National Weather Service Medford

2021 August 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 National Centers for Environmental Information (NCEI).

August 2021 Weather Review

August 2021 featured conditions typical of summer, with periods of hot temperatures, thunderstorms and smoky conditions. Deep southerly flow continued over the area during the beginning of the month, which continued the thunderstorm pattern that was present at the end of July. Despite wetting rains with these thunderstorms, numerous fire starts occurred and multiple starts grew into larger, more persistent fires that would continue through the month.

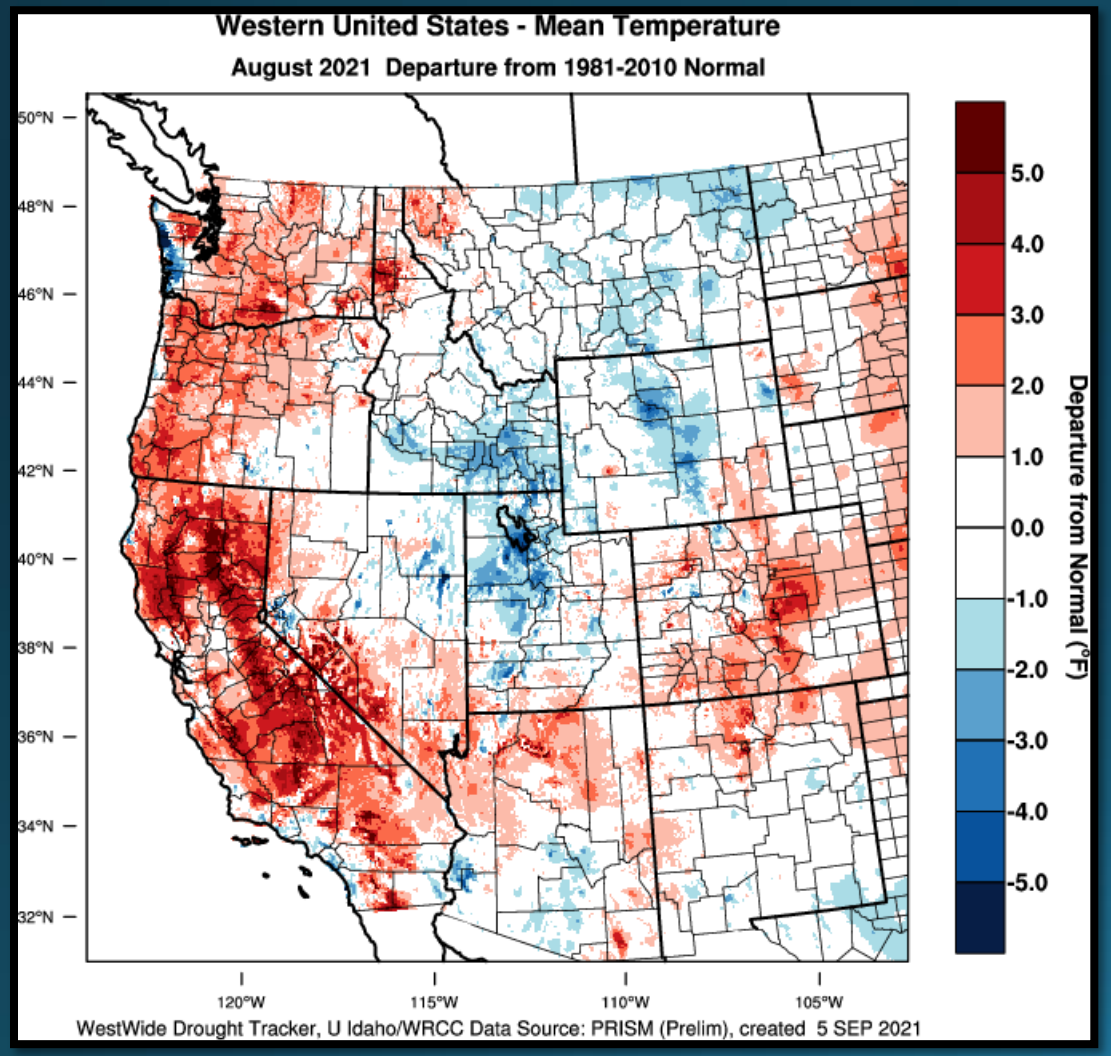
Low pressure moved through the region around the 5th, and although there wasn't very much precipitation associated with it, it brought a period of much cooler temperatures that was much welcomed, especially after a record hot July. Troughing lingered over the area for about the next week before high pressure returned offshore.

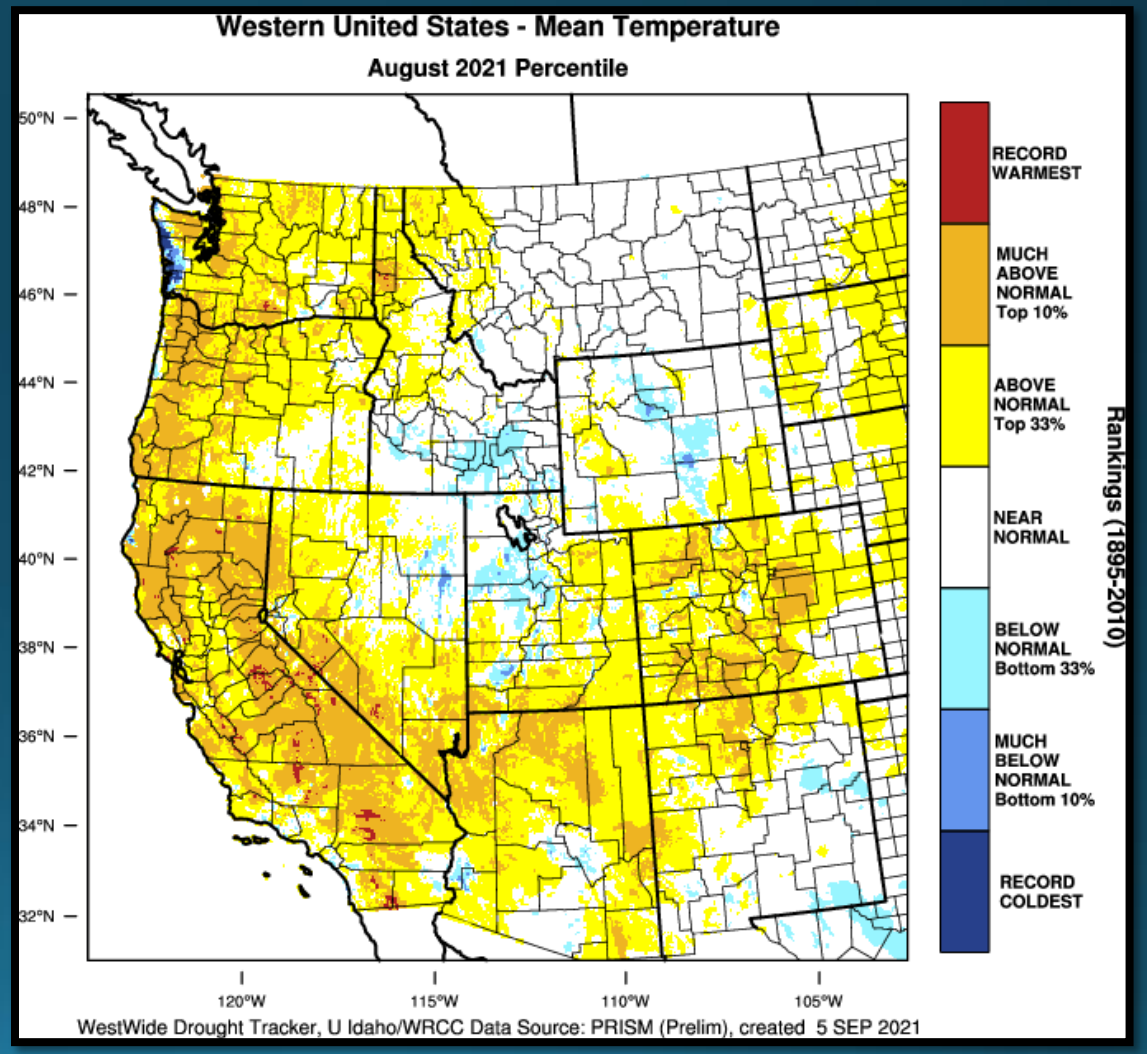
High pressure became the dominant weather driver through the middle of the month. During this time, several large wildfires developed to include the Skyline Complex and Devil's Knob in the Umpqua National Forest; the River Complex and McCash Fire in western Siskiyou County; the Fox and Cougar Fires in southwestern Lake County; and the Antelope Fire in eastern Siskiyou County. Extensive smoke from these fires resulted in very unhealthy air quality for much of area, especially from Jackson County eastward, including western Siskiyou County. With the area under high pressure, very hot temperatures returned, although temperatures were moderated some for areas under thick smoke.

