National Weather Service Medford

August 2020 Climate Summary



*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>.



August 2020 Weather Review

Overall, August 2020 was a typical summer month for northern California and southwest Oregon. The month was characterized by hot temperatures and dry weather with the occasional threat of thunderstorms. The month began under the influence of upper level troughing and this helped maintained near normal temperatures for the first few days of the month. The position of the upper level trough left the area under south to southwesterly flow, and this resulted in a favorable pattern for thunderstorms. A shortwave trough moved through the area and this provided the trigger for an area of thunderstorms to develop from central Siskiyou County and northeastward into Klamath County. Fortunately, these thunderstorms had precipitation with them, and one thunderstorm brought record rainfall to Montague, CA on the 5th. Cloud cover associated with these thunderstorms, along with a weak front, kept temperatures below normal for a few days across the area. Some light precipitation did fall with this weak front but was limited to coastal locations and places north of the Umpqua Divide.

Broad upper level troughing continued over the area for the next week. Eventually, the Four Corners High strengthened, pushing the upper level trough northward and this left the area under southwest flow again. This brought the return of seasonable temperatures and dry conditions until the middle of the month. At this point, the Four Corners High became the dominant influence and brought the hottest temperatures of the year so far. This heat wave challenged and broke multiple records across the area, including the all-time record high temperature at Roseburg. 109°F was recorded on the 15th and this tied the all-time high record that was set on July 20th, 1946. This heat wave continued through the 18th and, as is typical, thunderstorms were a concern again during this heatwave. Precipitation wasn't as hefty with this round of thunderstorms as the previous. Most locations only recorded a trace of precipitation. This included the Medford Airport, and this was the only precipitation recorded during the month of August for Medford.

After this heat wave broke, southwesterly flow aloft returned, and this brought more seasonable temperatures for the remainder of the month. However, under this southwesterly flow, smoke from California wildfires was transported into the area, bringing hazy/smoky conditions and degraded air quality, mainly east of the Cascades. The threat of thunderstorms continued under this pattern, especially on the 25th when tropical storm remnants were swept into the flow, enhancing the moisture and instability over the area. However, high level cloud cover and smoke significantly limited thunderstorm development. A dry front moved through the area during the end of the month. This front pushed smoke out of the area, bringing much improved air quality to areas east of the Cascades. Behind this front, northwest flow continued, and this kept the smoke out of the area, so these improved conditions continued through the end of the month.



