National Weather Service Medford

2022: 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 2022 Weather Review

August was a typical summer month for the region with persistent hot and dry weather. The exception, though, was the climatological peak of thunderstorm activity during the beginning of the month, which was a continuation of the thunderstorm activity from the end of July. Low pressure remained offshore for the first few days of August, and this is a favorable pattern for thunderstorm activity as southerly flow pumps moisture rich unstable air into the area. Almost 3000 lightning strikes (2817 to be exact) were recorded between 2 pm Monday (8/1) and early Wednesday (8/3) morning, with over 1000 strikes occurring Monday night. There was plenty of moisture for the storms to work with, and all of them had significant rainfall accompany them. Record PWATs were observed on a few of the upper air soundings at Medford, and this resulted in some humid days during this time frame. Additionally, one thunderstorm moved over the McKinney wildfire, which resulted in flash flooding and debris flows that threatened some fire crew members. Thankfully, everyone survived.

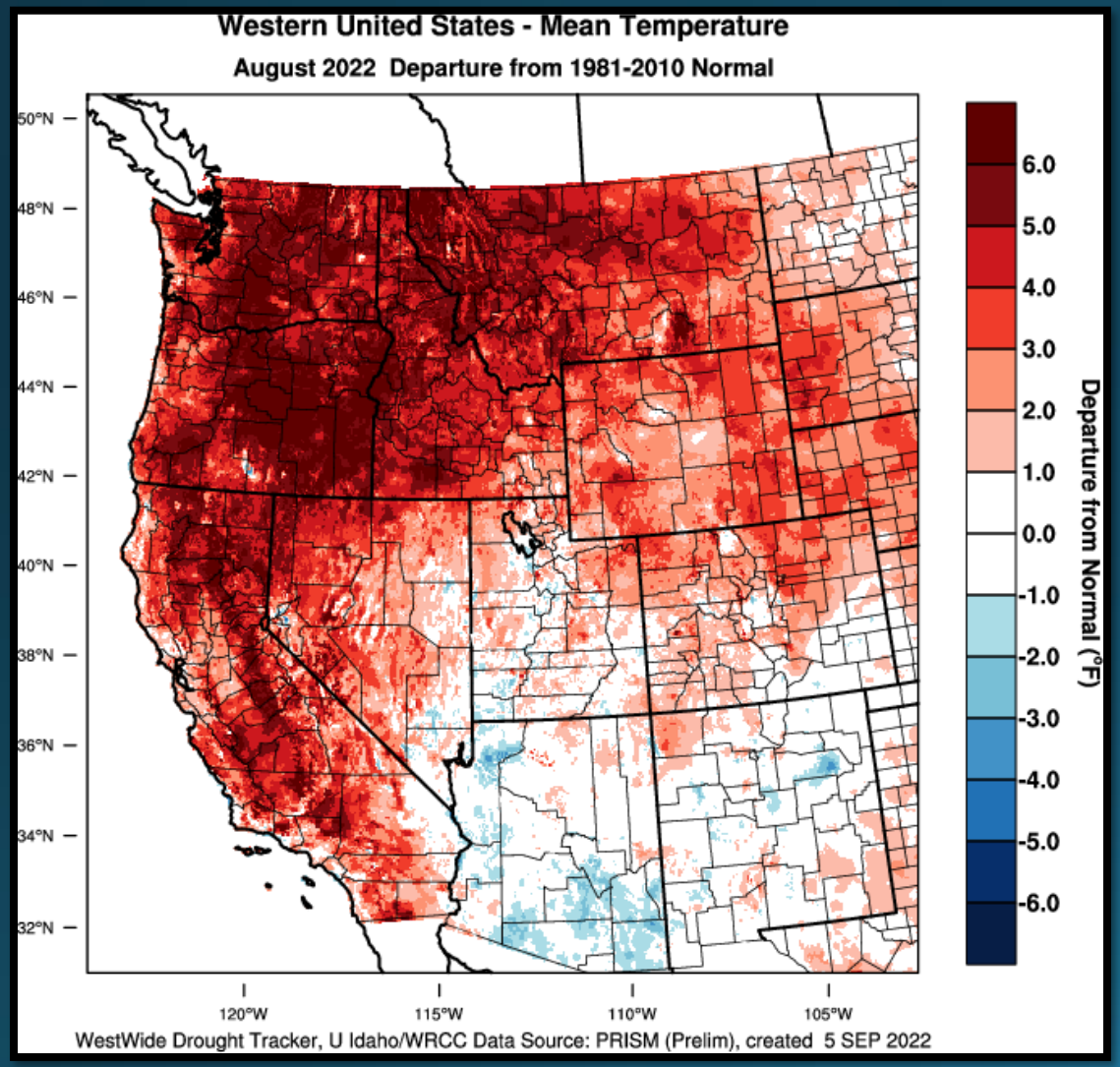
Low pressure retrograded westward to the eastern Pacific by the 3rd/4th and this brought an end to the thunderstorm pattern. Afterward, a weak trough and dry front passed through the region, which is also another critical fire weather pattern. There was concern that dry, gusty winds would fan out new fire starts from the recent lightning outbreak. However, fire agencies managed to catch most of the ignitions. Low pressure that had retrograded, returned to just offshore again around 8th/9th. This time, however, record low PWATs were observed and there wasn't enough moisture in the air for thunderstorms to develop.

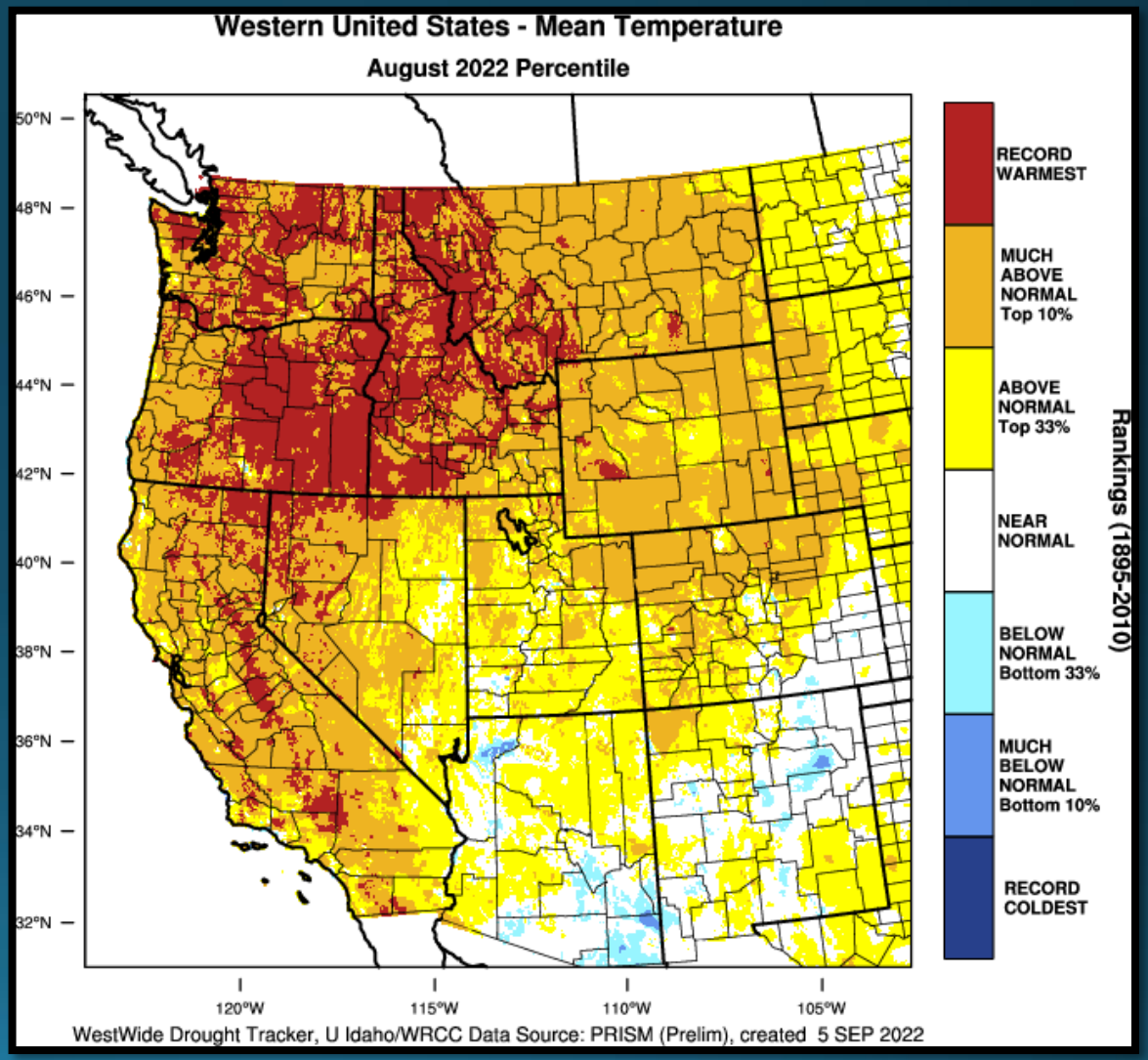
Once this low pressure finally moved out of the region by the 12th, strong high pressure from the Four Corners Region expanded northward around the middle of the month. The orientation of this high pressure allowed for moisture rich and unstable monsoonal air to filter into the area again, which brought another round of thunderstorm activity. The additional strikes resulted in new fire starts, many of which were in steep terrain and made it challenging for fire fighters to attack. The Rum Creek fire was one such fire, and this burned near Galice, OR. Another fire to develop from this round of lightning was the Potter/Windigo fire near the Diamond Lake area in the Cascades.

