#### National Weather Service Medford

# 2021: September 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>.



# September 2021 Weather Review

Cooler than normal temperatures under a period of troughing continued during the beginning of September 2021, though wildfire smoke continued to plague the region during this time. After the first few days of the month, strong high pressure over the Four Corners Region expanded westward and brought the return of hot temperatures to the area through the 9<sup>th</sup>.

The shift from summer to fall arrived around the 10<sup>th</sup> as a cold front moved through region and brought the first measurable precipitation for many areas since the end of July. Much of the precipitation with this front was focused east of the Coast Range with the greatest amounts recorded east of the I-5/Hwy 99 corridor. In fact, Mt Shasta City set a daily precipitation record on the 10<sup>th</sup> with this front. Although precipitation was beneficial and effective at suppressing fire activity some, it was not enough to end fire season or extinguish the area's wildfires. There was a brief reprieve from the smoky conditions with this front, however, smoke did return after its departure, though not as thick as it had been in recent weeks. Once this front moved out of the area, a period of flat ridging settled over the Pacific Northwest through the middle of the month.

A much stronger front arrived on the 18<sup>th</sup> and was much more effective at suppressing the area's wildfires. This atmospheric river was considerably stronger than those typical of September, bringing over an inch of rain to the Medford Airport and setting daily record rainfall records in both Medford and Roseburg. While this front did not completely end fire season, it certainly put a significant slow down to it. Many of the area's wildfires received substantial rainfall with this front, which significantly reduced fire activity and smoke output.

High pressure returned on the 21<sup>st</sup> and dry conditions continued through the 26<sup>th</sup>. Another front arrived on the 27<sup>th</sup>, bringing much cooler and wetter conditions. North Bend saw a daily rainfall record with this front and the cold air mass that followed brought freezing temperatures to areas east of the Cascades and in northern California, resulting in the end of the growing season.

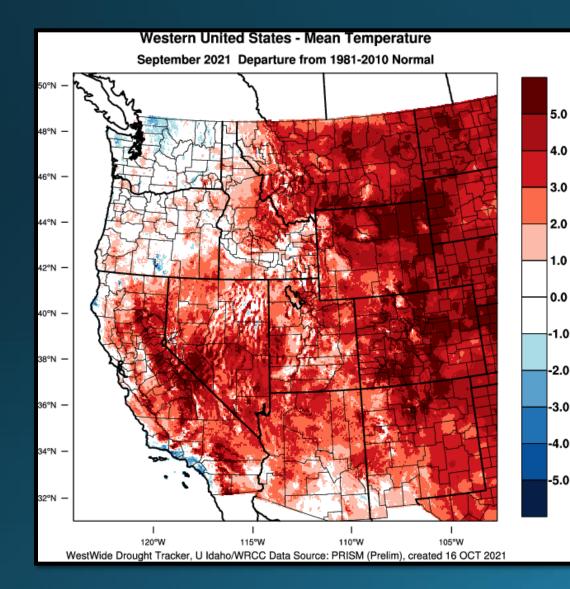
Although high pressure returned on the last day of the month, the active weather during September resulted in well above normal precipitation for the region with near to slightly above normal temperatures. The above normal precipitation was most welcomed not only for the significant slowing of fire season, but also for the ongoing significant drought conditions.