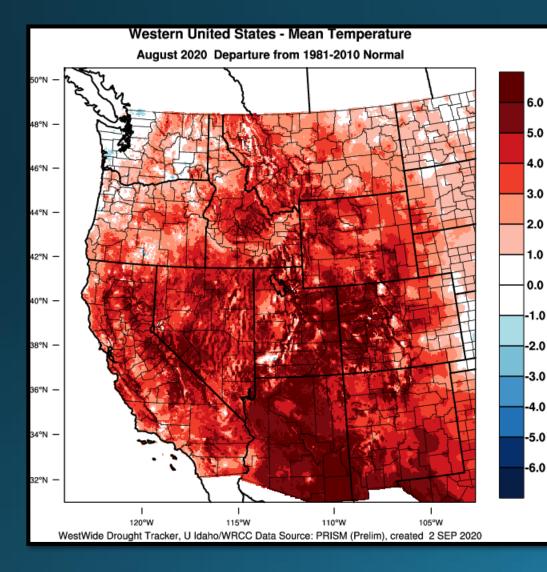
August 2020 Observed Temperatures

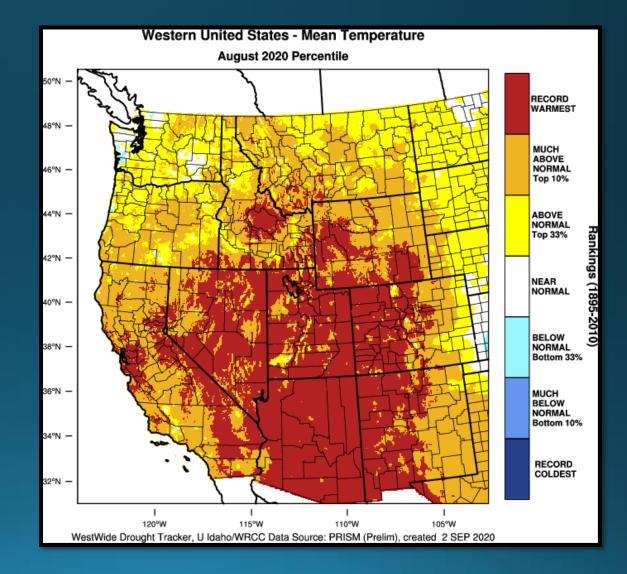
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Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	61.1	2.0°	69.1	3.7°	53.1	0.2°
Roseburg	73.5	3.4°	88.7	4.0°	58.4	2.9°
Medford	76.8	3.1°	93.4	2.7°	60.1	3.3°
Klamath Falls	67.6	2.7°	87.3	4.1 °	47.9	1.3°
Montague, CA	75.3	4.6°	93.9	4.2°	56.7	5.1°
Mt. Shasta City, CA	71.2	4.6°	88.7	3.5°	53.7	5.7°
Alturas, CA	67.8	3.2°	89.5	3.1 °	46.1	3.4°



Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)				
North Bend	85°	15 th	46°	14 th		Record High	Date	Old Record/Year
Roseburg	109°	15 th	51°	7 th & 12 th	Medford	108°	15 th	Ties with 2008
Medford	108°	15 th	51°	7 th	Montague	105°	15 th	Ties with 2008
inieujoru	100	15	51		North Bend	85°	15 th	84°/1919
Klamath Falls	9 8°	15 th	40°	7 th	Roseburg	109°	15 th	98°/2012
Montague, CA	105°	15 th	50°	5 th				s all time high
Mt. Shasta City, CA	99°	15 th	49°	21 st			temperature record of 109° set on July 20 th , 1946	
Alturas, CA	99°	15 th	<i>39</i> °	30 th & 31 st				