Relief from the heat and thick smoke came around 17th when upper level troughing settled over the Pacific Northwest and persisted through the end of the month. Several dry fronts pushed through the region during this time bringing both positives and negative impacts. One positive impact associated with these dry fronts, were the marine pushes that significantly helped to reduce fire behavior for the fires along the Umpqua. However, gusty winds and unstable conditions aggravated fire conditions for fires in northern California and east of the Cascades. Another, more widespread benefit to these dry fronts, was the clearing of stagnant air and built up smoke trapped in the valleys. These dry fronts brought several afternoons of fresh air to the Rogue Valley and other locations that had been plagued by persistent smoke.

Despite the stretch of relatively cooler weather during the last half of the month, August 2021 was still above normal in terms of temperatures and sealed the deal for making the summer of 2021 the warmest summer on record for the Medford Airport. Precipitation amounts remained below normal as well for the month, and this resulted in worsening drought conditions for some areas.

August 2021 Observed Temperatures





Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	60.5	0.1°	67.7	0.4°	53.3	-0.3°
Roseburg	73.4	1.9°	87.8	1.9°	58.9	1.8°
Medford	76.2	1.7°	92.0	0.9°	60.3	2.4°
Klamath Falls	65.9	0.3°	86.6	1.8°	45.2	-1.3°
Montague, CA	74.3	1.9°	93.2	1.0°	55.4	2.8°
Mt. Shasta City, CA	70.3	3.0°	88.4	3.8°	52.3	2.4°
Alturas, CA	66.1	0.3°	88.8	1.5°	43.4	-0.8°

Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	74°	7th	46°	24th & 31st
Roseburg	102°	12th	49°	24th
Medford	104°	1st & 11th	50°	31st
Klamath Falls	98°	12th & 15th	34°	22nd & 31st
Montague, CA	105°	11th & 15th	47°	22nd
Mt. Shasta City, CA	99°	14th	42°	22nd
Alturas, CA	100°	12th & 15th	33°	22nd

	Record High	Date	Old Record/Year
Montague	105°	15th	Ties with 2008 & 2020

2021 – Warmest Summer* on Record

*92-day period covering June 1st – August 31st.
Ranking is based on daily average temperatures

Maximum 92-Day Mean Avg Temperature for Medford Area, OR (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days
1	76.8	2021-08-31	0
2	76.4	2015-08-31	0
3	75.5	2017-08-31	0
4	75.0	2014-08-31	0
5	74.0	2013-08-31	0

Last value also occurred in one or more previous years.

Period of record: 1911-03-11 to 2021-09-27

Maximum 92-Day Mean Avg Temperature for ROSEBURG REGIONAL AP, OR

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days
1	74.0	2015-08-31	0
2	72.9	2021-08-31	0
3	71.8	2014-08-31	0
4	71.6	2013-08-31	0
5	71.4	2017-08-31	1

Period of record: 1900-04-01 to 2021-09-27

Maximum 92-Day Mean Avg Temperature for Mount Shasta Area, CA (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days
1	71.5	2021-08-31	0
2	69.9	2017-08-31	0
3	69.7	2015-08-31	0
4	69.4	2014-08-31	0
5	68.7	2016-08-31	0

Period of record: 1948-04-15 to 2021-09-27

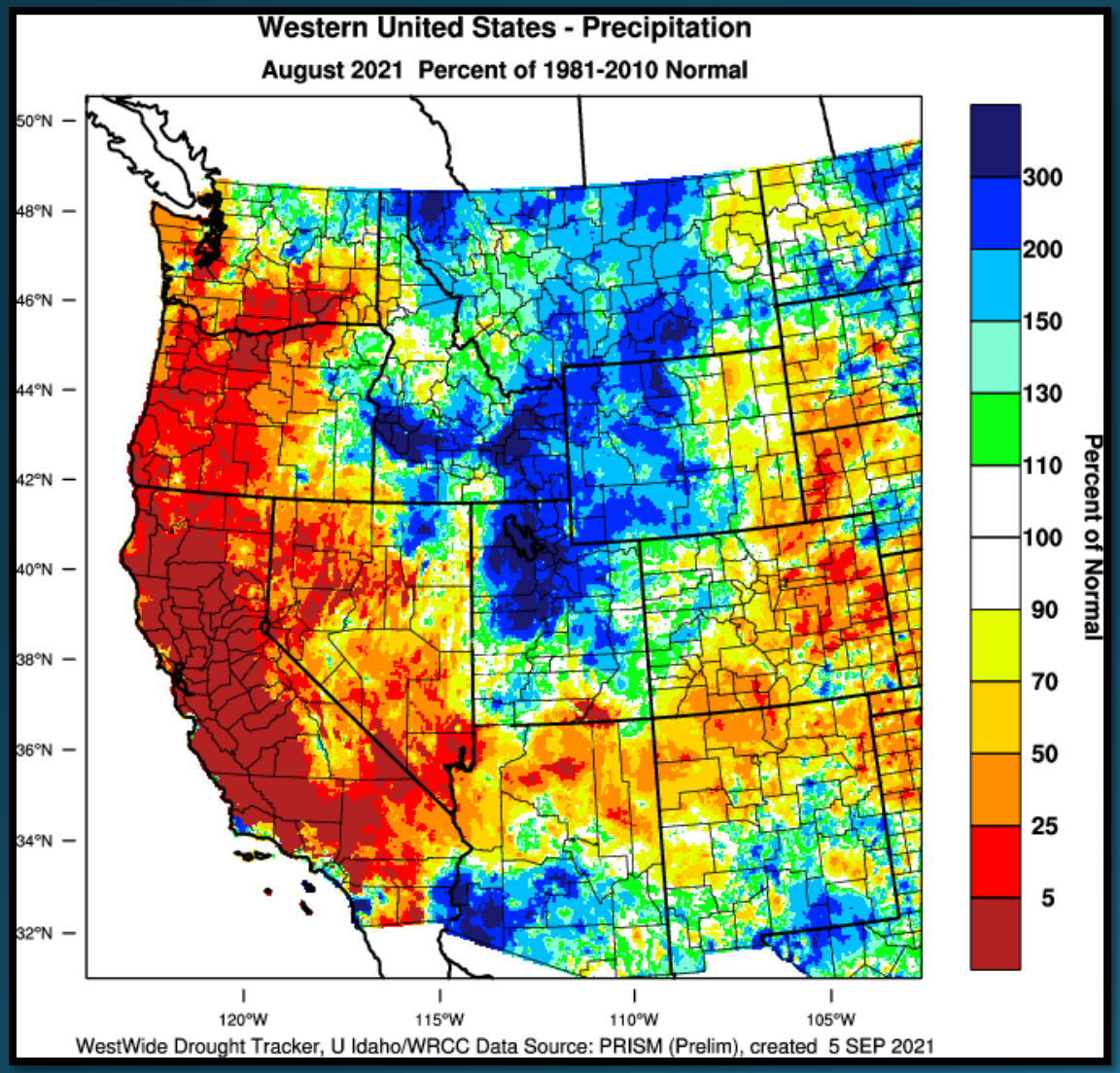
Maximum 92-Day Mean Avg Temperature for Alturas Area, CA (ThreadEx)