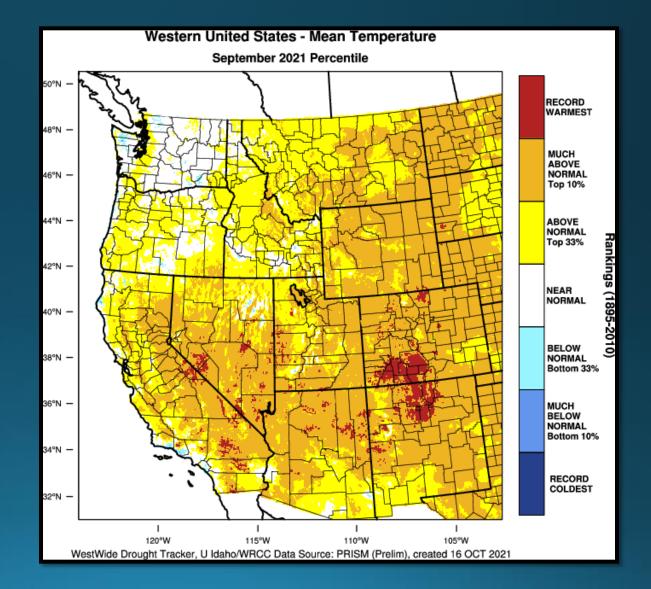


## September 2021 Observed Temperatures

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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	59.4	0.4°	68.1	1.4°	50.6	-0.7°
Roseburg	67.0	0.9°	81.6	1.5°	52.4	0.2°
Medford	68.0	0.3°	84.6	0.3°	51.4	0.2°
Klamath Falls	58.0	-0.2°	78.6	1.1°	37.5	-1.5°
Montague, CA	64.9	0.0°	84.1	-0.3°	45.7	0.3°
Mt. Shasta City, CA	62.9	1.4°	81.1	2.7°	44.8	0.2°
Alturas, CA	58.3	-0.2°	81.1	1.4°	35.6	-1.6°



## Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	80°	24 <sup>th</sup>	45°	14 <sup>th</sup>
Roseburg	93°	7 <sup>th</sup>	45°	17 <sup>th</sup>
Medford	95°	24 <sup>th</sup>	43°	29 <sup>th</sup> & 30 <sup>th</sup>
Klamath Falls	94°	7 <sup>th</sup>	28°	29 <sup>th</sup> & 30 <sup>th</sup>
Montague, CA	95°	7 <sup>th</sup>	<i>33</i> °	29 <sup>th</sup>
Mt. Shasta City, CA	97°	7 <sup>th</sup>	<i>33</i> °	29 <sup>th</sup>
Alturas, CA	98°	7 <sup>th</sup>	27°	29 <sup>th</sup>

	Record High	Date	Old Record/Year
	98°	7 <sup>th</sup>	97° / 1957
Alturas	94°	8 <sup>th</sup>	Ties with 1958
	94°	$9^{th}$	93° / 1963
	94°	6 <sup>th</sup>	93° / 1958
Mt Shasta City	94°	8 <sup>th</sup>	92°/2015
	94°	$9^{th}$	Ties with 2015

Record Low		Date	Old Record/Year
Klamath Falls	32°	3 <sup>rd</sup>	Ties with 1921
Montague	39 <b>°</b>	3 <sup>rd</sup>	Ties with 1964

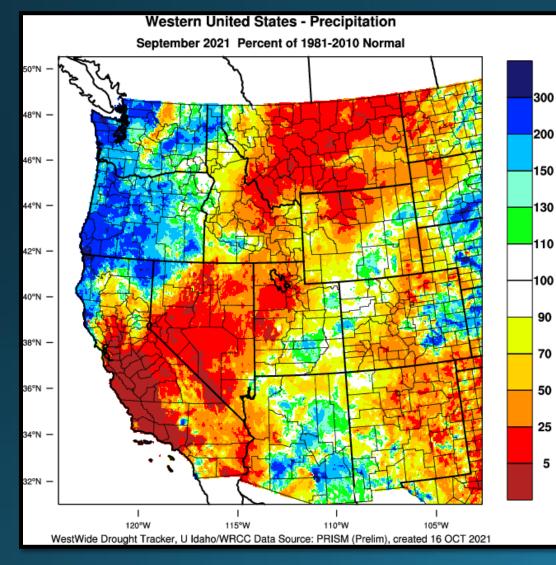


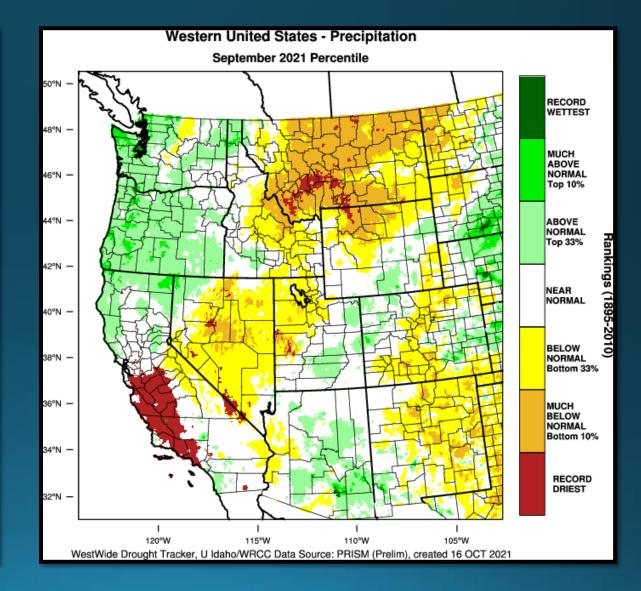
## September 2021 Observed Precipitation