August 2020 Observed Precipitation

RECORD

WETTEST

MUCH ABOVE NORMAL

Top 10%

ABOVE NORMAL Top 33%

NEAR NORMAL

BELOW

MUCH BELOW NORMAL Bottom 10%

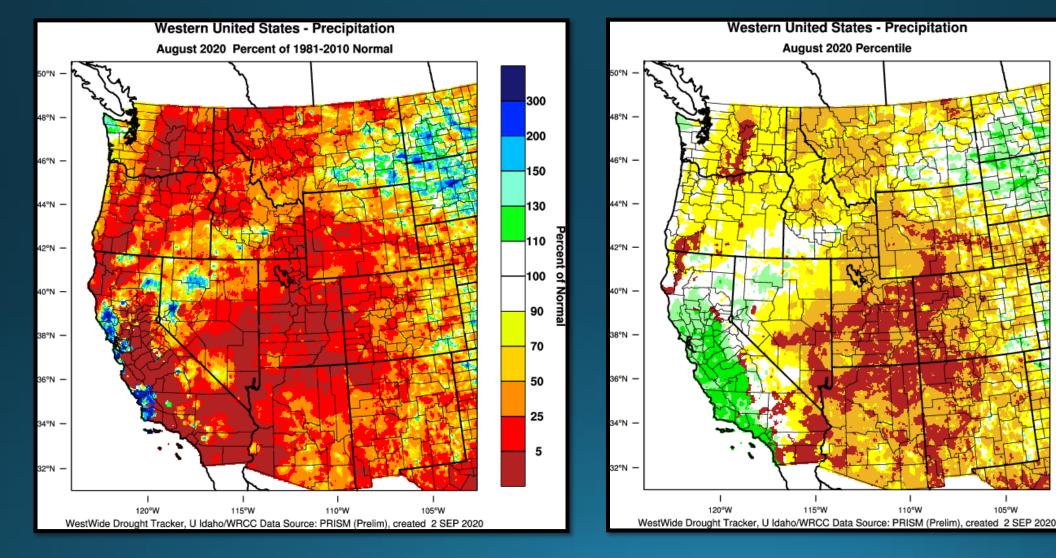
RECORD

NORMAL

Bottom 33%

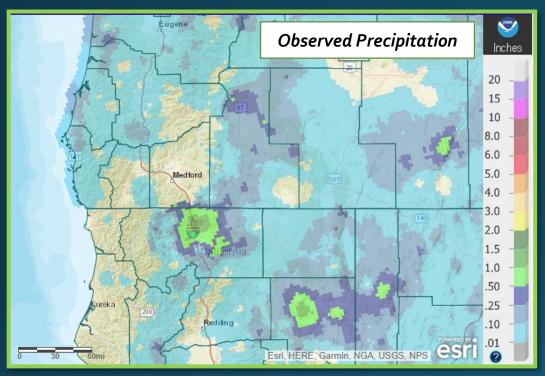
(1895-

-2010)





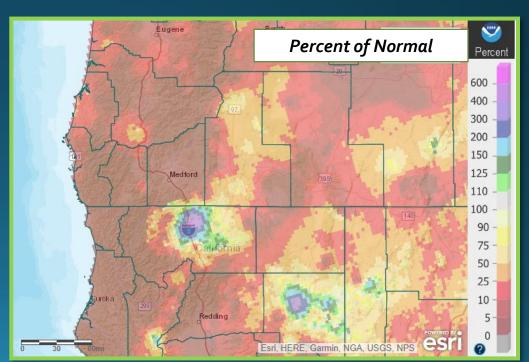
Precipitation



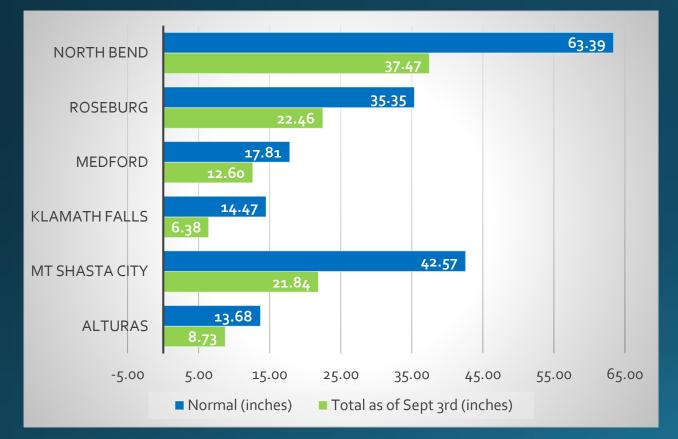
Record Precipitation

	Date/Amount	Old Record/Year
Montague	5 th / 1.76″	0.29″ / 1952
Alturas	17 th / 0.10″	Ties with 1968

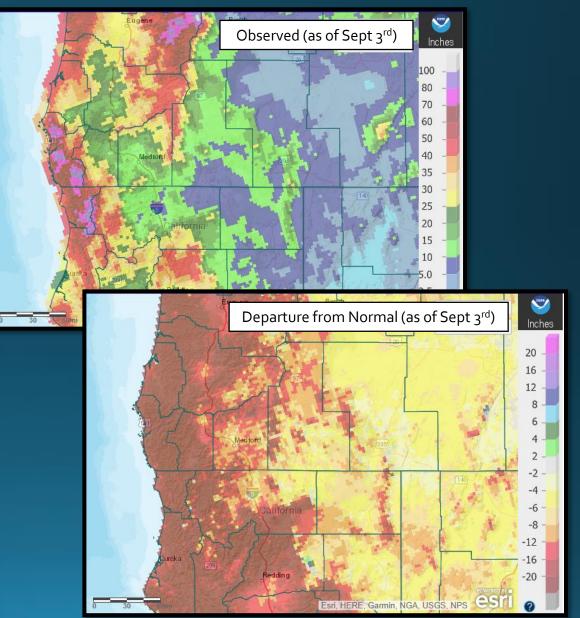
	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	0.07″	-0.55″	0.04″	21 st
Roseburg	0.02″	-0.45″	0.02″	6 th
Medford	Т	-0.40″	Т	16 th
Klamath Falls	0.25″	-0.18″	0.25″	5 th
Montague, CA	1.77″	1.43″	1.77″	5 th
Mt. Shasta City, CA	0.10″	-0.24″	0.10″	17 th
Alturas, CA	0.12″	-0.24″	0.12″	17 th