Hot and dry, benign weather returned for the last 10 days of the month. The upper level pattern wavered between ridging and zonal flow which resulted in periods of hot temperatures with near normal temperatures and dry conditions. With the benign weather, typical afternoon winds brought smoke into the Rogue Valley from the Rum Creek fire, resulting in degraded air quality for much of the end of August.

Despite the ample moisture from thunderstorms at the beginning of the month, the isolated nature of thunderstorms resulted in below normal precipitation for the majority of the region for the month of August. Temperatures across the month were hot, even by summer's standards, and August 2022 set a new record for the hottest August on record at the Medford airport. The average temperature for the month of August was 79.0°F, breaking the old record of 78.1°F set in 2017.

August 2022 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	1.9°	68.4	1.1°	56.2	2.6°
Roseburg	75.0	3.5°	90.4	4.5°	59.7	2.6°
Medford	79.1	4.6°	95.7	4.6°	62.4	4.5°
Klamath Falls	69.6	4.0°	89.9	5.1°	49.3	2.8°
Montague, CA	78.3	5.9°	97.5	5.3°	59.0	6.4°
Mt. Shasta City, CA	72.6	5.3°	91.6	7.0°	53.7	3.8°
Alturas, CA	69.3	3.5°	92.0	4.7°	46.6	2.4°

Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	72°	20th & 29th	50°	29th
Roseburg	101°	17th & 18th	53°	13th & 28th
Medford	103°	3rd	56°	28th
Klamath Falls	96°	16th	38°	11th
Montague, CA	104°	16th & 17th	50°	11th & 14th
Mt. Shasta City, CA	99°	17th	43°	11th
Alturas, CA	97°	8th & 29th	37°	11th

August Record Temperatures

	Date	Record High	Old Record/Year
Alturas	29th	97°F	Ties w/2017
Mt Shasta City	16th	98°F	Ties w/2008
	17th	99°F	97°F / 1951
	21st	95°F	95°F / 2017
Montague	7th	101°F	100°F / 2001
	16th	104°F	103°F / 2008
	17th	104°F	101°F / 2012
	21st	102°F	99°F / 2016
	23rd	97°F	96°F / 2019
	24th	99°F	Ties w/2007
Roseburg	17th	101°F	99°F / 1950
	30th	99°F	96°F / 2007

Maximum 31-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	79.0	2022-08-31	0
2	78.1	2017-08-31	0
3	77.9	1967-08-31	0
4	77.3	2016-08-31	0
5	77.1	1986-08-31	0
6	77.0	2014-08-31	0
7	76.8	2020-08-31	0
8	76.3	2012-08-31	0
9	76.2	2021-08-31	0
-	76.2	2005-08-31	0

Period of record: 1911-03-11 to 2022-12-18

Maximum 31-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	70.6	2017-08-31	0
2	70.1	1967-08-31	0
3	69.3	2022-08-31	0
4	68.9	1958-08-31	0
5	67.9	1971-08-31	0
6	67.8	2020-08-31	0
7	67.7	1961-08-31	0
8	67.6	1986-08-31	0
9	67.5	1966-08-31	0
10	67.5	2012-08-31	0

Period of record: 1935-05-01 to 2022-12-18

Maximum 31-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	72.6	2022-08-31	0
2	72.5	2017-08-31	0
3	71.5	1967-08-31	0
4	71.2	2020-08-31	0
5	70.8	2016-08-31	0
6	70.7	1958-08-31	0
7	70.5	2012-08-31	0
8	70.3	2021-08-31	0
9	69.3	1950-08-31	0
10	69.2	1971-08-31	0

Period of record: 1948-04-15 to 2022-12-18

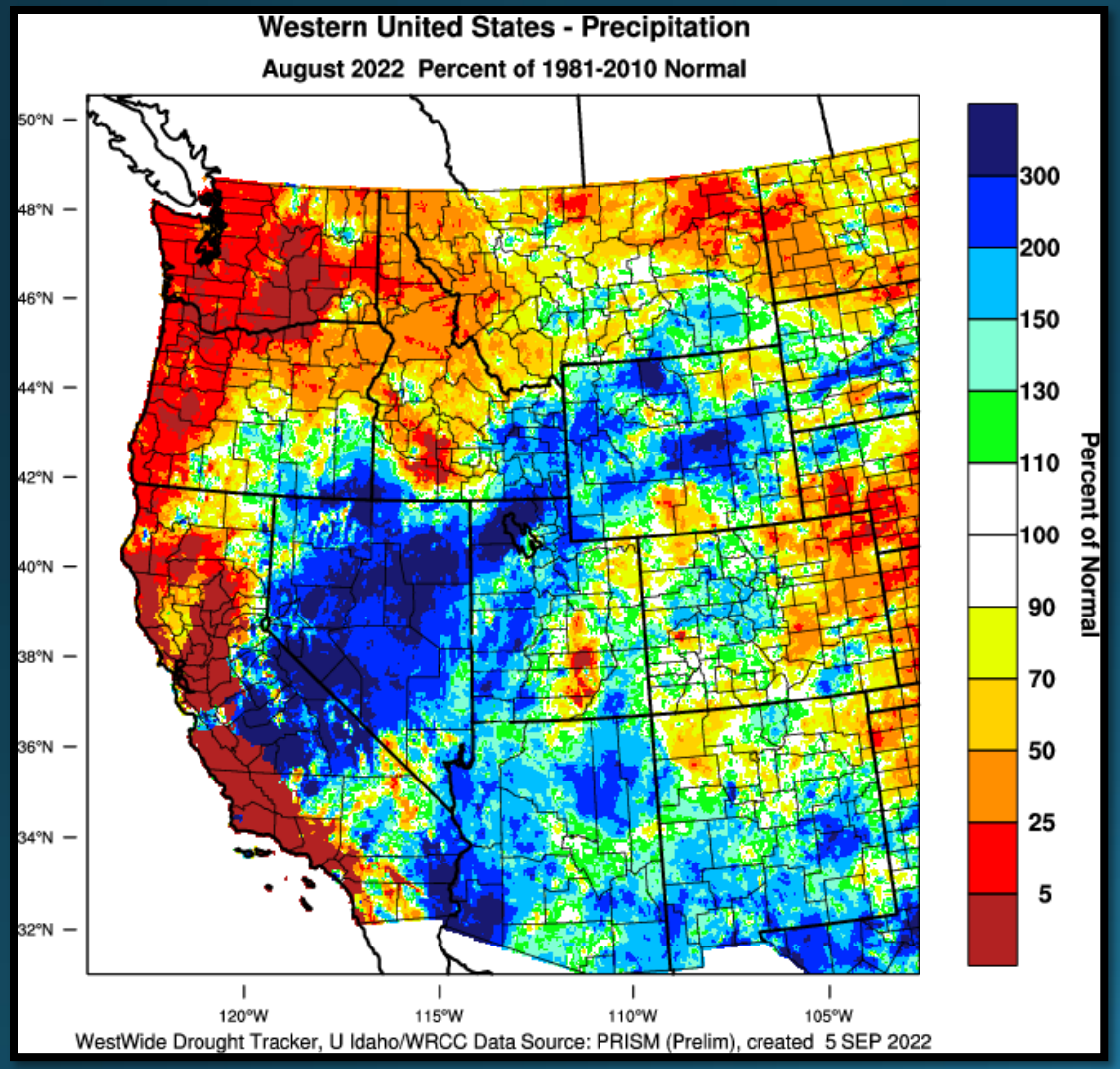
Maximum 31-Day Mean Avg Temperature for MONTAGUE SISKIYOU AIRPORT, CA