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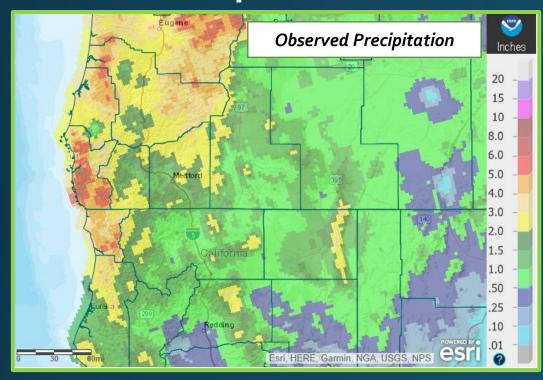
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### Precipitation

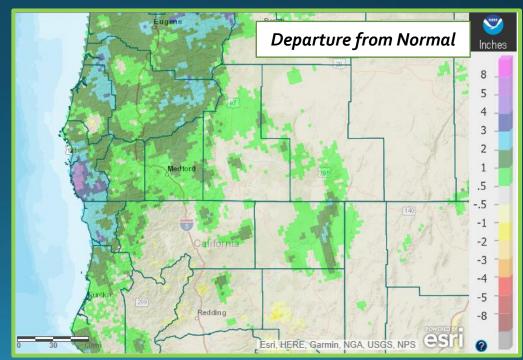


#### **Record Precipitation**

	Date / Amount	
North Bend	27 <sup>th</sup> / 1.43″	0.72″ / 1995
Roseburg	18 <sup>th</sup> / 1.23″	1.05" / 1966
Medford	18 <sup>th</sup> / 0.76″	0.65″ / 2019
Mt Shasta City	10 <sup>th</sup> / 0.43″	0.17″ / 1980

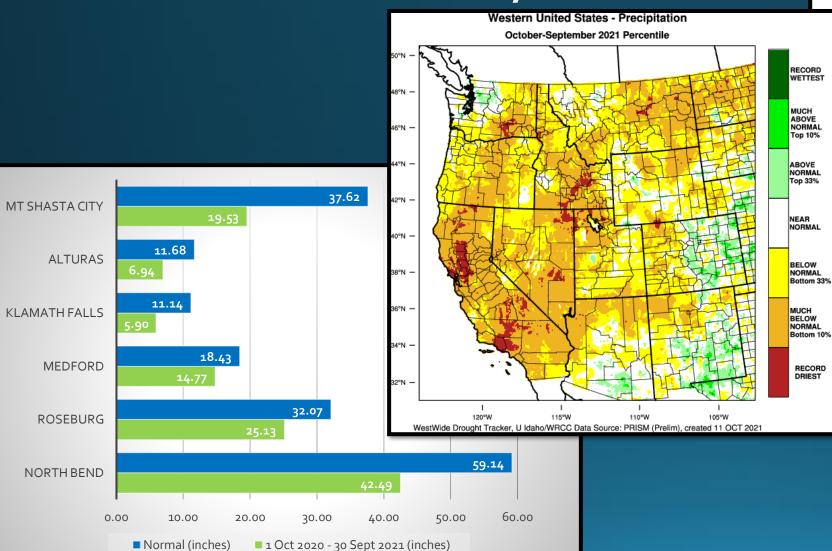
NNAP

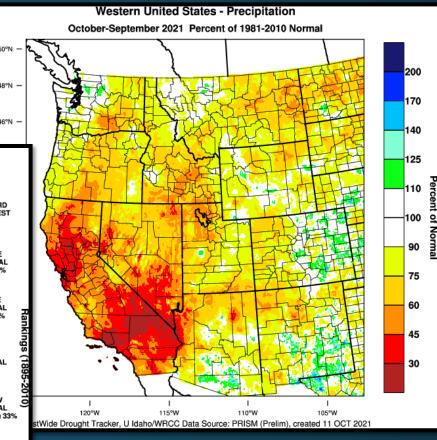
	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	3.21″	1.66″	1.51″	26 <sup>th</sup> – 27 <sup>th</sup>
Roseburg	2.26″	1.41″	1.35″	<b>18</b> <sup>th</sup> – <b>19</b> <sup>th</sup>
Medford	1.48″	1.00″	1.04″	<b>18</b> <sup>th</sup> – <b>19</b> <sup>th</sup>
Klamath Falls	0.39″	0.09″	0.30″	9 <sup>th</sup> – 10 <sup>th</sup>
Montague, CA	0.28″	0.01″	0.28″	9 <sup>th</sup> – 10 <sup>th</sup>
Mt. Shasta City, CA	o.83″	0.32″	0.44″	9 <sup>th</sup> – 10 <sup>th</sup>
Alturas, CA	1.26″	0.91″	0.57″	<b>18</b> <sup>th</sup> <b>– 19</b> <sup>th</sup>