Water Year Status (As of September 3rd)



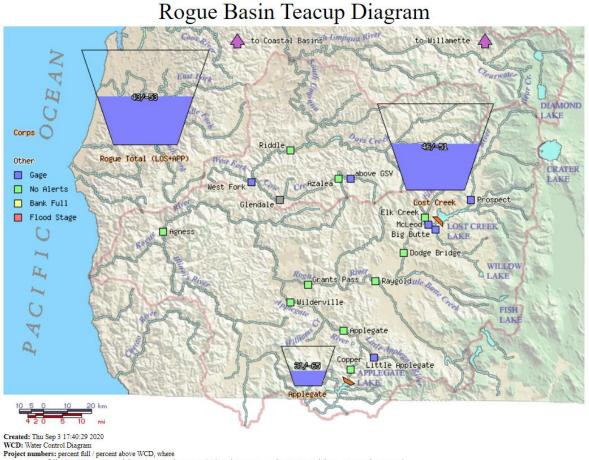
NOAA



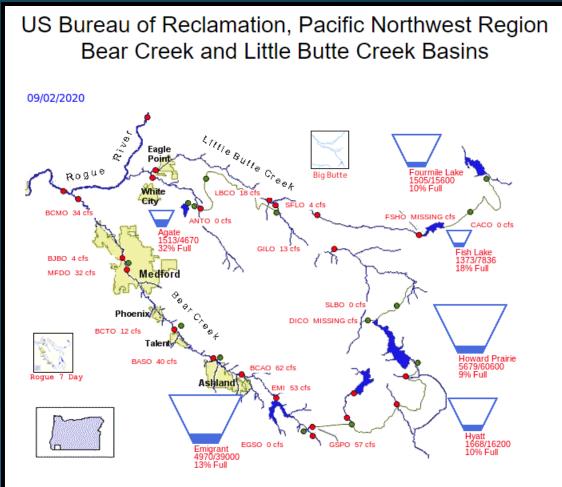


Reservoir Status

Data courtesy of <u>US Army Corps of Engineers</u>



percent full = (current storage - minimum conservation storage) / (maximum conservation storage - minimum conservation storage) percent above water control diagram = (current storage - WCD storage) / (maximum conservation storage - minimum conservation storage) Data courtesy of **Bureau of Reclamation**

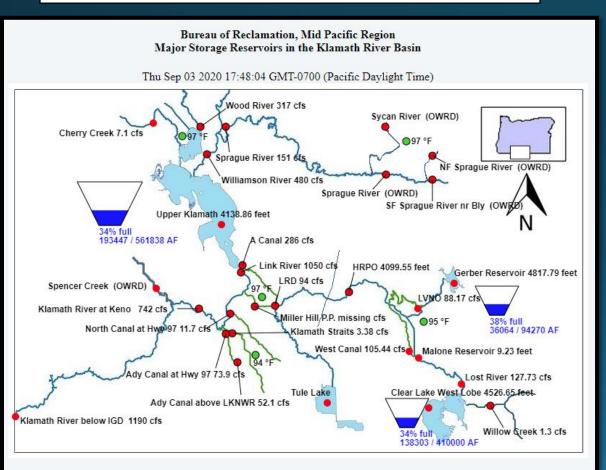


PROVISIONAL DATA - SUBJECT TO CHANGE!



Reservoir Status

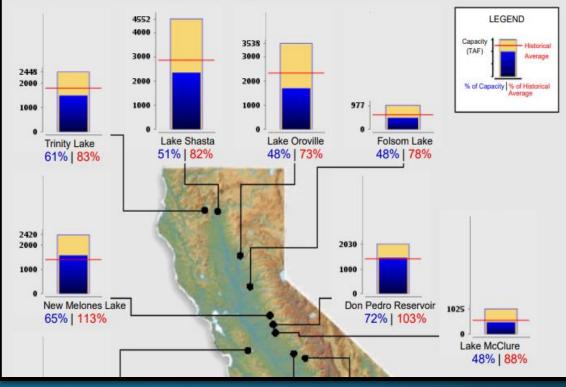
Klamath River Basin. Data courtesy of Bureau of Reclamation



Reservoir Conditions

Ending At Midnight - September 2, 2020

CURRENT RESERVOIR CONDITIONS



Northern California. California Data Exchange Center

PROVISIONAL DATA - SUBJECT TO CHANGE!