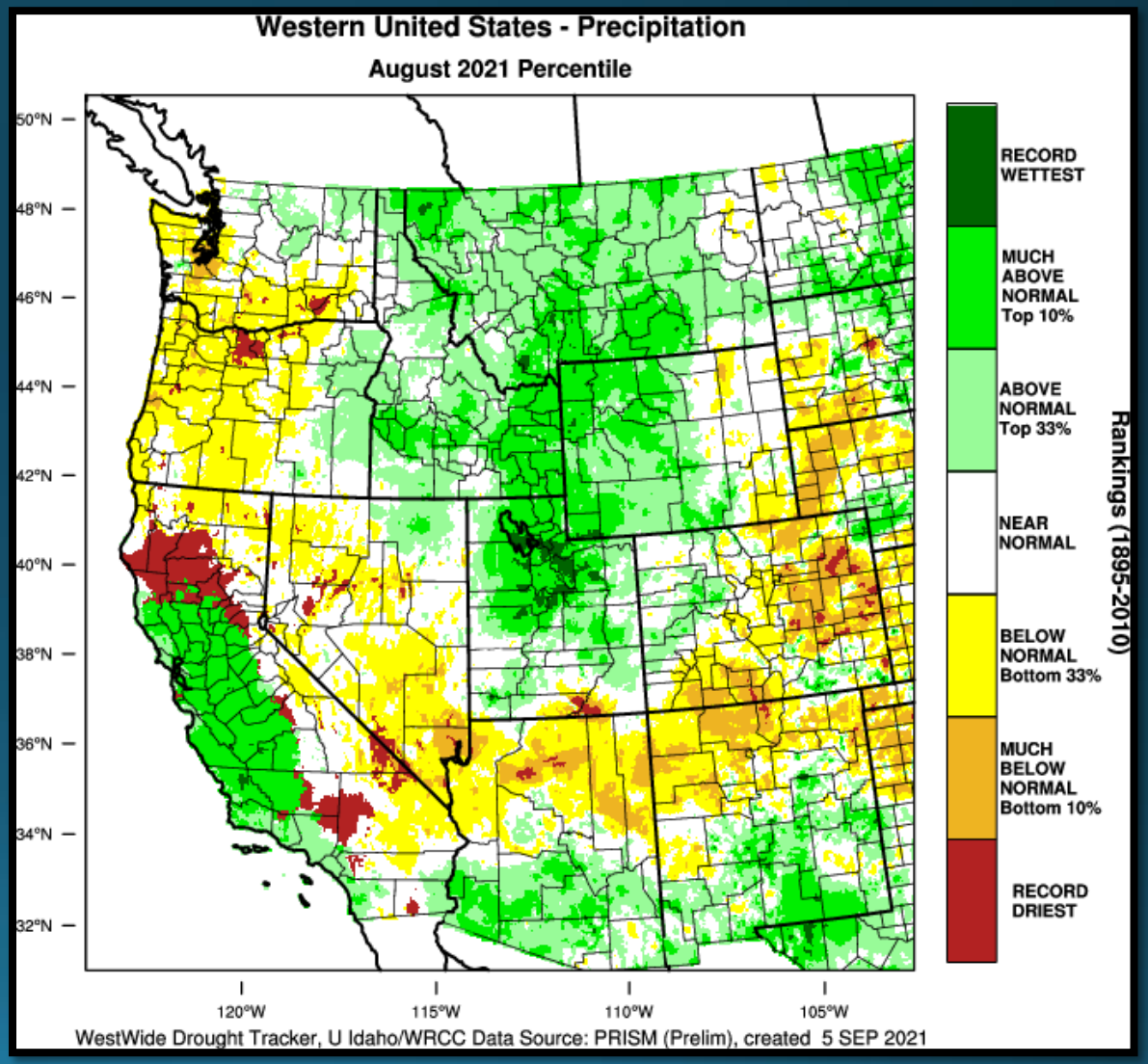
Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days
1	68.5	2017-08-31	3
2	68.2	2021-08-31	0
3	67.5	2014-08-31	0
4	67.4	2015-08-31	0
5	66.7	1961-08-31	0

