National Weather Service Medford

July 2019 Climate Summary

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*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>.

July 2019 Weather Review

Overall, July 2019 was a fairly typical summer month with warm temperatures, dry conditions and periods of thunderstorms east of the Cascades. With no big heat waves, temperatures for most locations were within a degree or two of normal for the month, but precipitation for many areas was well below normal.

During the beginning of the month, a few weak fronts moved through the area, bringing rainfall mostly to the coast. One front brought enough precipitation to set a daily rainfall total at North Bend. For the most part, however, the most notable feature of these fronts was to push in cool, moist marine air into the area which helped to temper high temperatures west of the Cascades. As the month progressed, high pressure strengthened over the Four Corners region and with troughing offshore, this put the forecast area under persistent southwest flow. This led to hot, dry days with periods of thunderstorms east of the Cascades. There were times during the month when the trough offshore would move inland and bring a gradual cool down with breezy winds, but the southwest flow pattern returned shortly after and temperatures rebounded. This pattern continued for most of the month, and the weather was rather benign with no big thunderstorm outbreaks or prolonged periods of hot temperatures.

Although no big thunderstorm outbreaks occurred, the hot and dry conditions primed the area for wildfires. The human caused MP 97 wildfire near Canyonville was reported the night of July 24th and quickly grew over the next few days. Typical afternoon winds brought smoke from this fire into the valleys south of the Umpqua Divide, which degraded air quality for about a week. However, a surge of cool moist marine air reached the fire multiple mornings in a row, and this helped crews gain significant progress on containment and reduced fire activity and smoke. Another fire, the Panther Gulch Fire, ignited in the Applegate Valley and crews were able to get a handle on this fire as well.

July 2019 Observed Temperatures



Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	62.3	+3.7°	68.7	+4.2°	55.9	+3.1°
Roseburg	71.1	+0.8°	84.1	-0.2°	58.0	+1.8°
Medford	74.0	-0.1°	89.0	-1.7°	58.9	+1.5°
Klamath Falls	65.1	-0.9°	84.1	+0.2°	46.1	-2.1°
Montague, CA	73.7	+1.0°	91.5	+0.2°	56.0	+1.9°
Mt. Shasta City, CA	68.8	+0.9°	86.2	+0.4°	51.4	+1.4°
Alturas, CA	66.9	+0.5°	88.0	0.0°	45.8	+1.0°

Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	72°	17 th & 27 th	50°	7 th
Roseburg	94°	26 th	51°	3 rd
Medford	98°	25 th	52°	4 th
Klamath Falls	91°	26 th & 28 th	<i>37</i> °	3 rd & 7 th
Montague, CA	99°	28 th	46°	4 th
Mt. Shasta City, CA	95°	28 th	43°	1 st
Alturas, CA	95°	28 th	36°	1 st

July 2019 Observed Precipitation



July Precipitation

Record Daily Precipitation				Total	Departure from Normal	Greatest 24-hr Total	Date(s)		
			North Bend	1.08″	+0.58″	0.85″	9 th		
			Roseburg	0.02″	-0.40″	0.02″	18 th		
	New	Date	Old	Year	Medford	Trace	-0.28″	Trace	9 th
North	Record		κετοια		Klamath Falls	0.07″	-0.41″	0.07″	14 th
Bend 0.85"	9 th	0.43″	1979	Montague, CA	Trace	-0.45″	Trace	9 th	
					Mt. Shasta City, CA	0.00″	-0.39″	N/A	N/A
					Alturas, CA	0.01″	-0.33″	0.01″	7 th





Reservoir Status



PROVISIONAL DATA - SUBJECT TO CHANGE!

Ending At Midnight - August 15, 2019

Reservoir **Status**

Cherry Creek 8.47 cfs

Spencer Creek (OWRD)

Klamath River below IGD 965 cfs

Klamath River at Keno 594 cfs

54% full 276529 / 515615 AF

North Canal at Hww 97 59.2 cfs

076 F

Canal at Hwy 97 207 cfs

CURRENT RESERVOIR CONDITIONS



Klamath River Basin. Data courtesy of Bureau of Reclamation

Crater Lake

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 7/31/19	Highest Max/ Lowest Min
July	66.2°	40.7°	0.01″	0.0″	o″	77° (28 th) / 31° (2 nd)
Normal (1981-2010)	68.7°	40.5°	1.03″	0.1″	o″	N/A



Drought Monitor (Current) & Outlook (August)





http://www.cpc.ncep.noaa.gov/products/expert_assessment/ month_drought.png

Looking Ahead: Normals for August (1981-2010)

August is typically one of the two driest dry months across the forecast area, but is not as dry as July for areas west from the coastal mountain ranges westward. Lightning (see next slide) and fire activity usually peaks in August. High temperatures are typically at their warmest of the year, generally very similar to July's normals. Valley high temperatures are typically in the 8os to lower 9os. Average minimum temperatures are slightly cooler than those of July as nights become increasingly longer. Average minimum temperatures are mostly in the 40s for east side valleys, and in the 40s and 50s for west side valleys. Most of the forecast area usually receives an inch or less of precipitation. Exceptions portions of the coastal include mountain ranges and the higher terrain of eastern Douglas county.



*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 may 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 may 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>: 12/1/1897 Present

- 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