## 2020-2021 Water Year Summary

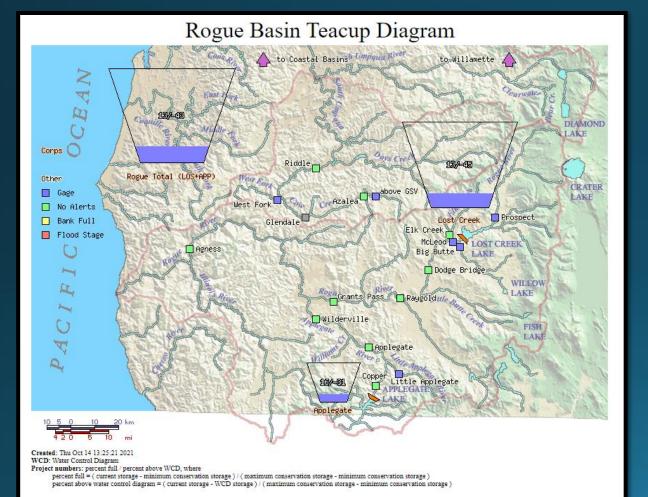






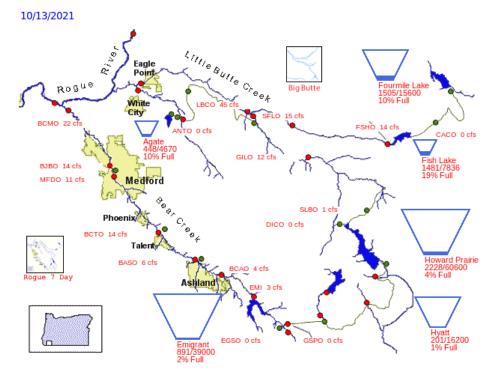
#### **Reservoir Status**

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



Data courtesy of **Bureau of Reclamation** 

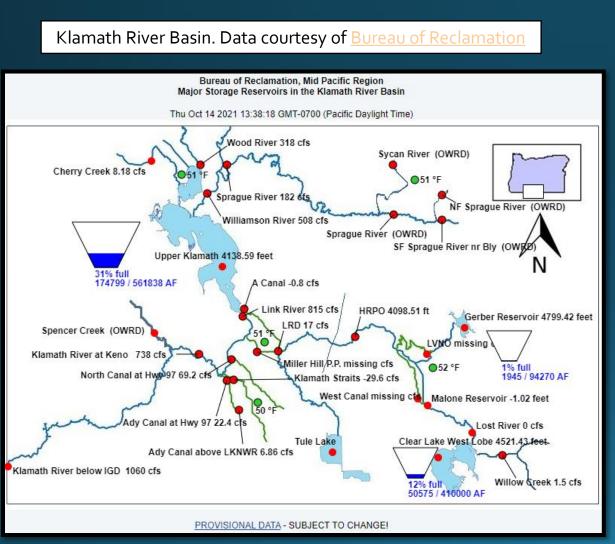
#### US Bureau of Reclamation, Pacific Northwest Region Bear Creek and Little Butte Creek Basins



PROVISIONAL DATA - SUBJECT TO CHANGE!



