. The combination of the preceding wet weather followed by hotter and drier conditions has made fine fuels both abundant and very receptive.

Northwest Observed Fire Danger Class: 05-Jul-17





## **Crater Lake**

	Average Max	Average Min	Total	Total	Snow Depth as	Highest Max/
	Temp (°F)	Temp (°F)	Precipitation	Snowfall	of: 6/30/16	Lowest Min
June	57.2°	34.2°	1.62″	3.0″	15″	77° (26 <sup>th</sup> ) / 25° (11 <sup>th</sup> )
Normal (1981-2010)	57.9°	33.2°	2.28″	4.1″	7″	N/A



# Drought Outlook: July





Valid for July 2017 Released June 30, 2017

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

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

Typically, July, along with August, is one of the two driest and warmest dry season months. High temperatures are very warm to occasionally hot, low temperatures are cool to occasionally warm, and precipitation is minimal, yet locally intense, usually coming in the form of monsoonal showers and thunderstorms. Nearly all of the forecast area receives, on average, an inch or less of precipitation in July. Valley high temperatures are usually in the 80s to lower 90s. Nights are usually cool, with average minimum temperatures in the 40s for valleys east of the Cascades, and 50s in valleys west of the Cascades.



# Outlook for July 2017

The official CPC forecast for July 2017 calls for equal chances to warmer than normal temperatures and equal chances of at, below, and above normal precipitation. Both current and long term indications from model guidance suggest July is most likely to be above normal for temperatures, except along and near the coast and Umpqua Basin, where an increased marine layer influence and cooler than normal sea surface temperatures are most likely to result in near to even below normal temperatures. Weekly model forecasts suggest upper level flow from the SSW early in the month, followed by predominant SSE flow from approximately mid-month onward. This suggests that monsoonal showers and thunderstorms will occur during the 2<sup>nd</sup> half of the month. We, therefore, support the forecast for equal chances for precipitation, pointing out that there is an enhanced possibility of rainfall during the 2<sup>nd</sup> half of July.



#### Expected Impact, July 2017:

Climatologically speaking, July, along with August, is the most common month in which large wildfires start. Dry fuels and lightning realize this potential, and this July appears as if it will bring both during the 2<sup>nd</sup> half of the month. With the abundant fine fuel load, we expect grass and brush fires to be highly problematic, moving into less receptive timber. Thunderstorms will be locally hazardous during the 2<sup>nd</sup> half of the month. Heat impacts and localized smoke are also realistic concerns.

### \*A note about Period of Record (POR)

When looking at record setting events, it's important to consider the length and completeness of the site's period of record (POR). For example, a site June have records back to the early 1900's, but if there is a significant portion of the record missing, it's possible that the POR is not encompassing another significant event that June have surpassed the event in question. Therefore, "record setting" should be considered relative to the completeness/length of POR. To help keep records in context, the POR for each climate site is listed below:

- North Bend: 1/1/1902 Present
- <u>Roseburg</u>: 4/1/1900 Present
  - Missing:
    - ▶ 05/1900-01/1901
    - ➢ 03/1901-06/1902
    - ➢ 08/1902-12/1930
    - ▶ 10/1965-06/1997
- <u>Medford</u>: 3/11/1911 Present
- <u>Klamath Falls</u>: 1/1/1948 Present
  - Missing:
    - ▶ 08-10/1970
    - > 1971-10/1997

- Montague, CA: 7/1/1948 Present
  - ✤ Missing:
    - ▶ 08-09/1952
    - ▶ 02/1953-06/2000
- Mount Shasta City, CA: 4/15/1948 Present
  - Missing:
    - ➢ 10/1984-01/1985
    - ▶ 10/1985-03/1986
    - ➢ 09/1986-07/1997
- <u>Alturas, CA</u>: 6/1/1998 Present
  - ✤ Missing:
    - ▶ 08/1998