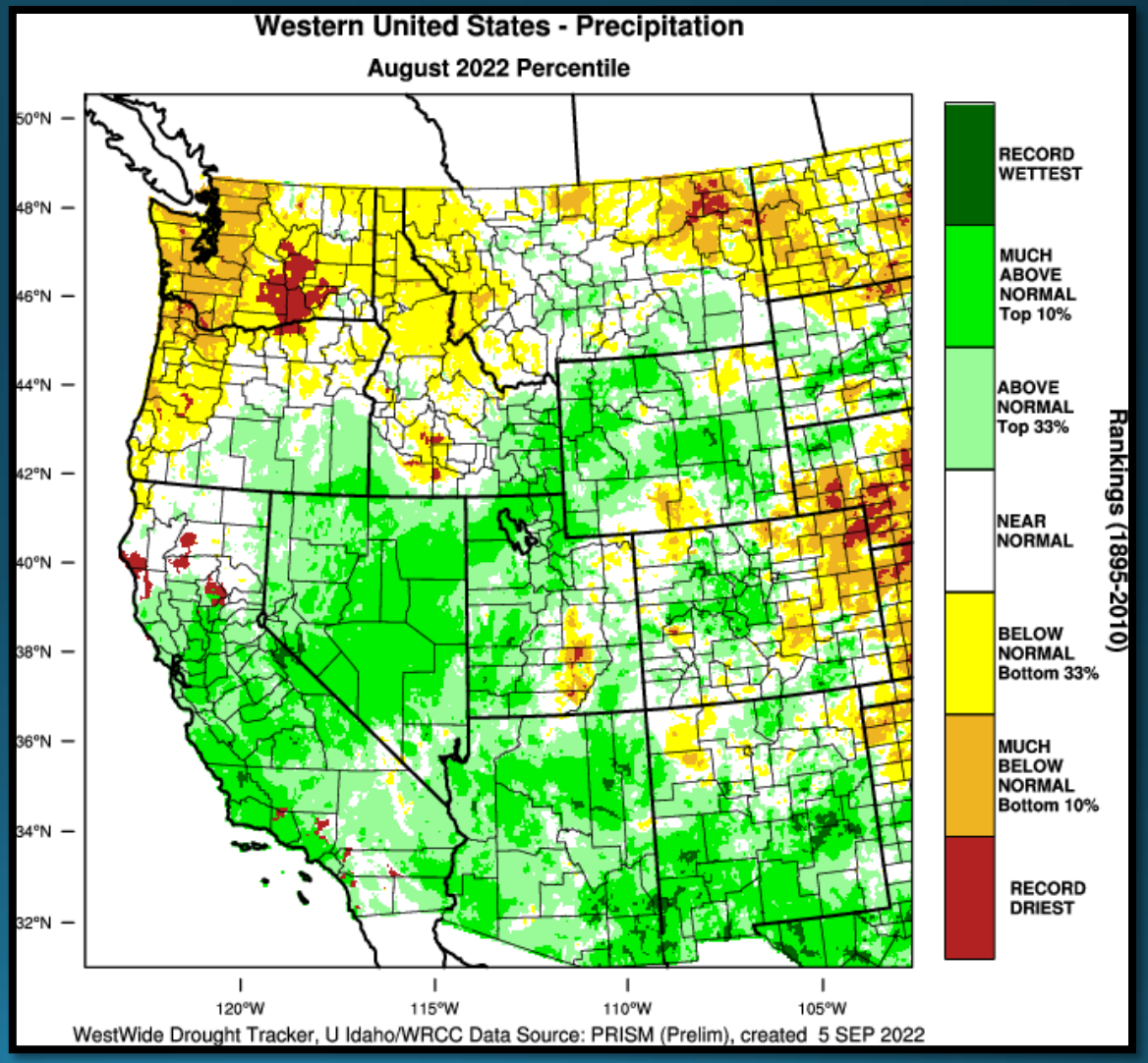
Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days
1	78.3	2022-08-31	0
2	75.3	2017-08-31	0
3	75.3	2020-08-31	0
4	74.3	2021-08-31	0
5	74.0	2012-08-31	0
6	73.7	2014-08-31	0
7	73.6	2019-08-31	0
8	73.5	2016-08-31	0
9	73.2	2015-08-31	0
10	72.7	1950-08-31	0

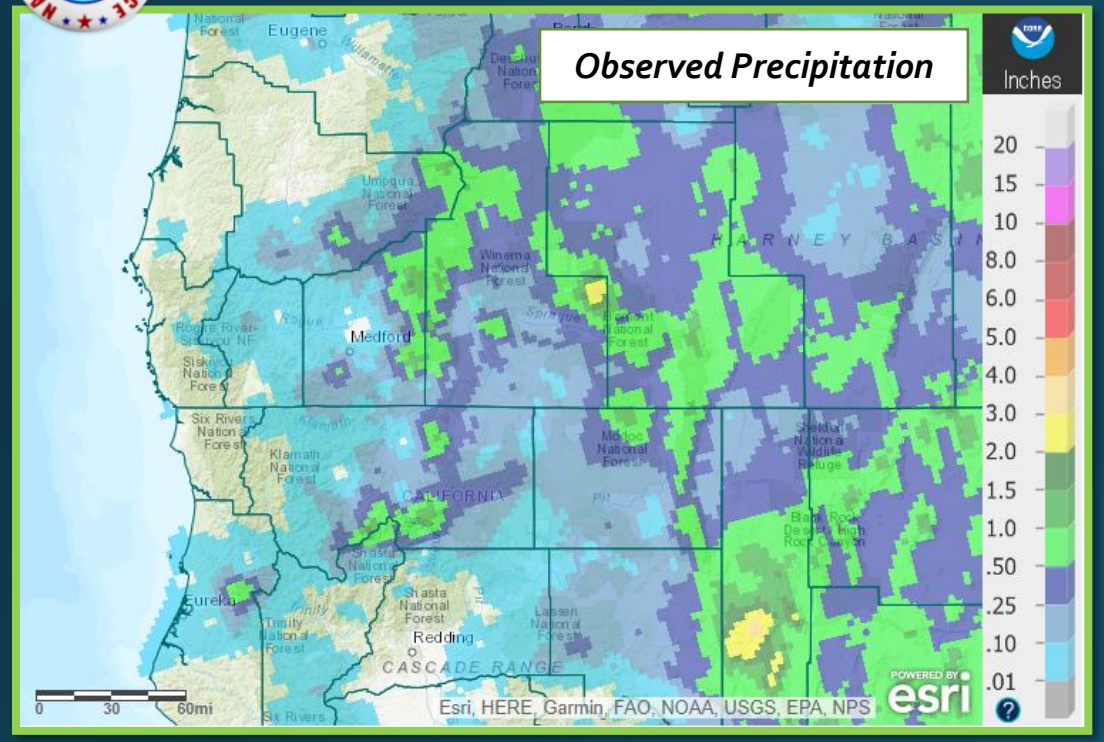
Period of record: 1948-07-01 to 2022-12-18