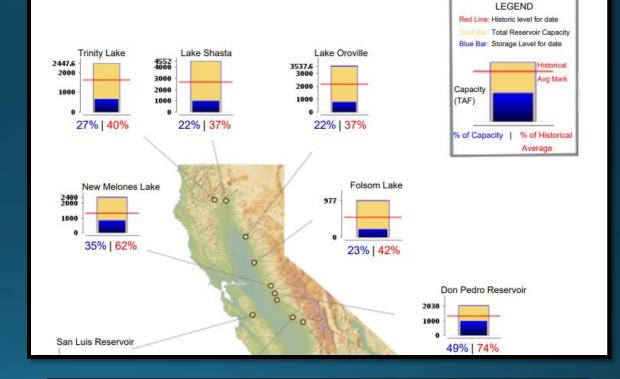
### Reservoir Status





#### SELECTED WATER SUPPLY RESERVOIRS

Midnight: October 13, 2021



Northern California. California Data Exchange Center

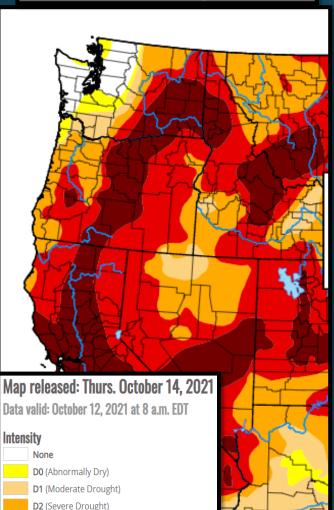
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Image: NPS

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 9/30/21	Highest Max/ Lowest Min
September	63.1°	39·9°	3.19″	2.3″	o″	78° on 8 <sup>th</sup> / 28° on 29 <sup>th</sup>
Normal (1991-2020)	63.0°	37.1°	1.93″	1.8″	Trace	N/A

### Drought Monitor (Current) & Outlook (October)

#### United States Drought Monitor



D3 (Extreme Drought) D4 (Exceptional Drought)

No Data

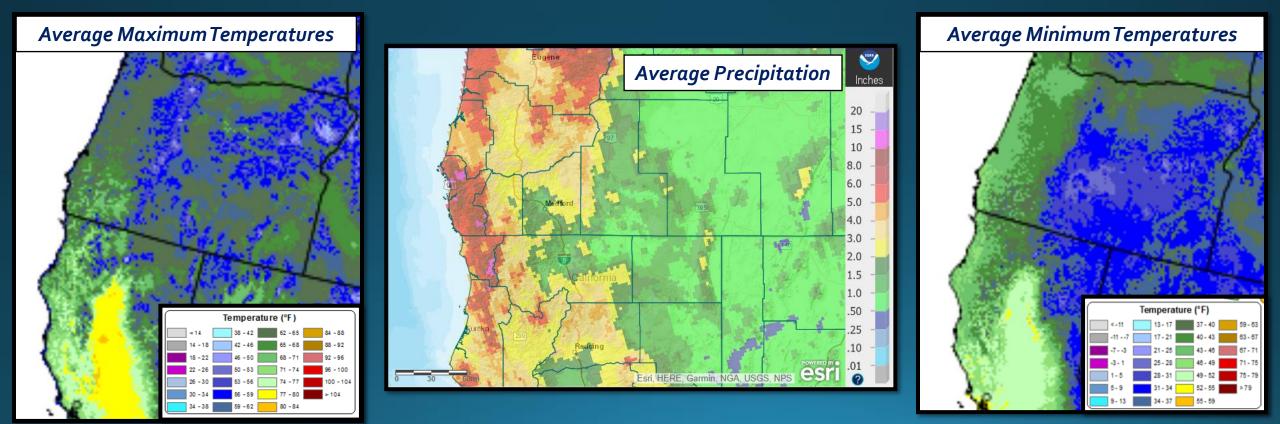
U.S. Monthly Drought Outlook Drought Tendency During the Valid Period .Т. Valid for October 2021 Released September 30, 2021 **Drought persists Drought remains but improves Drought removal likely Drought development likely** 





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

October is the first month of the water year because it is the month when the weather usually turns definitively cooler and wetter for our forecast area. If fire season hasn't already ended, it almost certainly will end this month. Average low temperatures are in the 20s and 30s east of the Cascades, and in the upper 30s to 40s west of them. Average high temperatures are mainly in the 50s in the mountains, though colder on the peaks, where snow usually begins to accumulate. Most east side valley highs are in the 60s while, on the west side, 60s and lower 70s are normal. 5-10 inches of precipitation is normal for Curry County & in the higher terrain of far western Siskiyou County, and 10-15" in the Curry mountains. Elsewhere, amounts vary greatly, with 0.5"-3" east of the Cascades, and 1" to 5" across much of the rest of the area.





## \*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