Period of record: 1935-05-01 to 2021-09-27

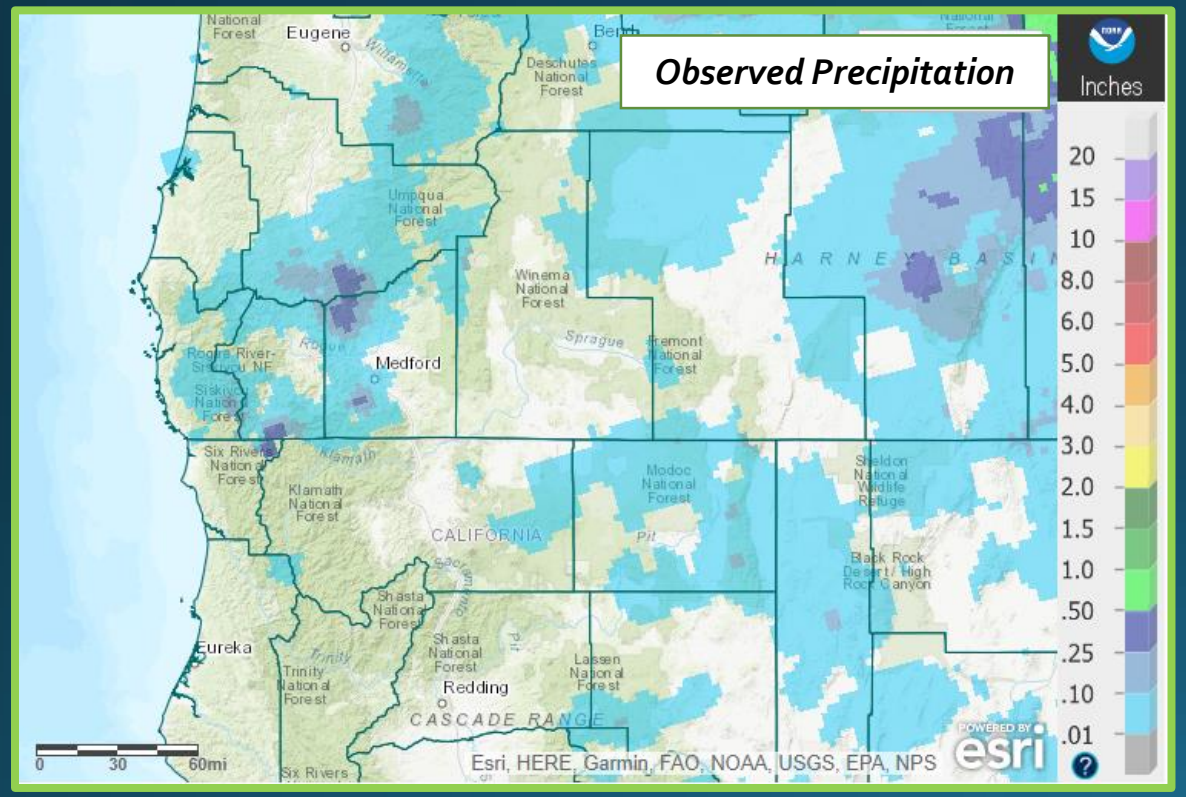
August 2021 Observed Precipitation

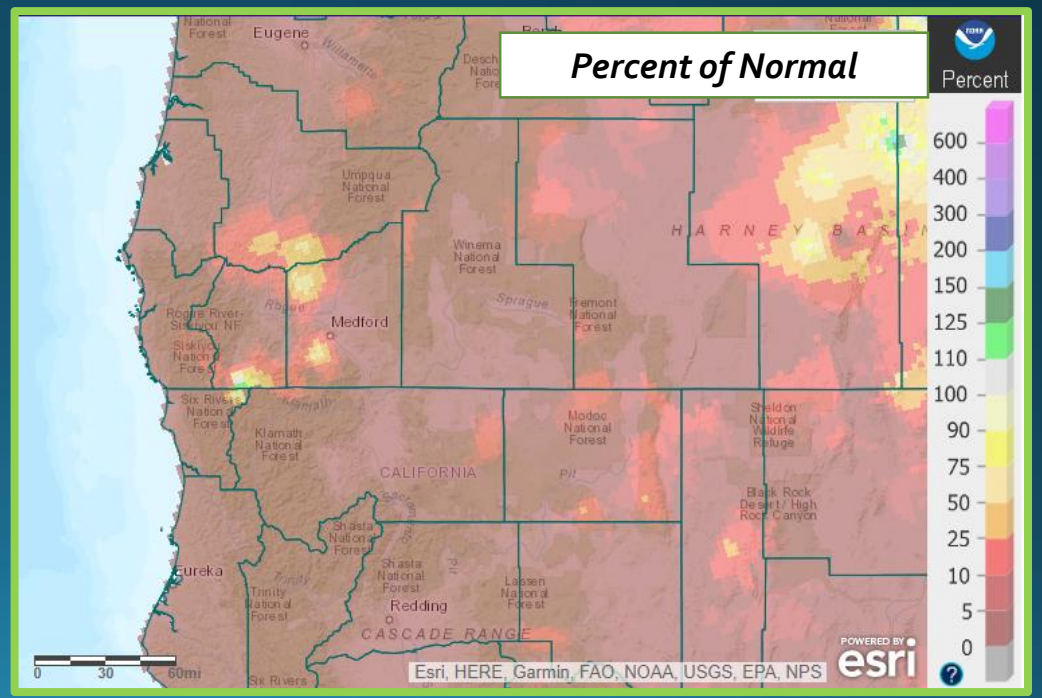




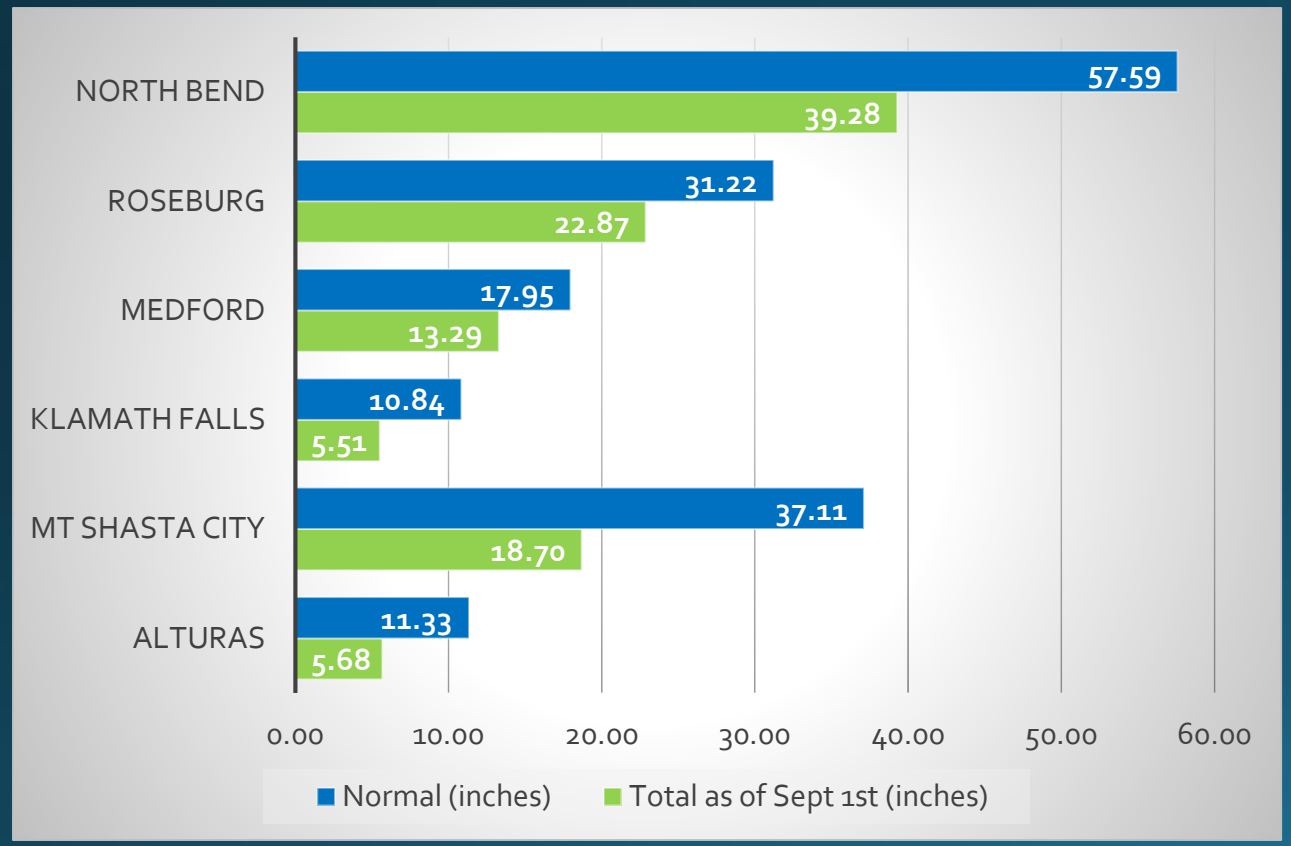
Precipitation

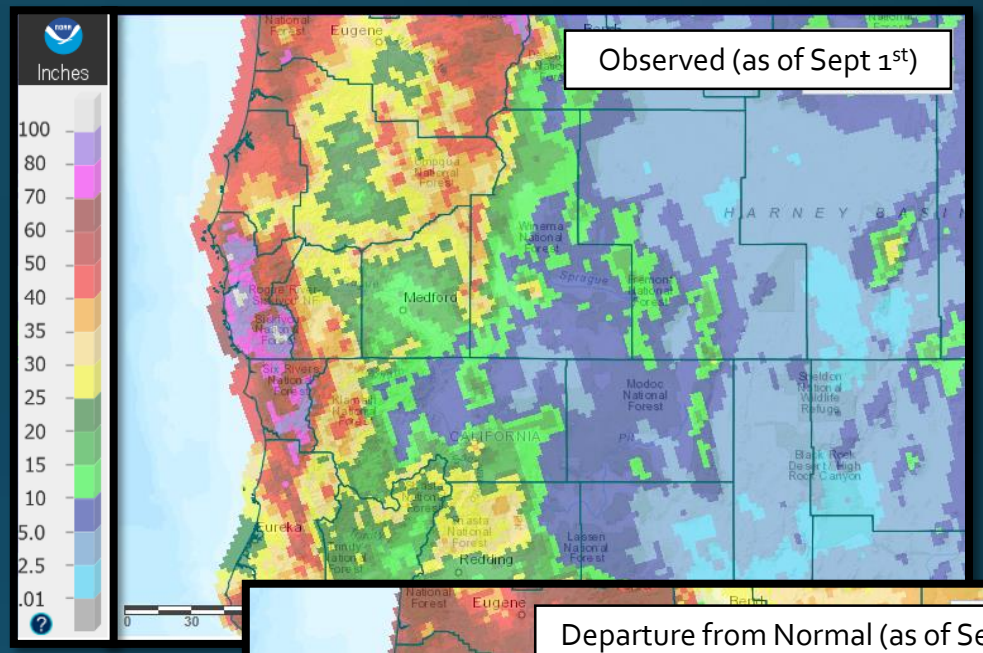
	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	*0.08"*	*-0.34"*	*0.04"*	*4th – 5th*