August 2022 Observed Precipitation

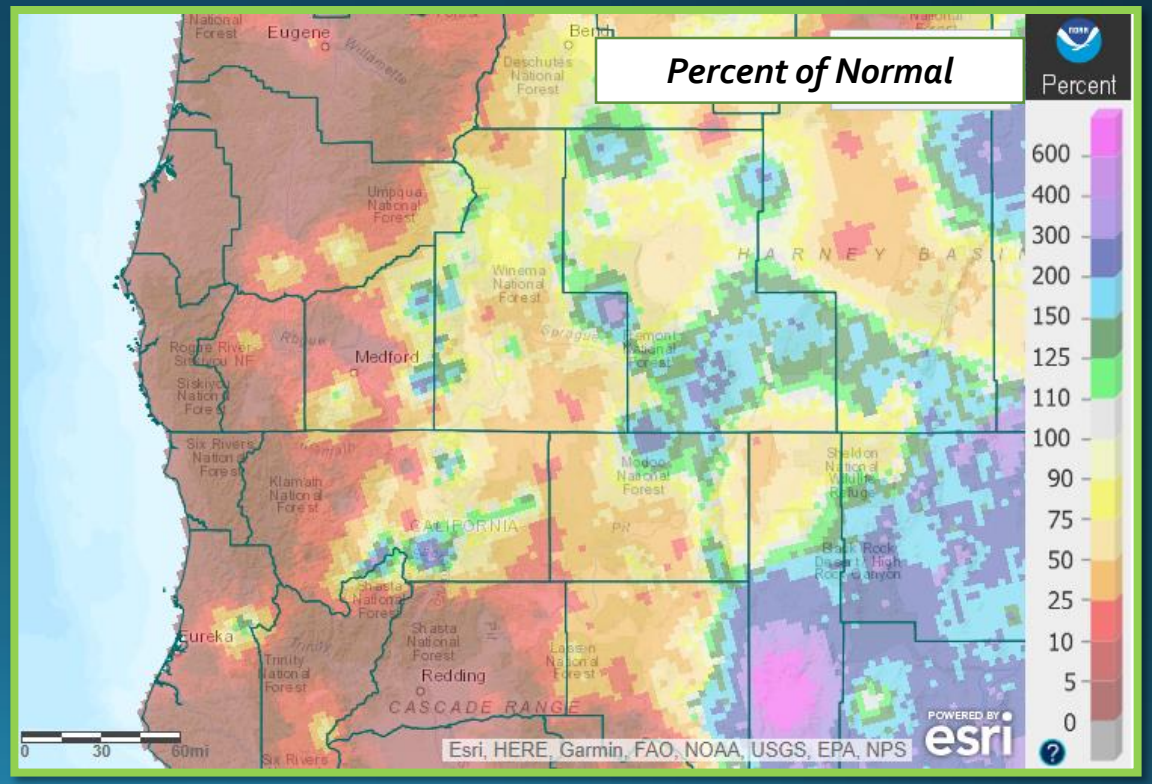




Precipitation



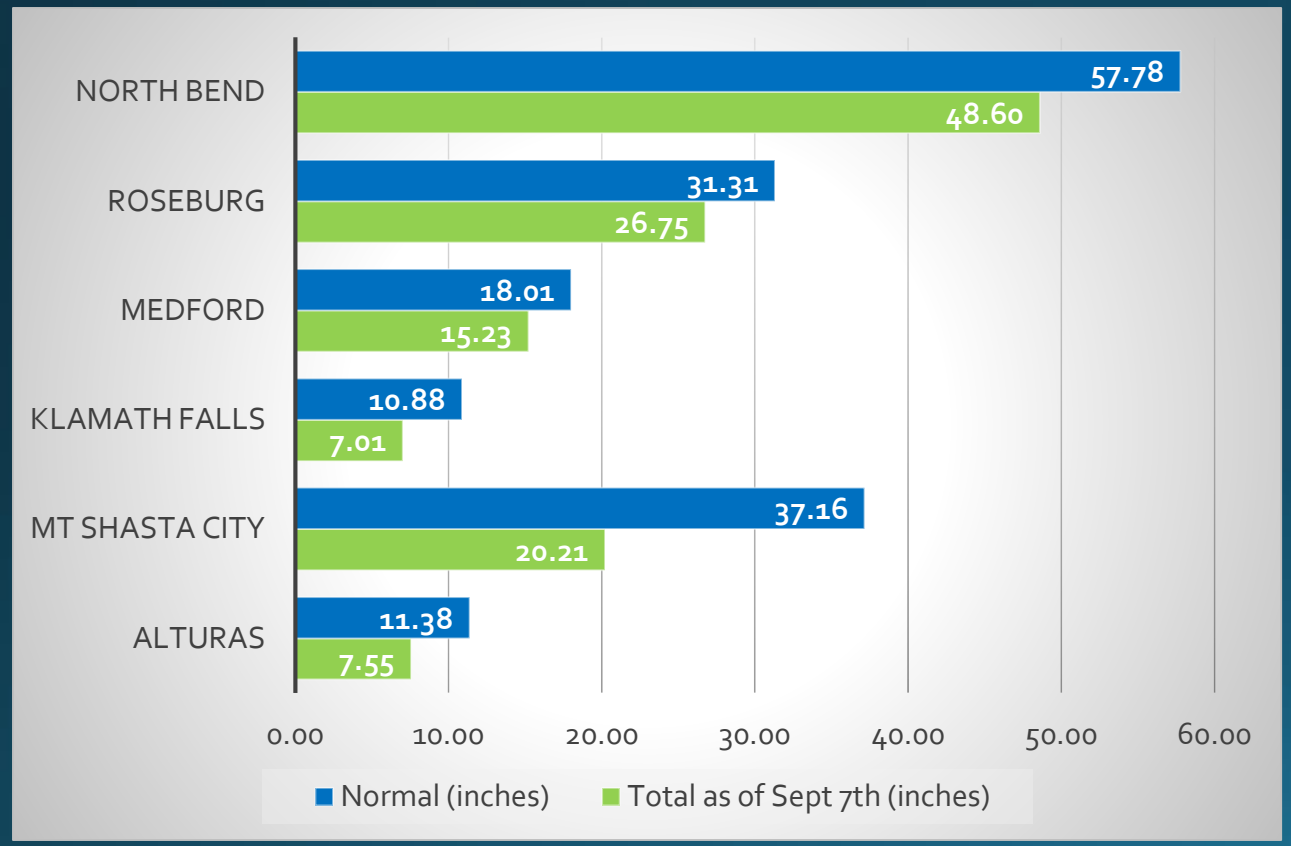
	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	*0.05"*	*-0.37"*	*0.03"*	*25th*
Roseburg	*Trace*	*-0.23"*	*Trace*	*Multiple*
Medford	*Trace*	*-0.33"*	*Trace*	*Multiple*
Klamath Falls	*0.27"*	*-0.01"*	*0.21"*	*1st – 2nd*
Montague, CA	*Trace*	*-0.34"*	*Trace*	*Multiple*
Mt. Shasta City, CA	*1.15"*	*0.95"*	*0..81"*	*2nd – 3rd*
Alturas, CA	*0.11"*	*-0.16"*	*0.04"*	*8th – 9th*