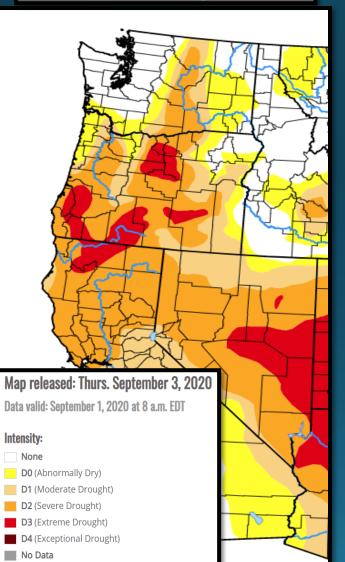
10A

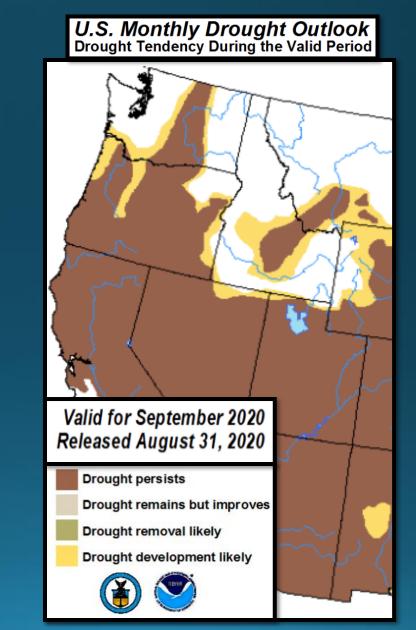
Image: NPS

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 8/31/20	Highest Max/ Lowest Min
August	71.4°	47·3°	0.10″	0.0″	o″	82° on 16 th / 35° on 7 th
Normal (1981-2010)	69.7°	40.5°	1.00″	0.0″	o″	N/A

Drought Monitor (Current) & Outlook (September)

United States Drought Monitor



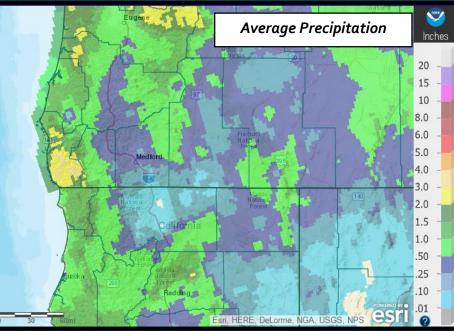




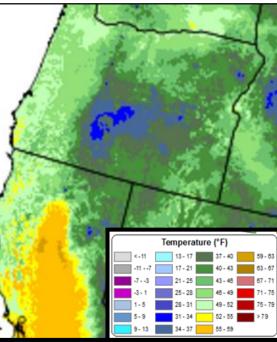


Looking Ahead: September Normals (1981-2010)

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 highest terrain of the Cascades westward, coastal counties, and coastal mountains. 2-4 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, as well.









*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 might have records dating 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 might 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:

- <u>North Bend</u>: 01/1902 Present
- <u>Roseburg</u>: 04/1900 Present
 Missing:
 - ▶ 05/1900-01/1901
 - ▶ 03/1901-06/1902
 - ▶ 08/1902-12/1930
 - ▶ 10/1965-06/1997
- <u>Medford</u>: 03/11/1911 Present
- <u>Klamath Falls</u>: 12/1897 Present

- Montague, CA: 07/1948 Present
 Missing:
 - ▶ 08-09/1952
 - ▶ 02/1953-06/2000
- <u>Mount Shasta City, CA</u>: 04/1948 Present
- <u>Alturas, CA</u>: 05/1935 Present