Roseburg	*0.04"*	*-0.19"*	*0.03"*	*1st*
Medford	*Trace*	*-0.33"*	*Trace*	*Multiple*
Klamath Falls	*Trace*	*-0.28"*	*Trace*	*Multiple*
Montague, CA	*0.00"*	*-0.34"*	*0.00"*	*N/A*
Mt. Shasta City, CA	*0.00"*	*-0.20"*	*0.00"*	*N/A*
Alturas, CA	*Trace*	*-0.27"*	*Trace*	*5th*

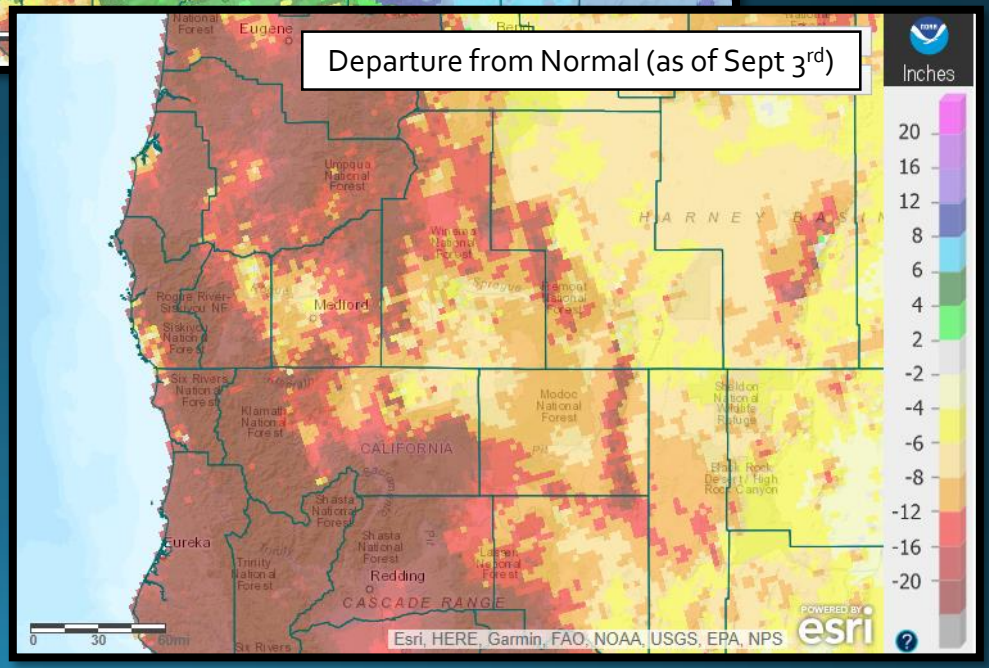




Water Year Status (As of September 1st)