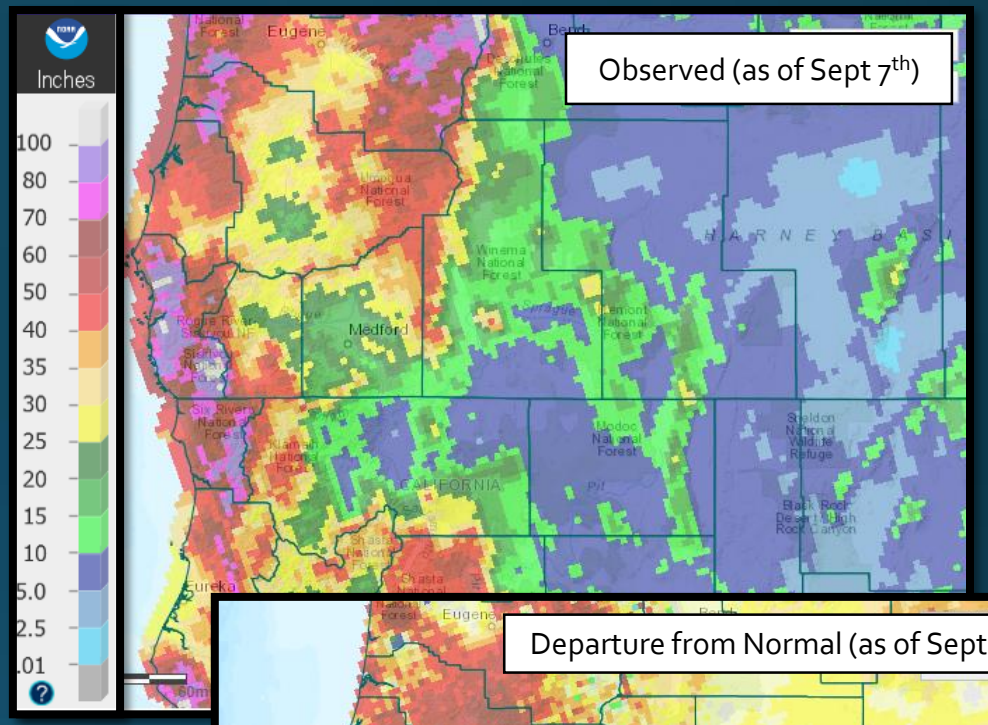


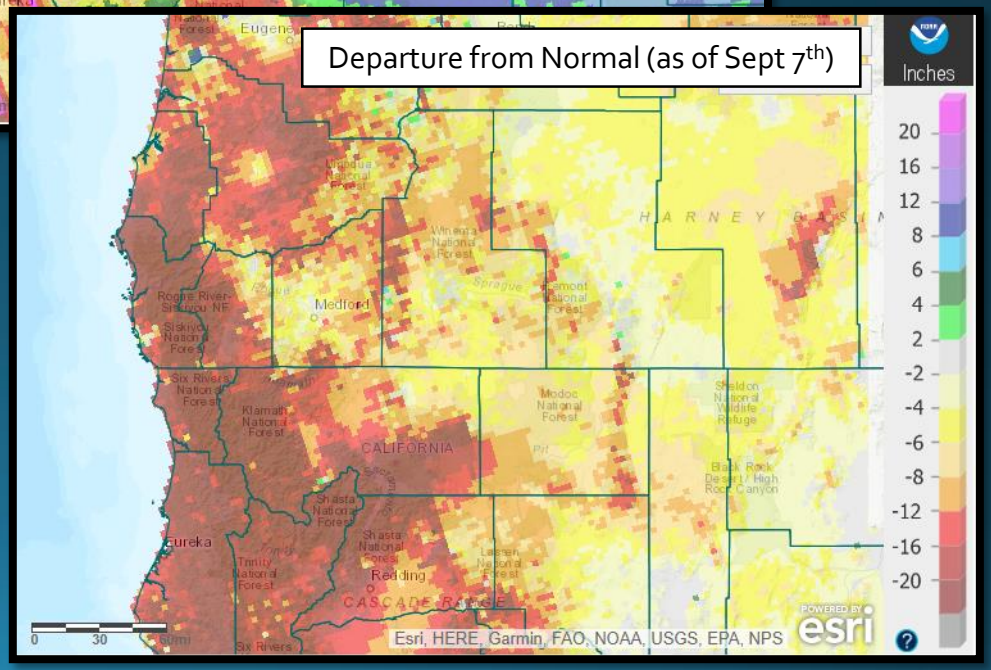
Record Precipitation

	Date / Amount	Old Record / Year
Klamath Falls	2nd / 0.10"	Ties w/ 2003
Mt Shasta City	2nd / 0.72"	0.38" / 2003
	3rd / 0.43"	0.24" / 2003

Water Year (Oct – Sept) Precipitation Status (as of 9/7)

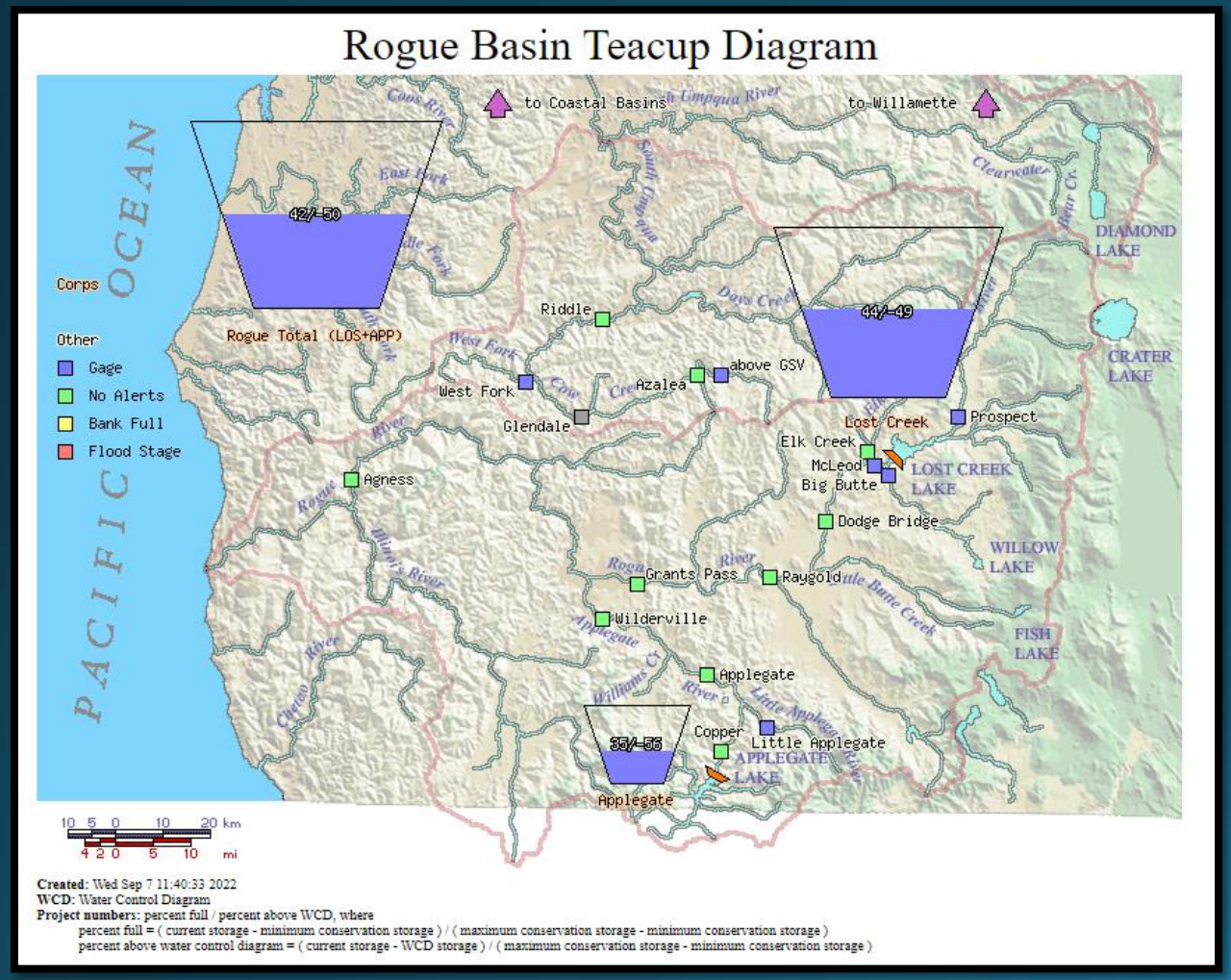




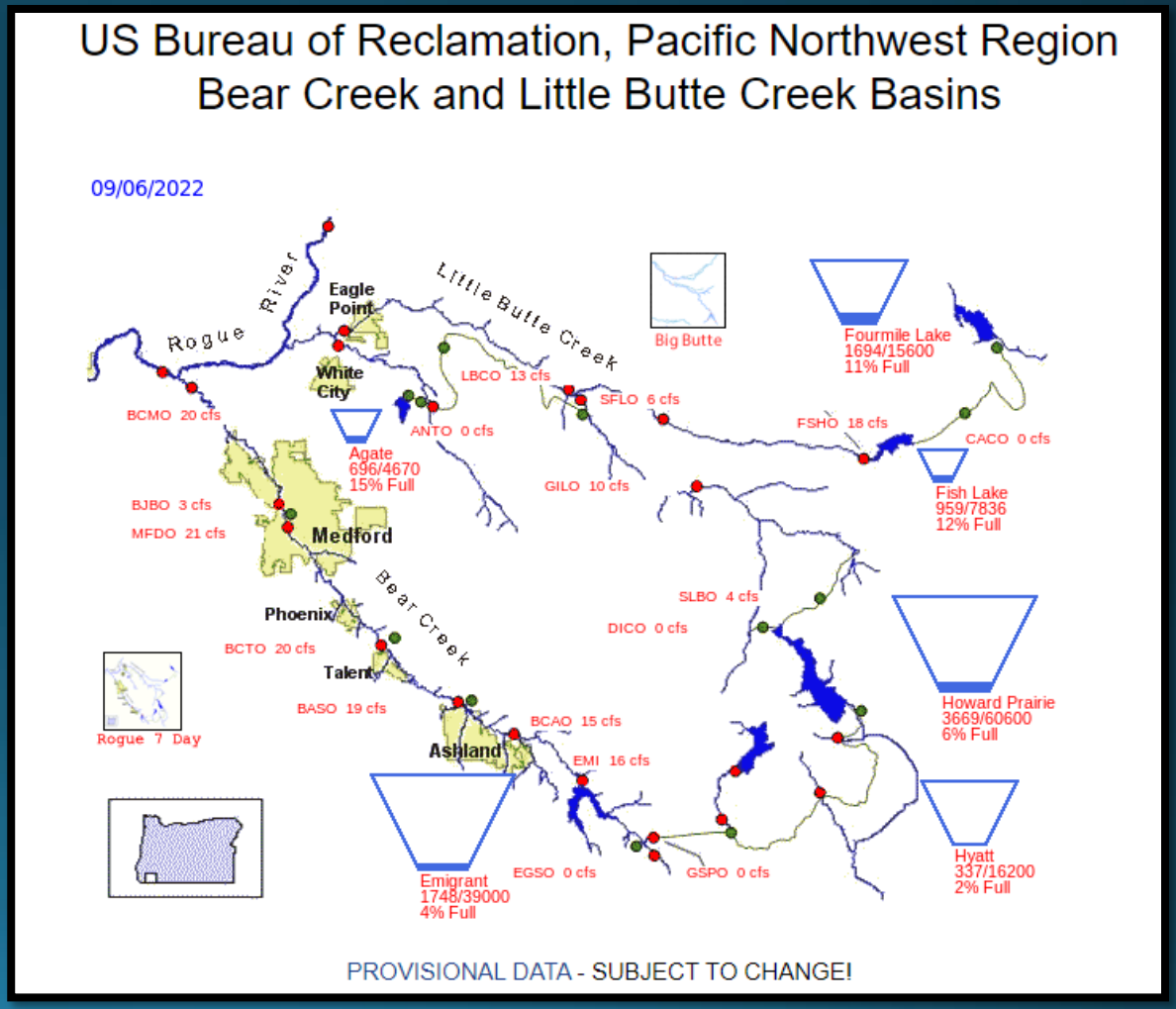


Reservoir Status

Data courtesy of US Army Corps of Engineers

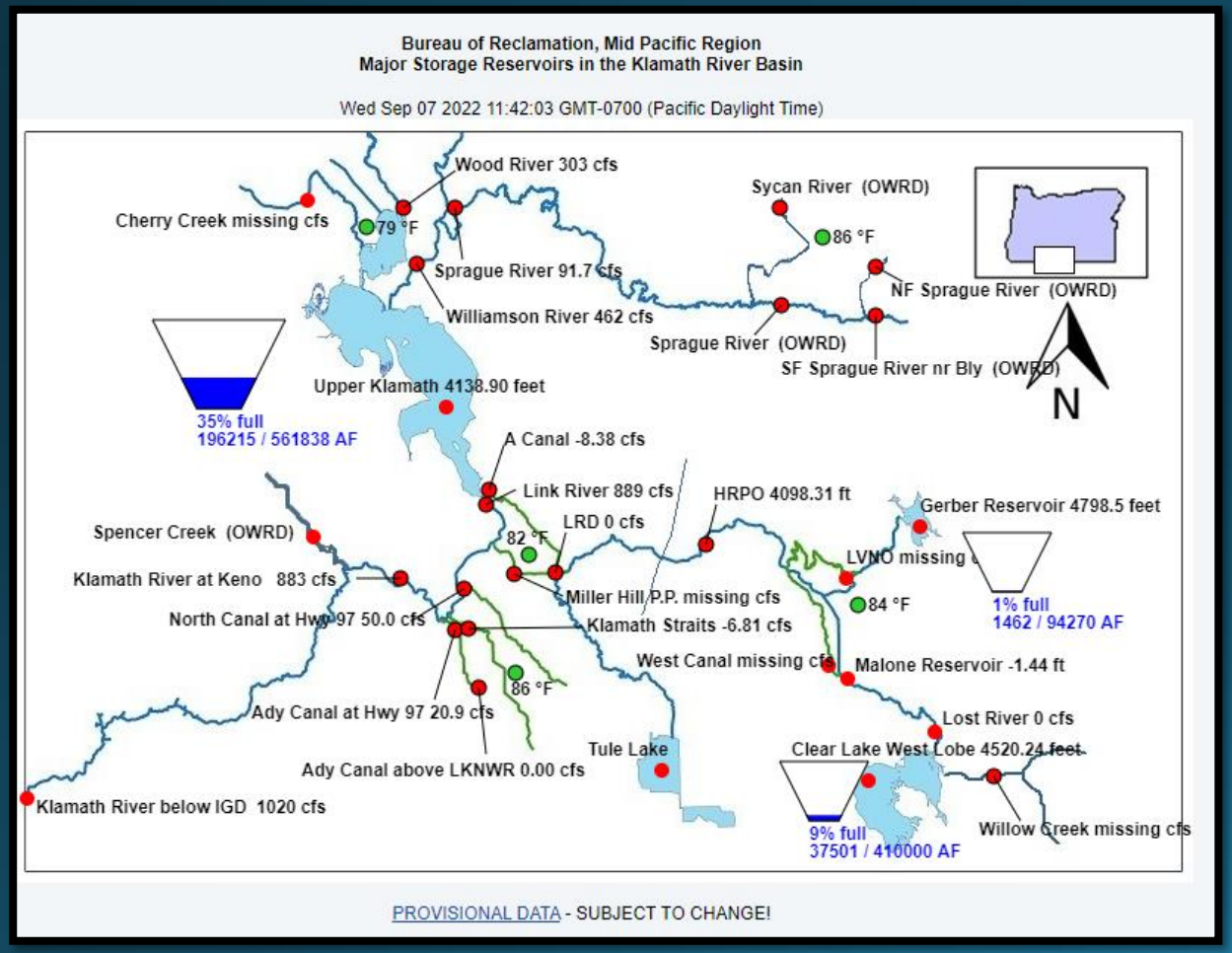


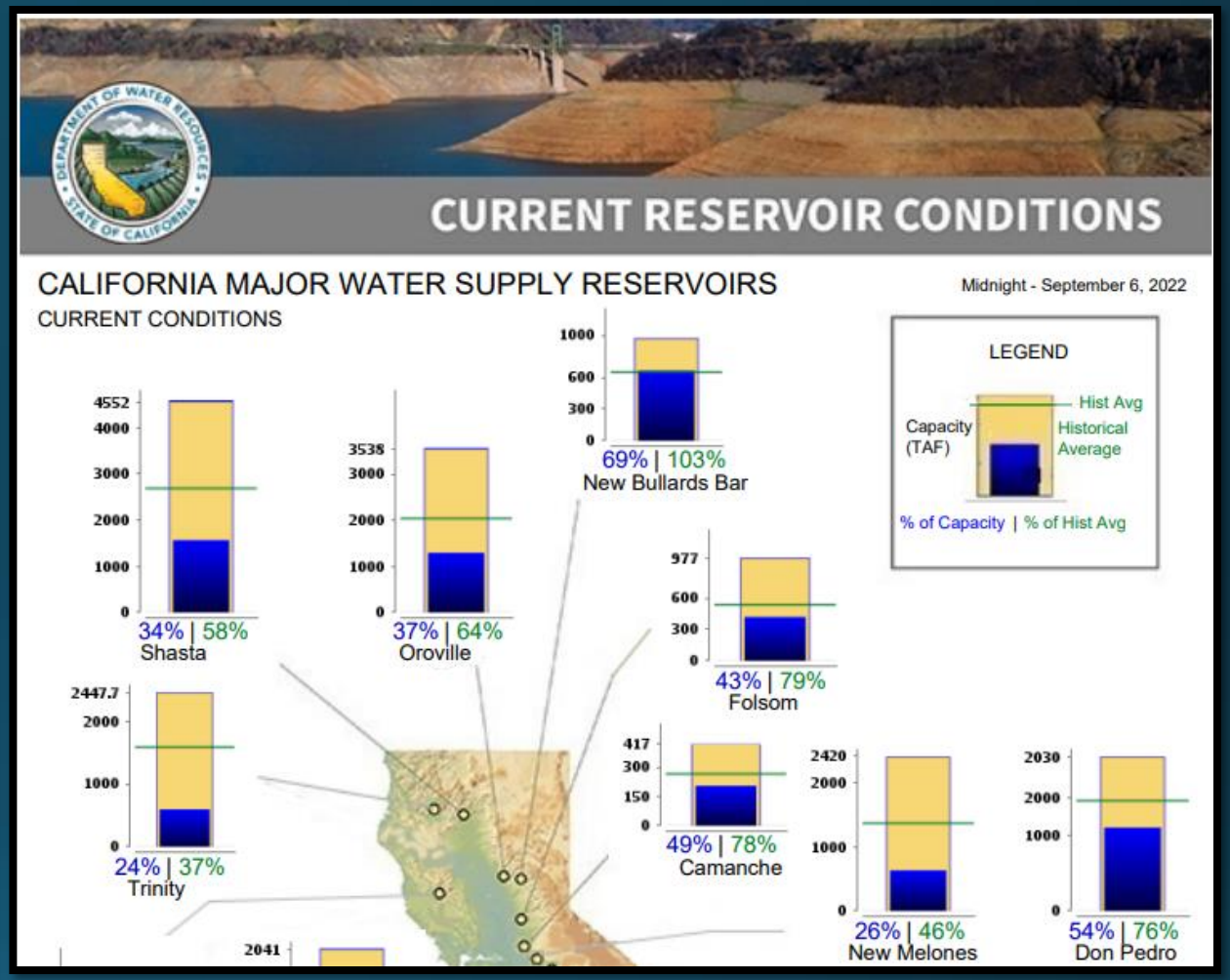