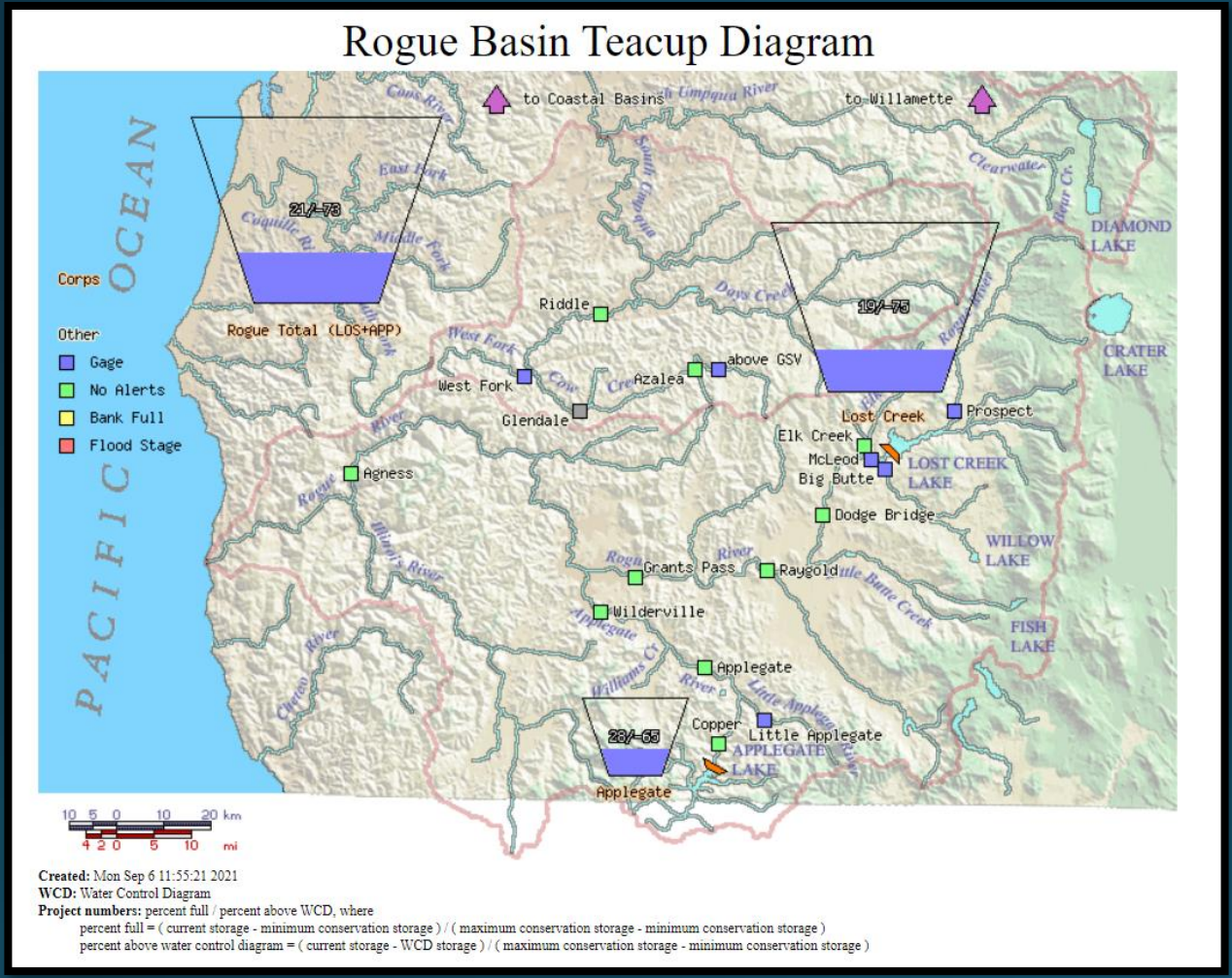




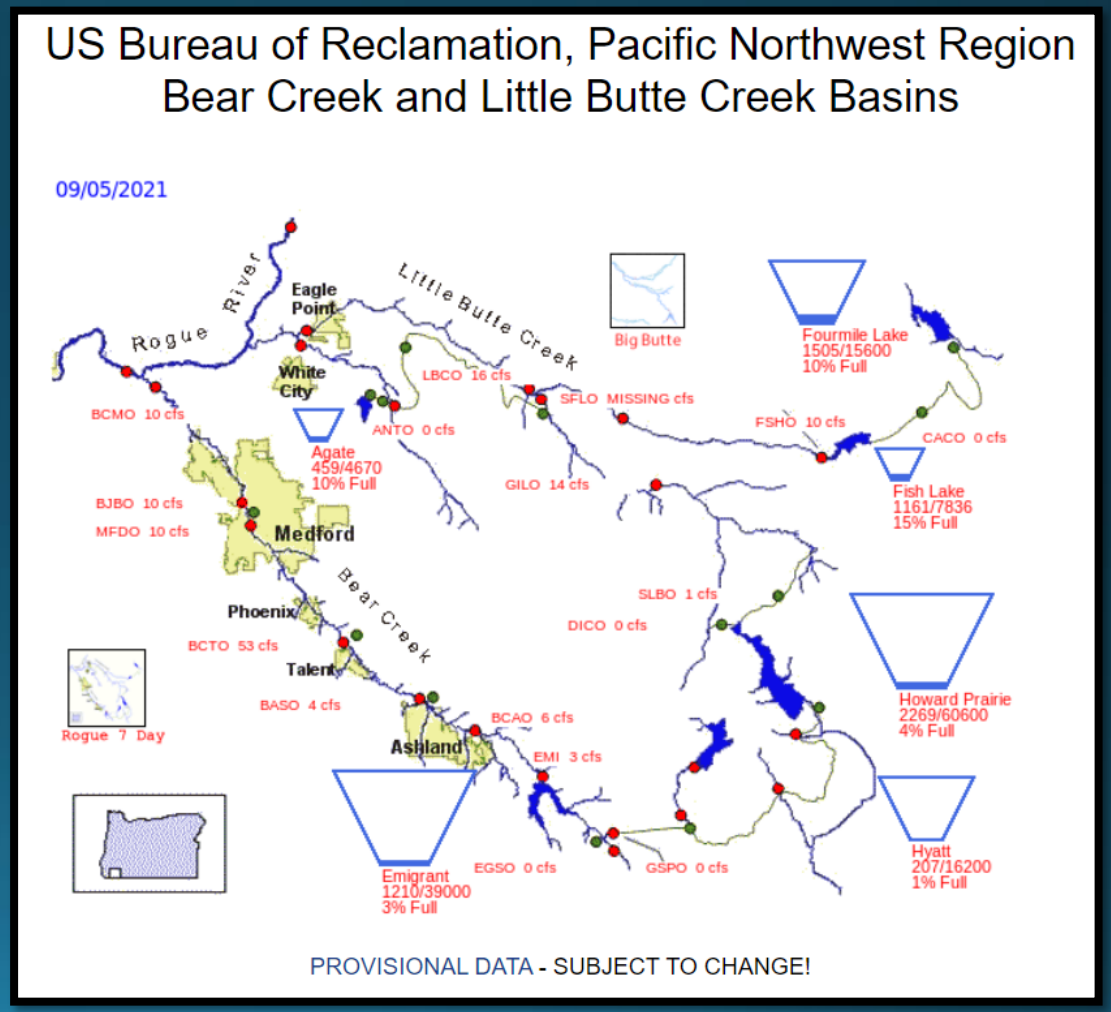


Reservoir Status

Data courtesy of US Army Corps of Engineers

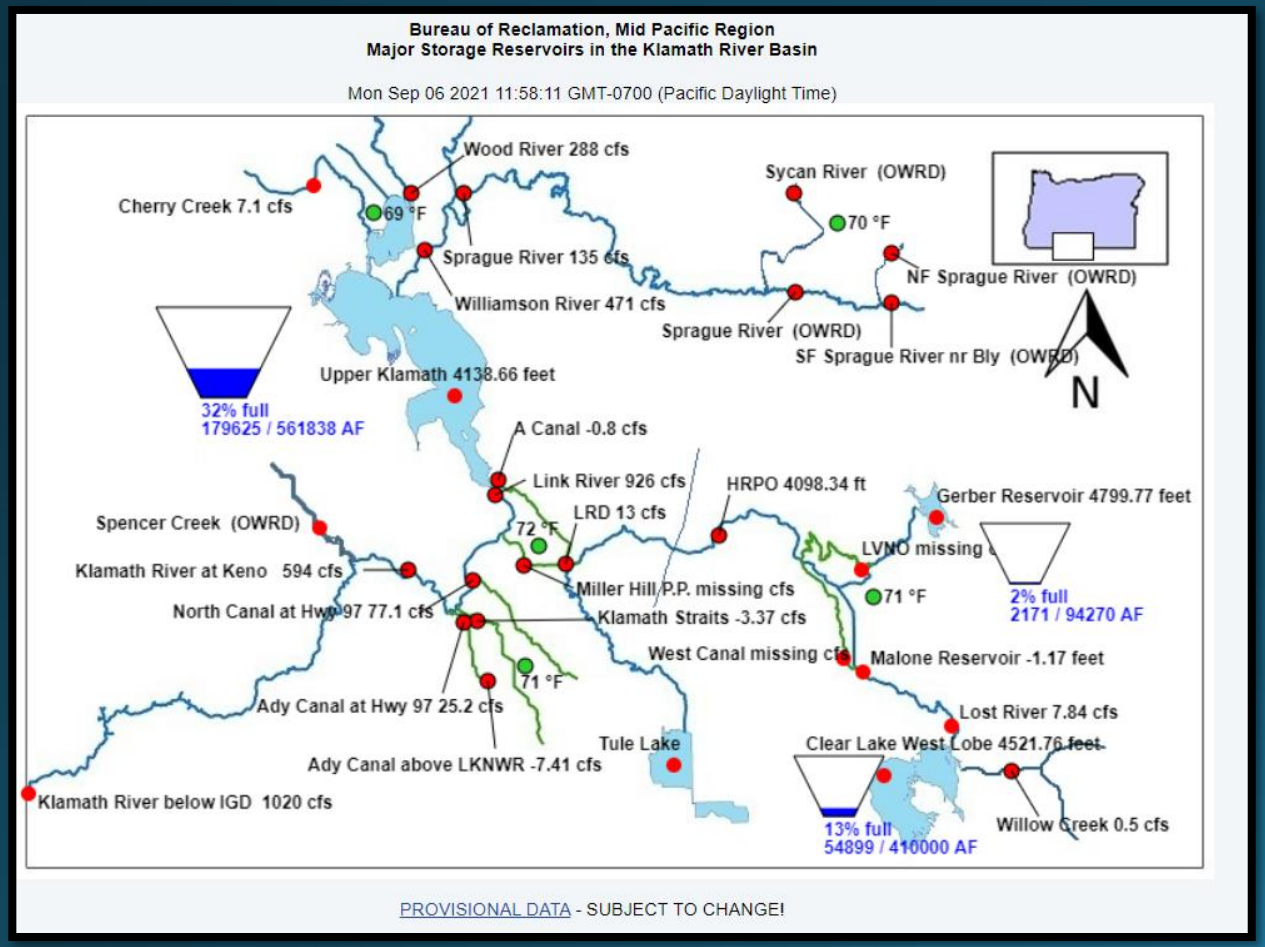


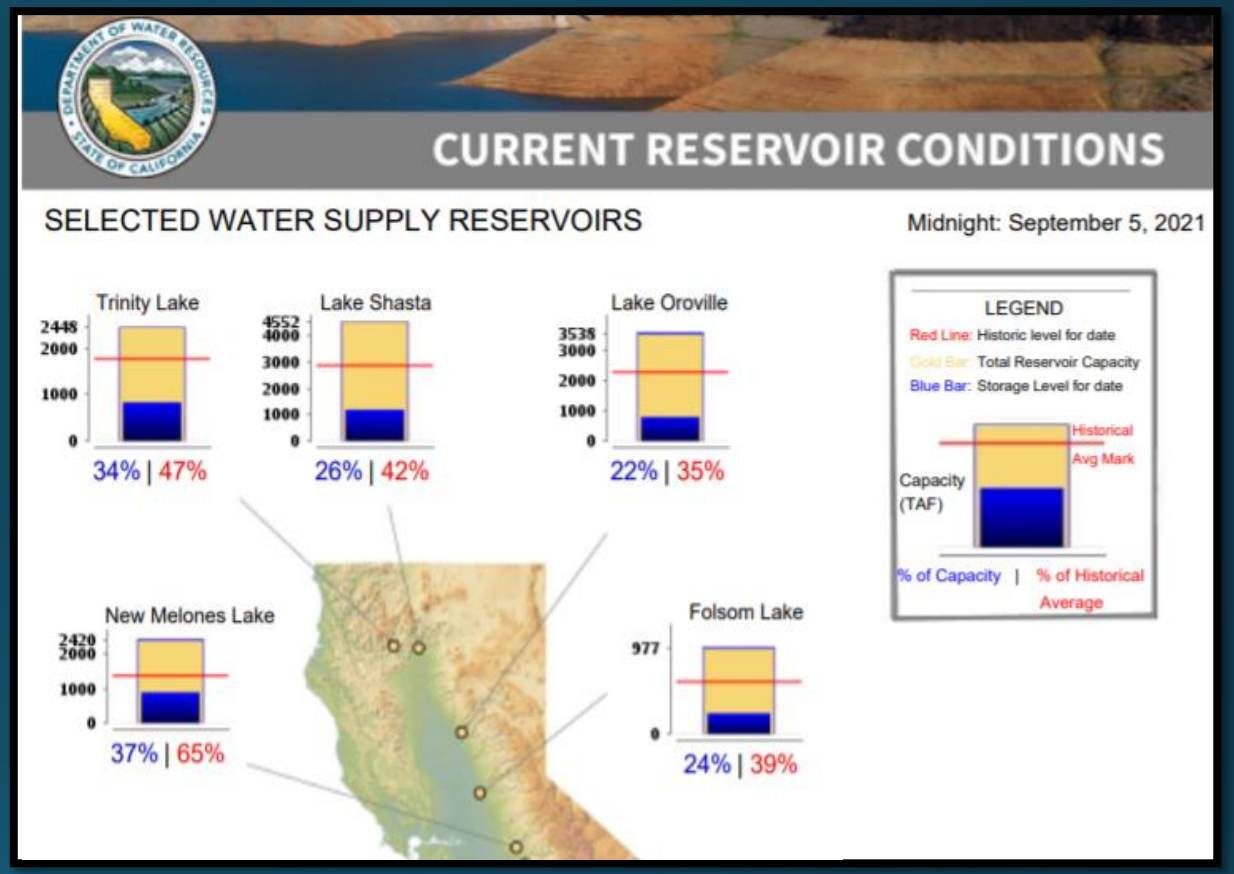