Data courtesy of Bureau of Reclamation



Reservoir Status

Klamath River Basin. Data courtesy of Bureau of Reclamation





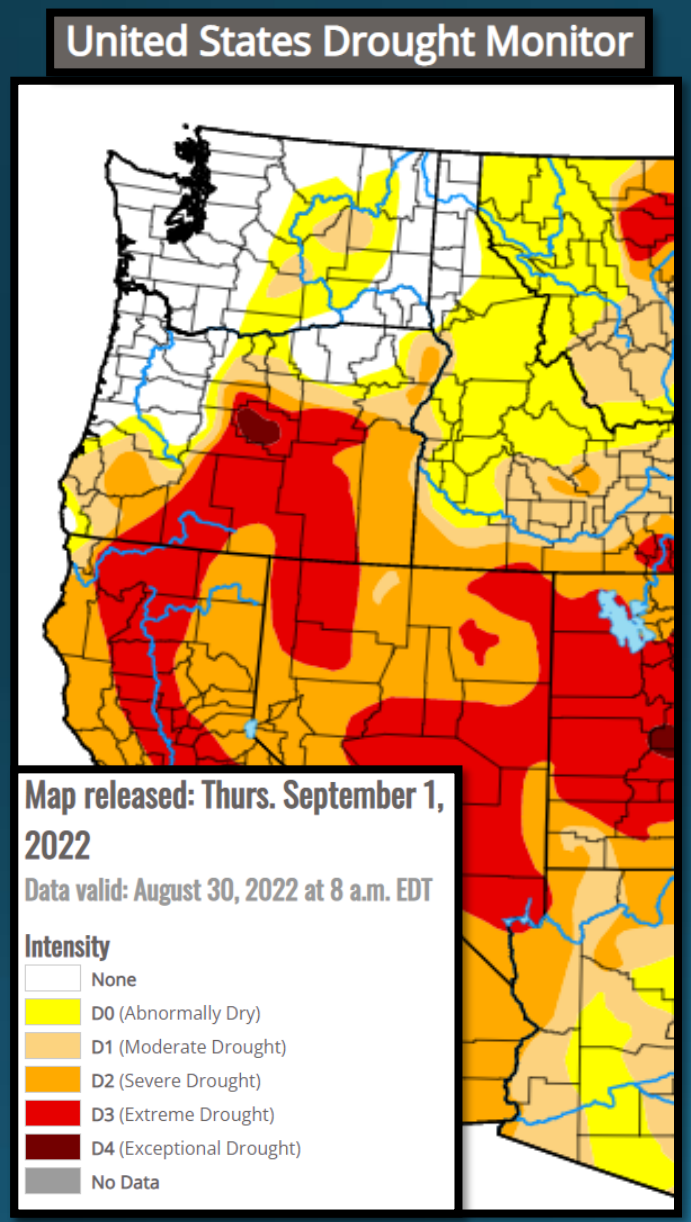
Northern California. California Data Exchange Center

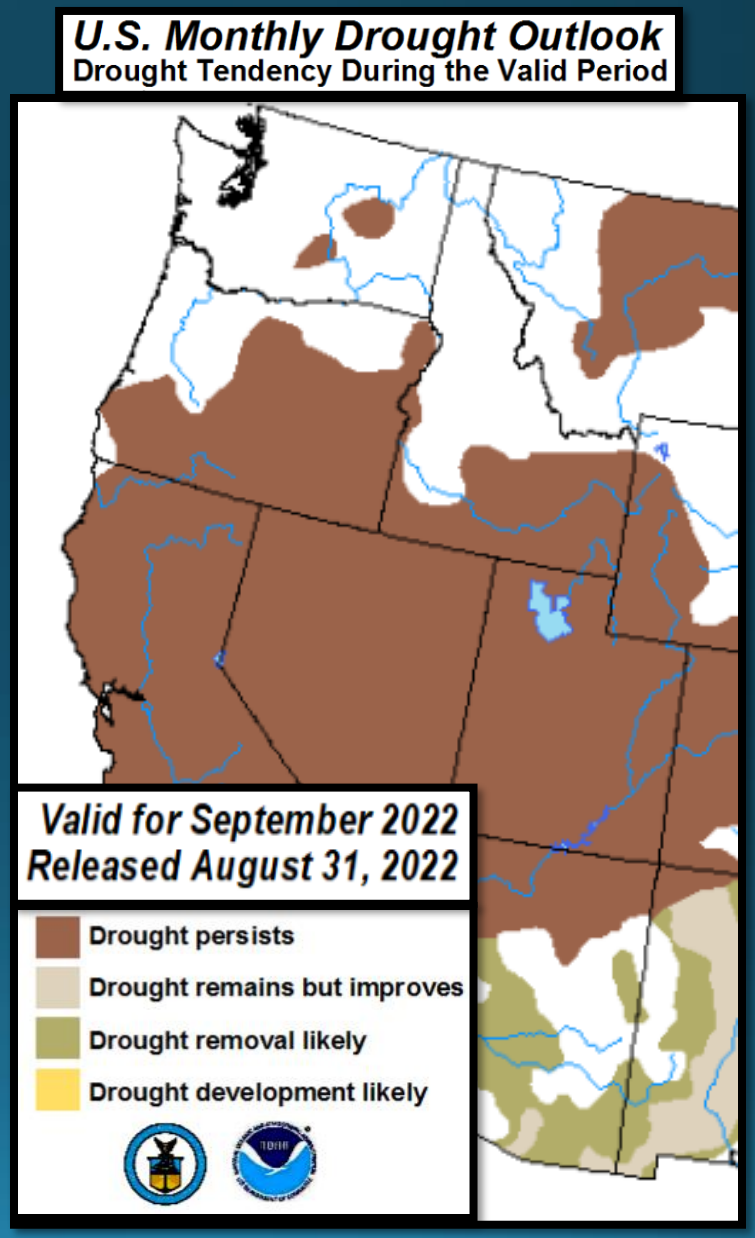
Crater Lake

Image: NPS

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 8/31/22	Highest Max/ Lowest Min
August	73.7°	48.4°	0.84"	0.0"	0"	84° on 1st / 42° on 13th & 14th
Normal (1991-2020)	69.3°	41.5°	0.83"	0.0"	*0"*	N/A

Drought Monitor (Current) & Outlook (September)

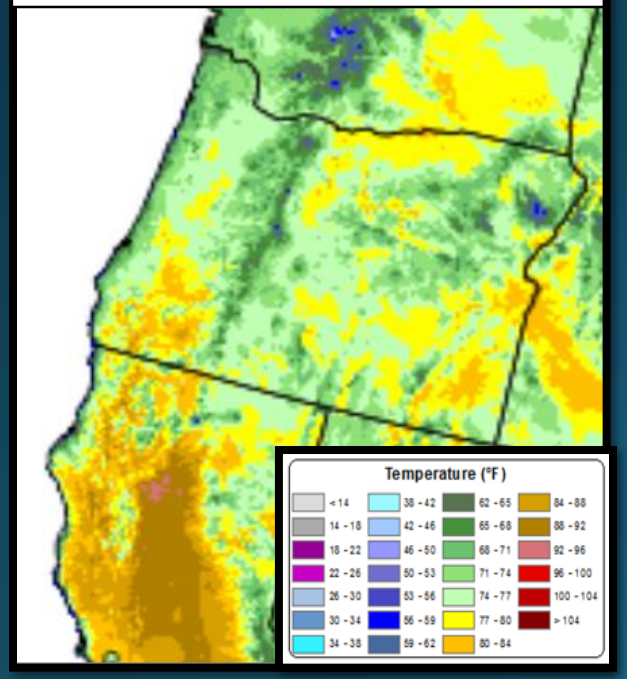




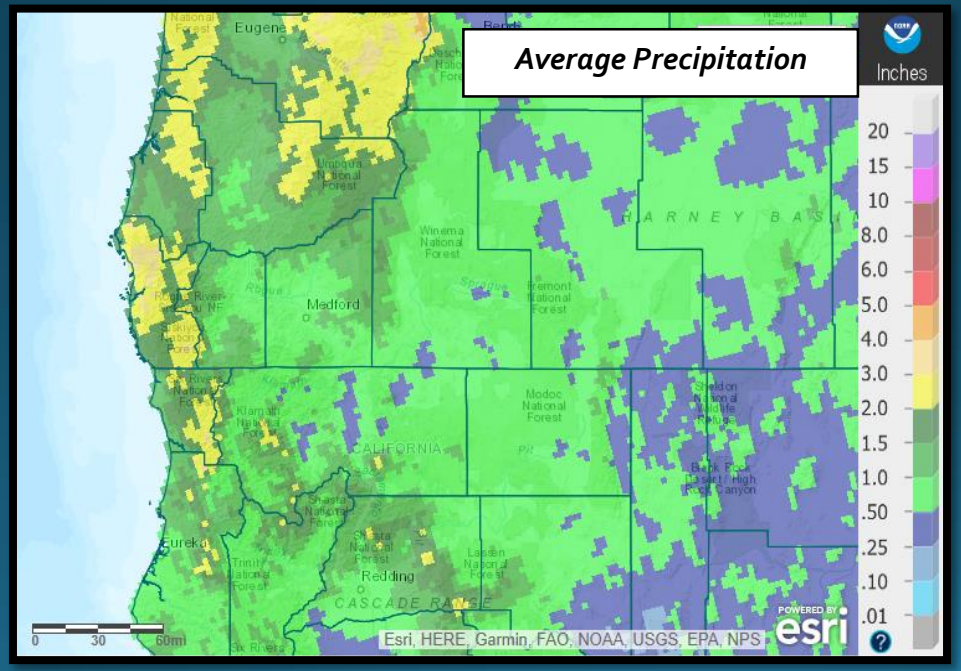
Looking Ahead: September Normals (1991-2020)

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.

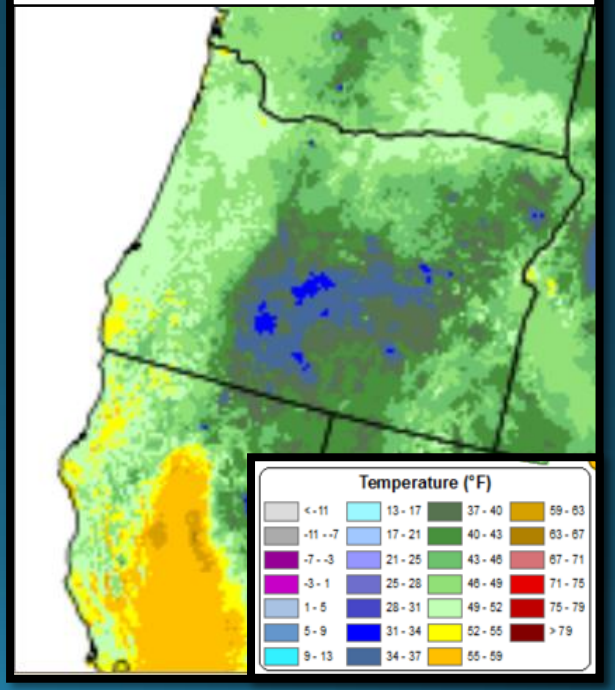
Average Maximum Temperatures



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**