Data courtesy of Bureau of Reclamation



Reservoir Status

Klamath River Basin. Data courtesy of Bureau of Reclamation





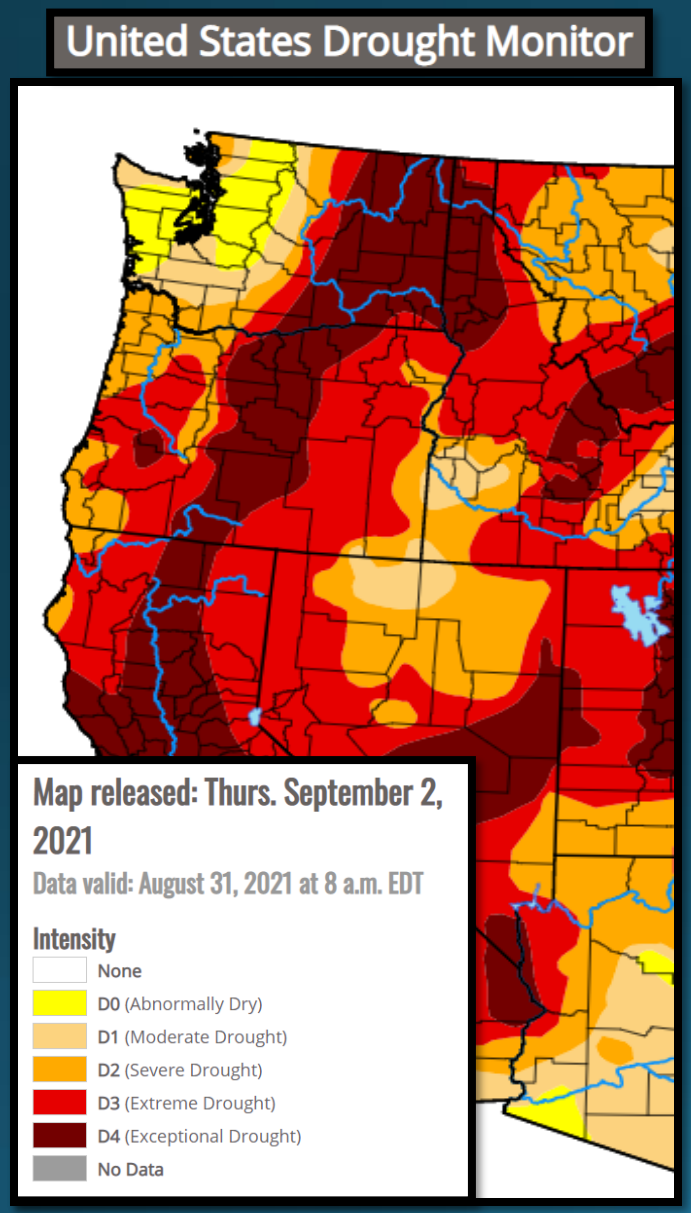
Northern California. California Data Exchange Center

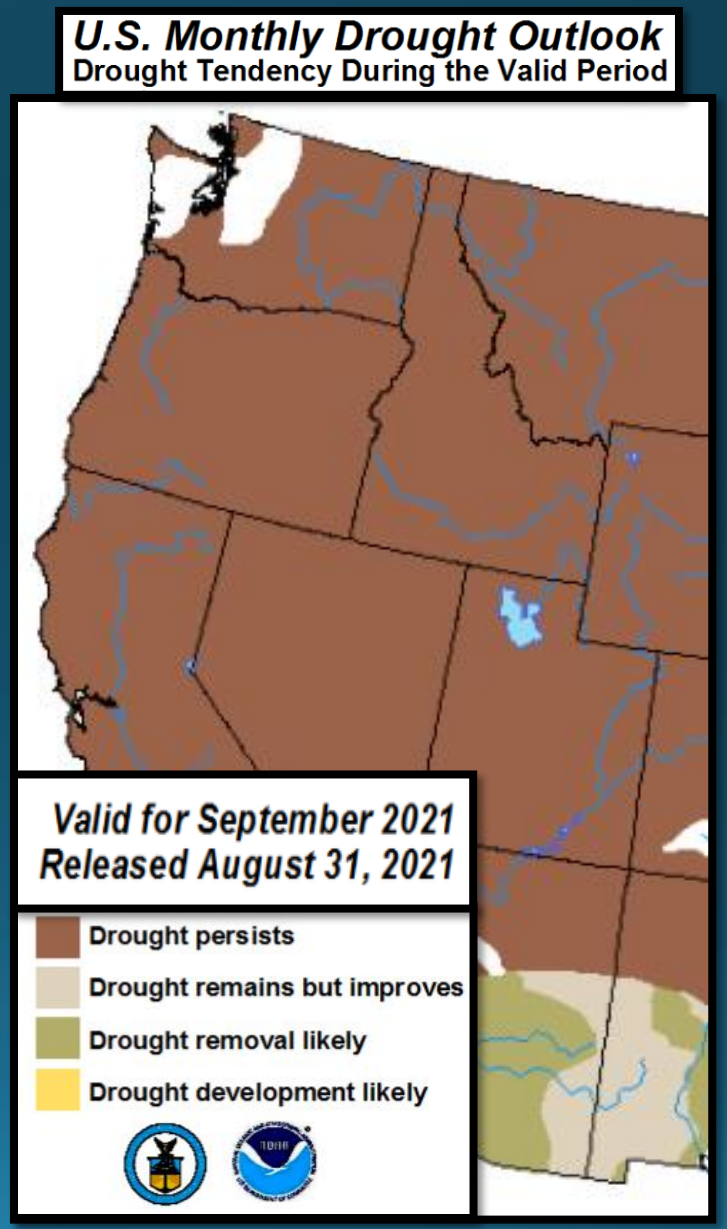
Crater Lake

Image: NPS

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 8/31/21	Highest Max/ Lowest Min
August	71.2°	46.5°	0.02"	0.0"	0"	84° on 15th / 35° on 21st
Normal (1981-2010)	69.3°	41.5°	0.83"	0.0"	*0"*	N/A

Drought Monitor (Current) & Outlook (September)

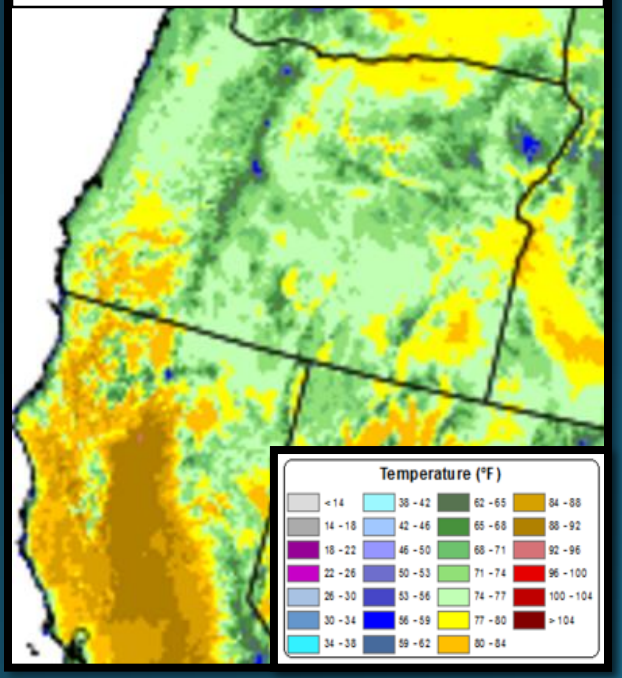




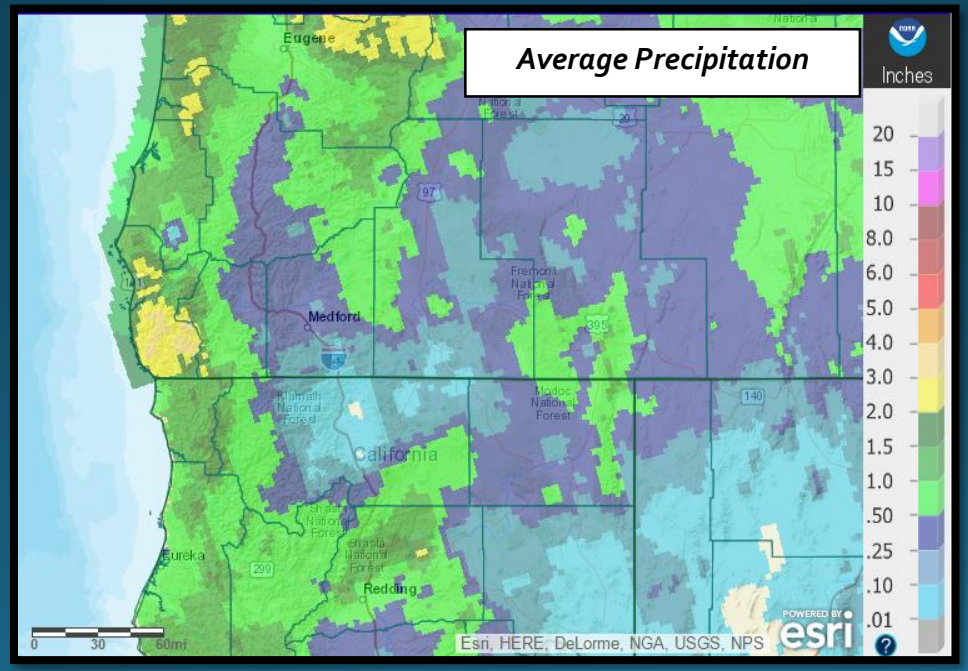
Looking Ahead: September Normals (1981-2010)

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.

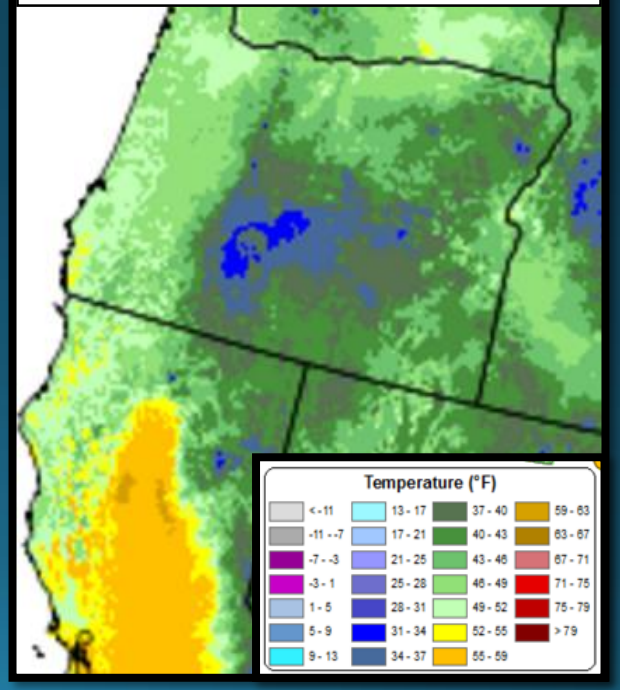
Average Maximum Temperatures



Average Precipitation



Average Minimum Temperatures



*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:

- **North Bend: 01/1902 – Present**
- **Roseburg: 04/1900 – Present**
  - *Missing:*
    - *05/1900-01/1901*
    - *03/1901-06/1902*
    - *08/1902-12/1930*
    - *10/1965-06/1997*
- **Medford: 03/11/1911 – Present**
- **Klamath Falls: 12/1897 – Present**
- **Montague, CA: 07/1948 – Present**
  - *Missing:*
    - *08-09/1952*
    - *02/1953-06/2000*
- **Mount Shasta City, CA: 04/1948 – Present**
- **Alturas, CA: 05/1935 – Present**