

National Weather Service Medford

2023: 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 2023 Weather Review

There was quite the mixed bag of weather during August for southern Oregon and northern California. This was especially so during the last half of the month with a heatwave followed by thunderstorms that ignited several wildfires, which then brought thick smoke into the region; all followed by significant rainfall from the remnants of Hurricane Hilary and a taste of fall to finish the month. Comparatively so, the first half of the month was rather benign in terms of weather.

The first few days of the month saw southwest flow over the region that transitioned to low pressure overhead on the 4th-6th. During this time, thunderstorms developed east of the Cascades and brought wetting rain with them and minimal fire starts. Temperatures remained within a few degrees of normal during the first half of the month, with slightly below normal temperatures east of the Cascades and slightly above normal west of the Cascades. That quickly changed around the middle of the month when strong high pressure from the southern US/Desert Southwest moved westward into the region. This brought a multiday heatwave from the 12th – 16th when temperatures reached well into the triple digits for valleys west of the Cascades and in northern California, and into the upper 90s for areas east of the Cascades. The hottest day of the month region-wide was on the 14th when many climate sites set new daily records.

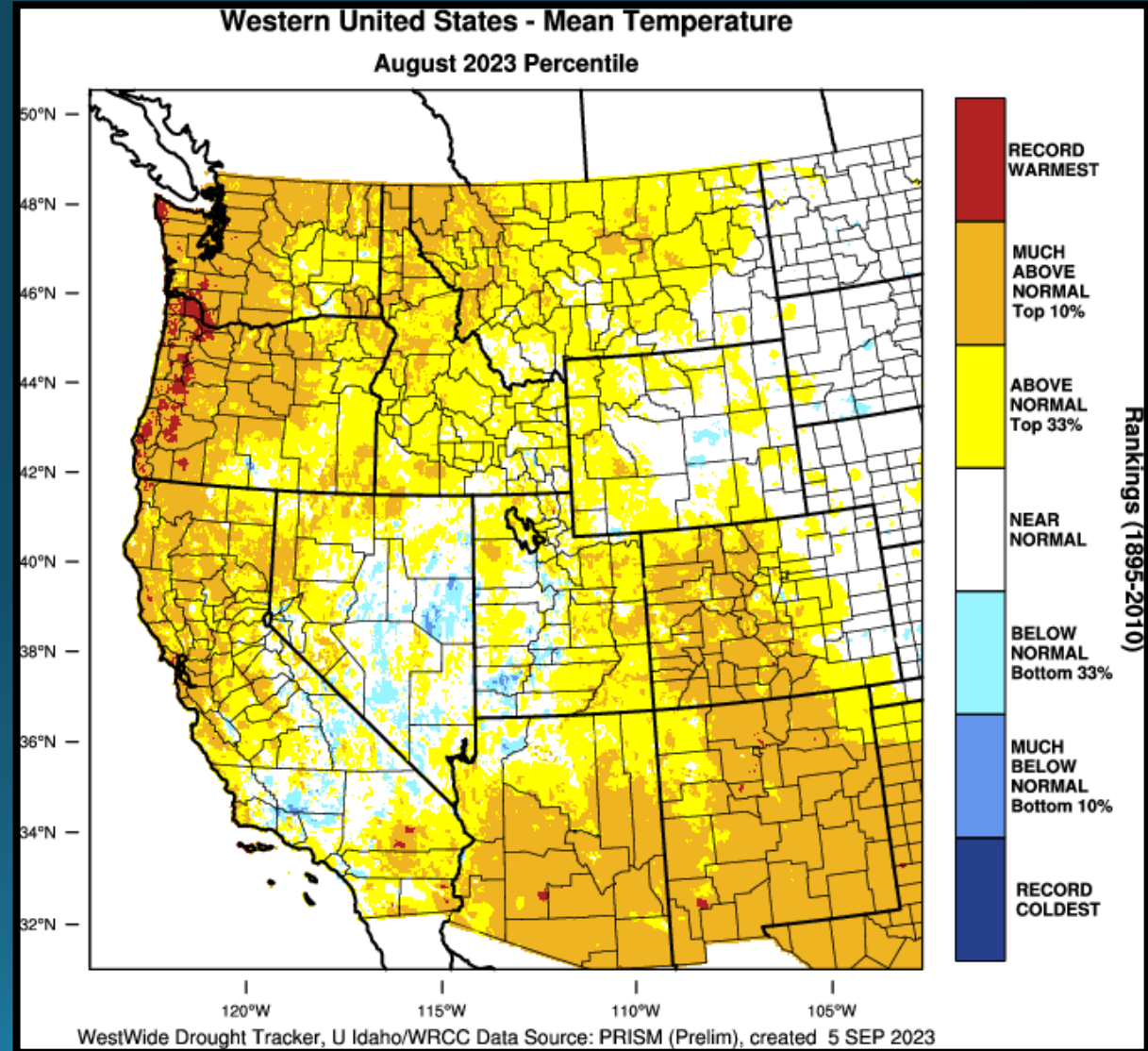
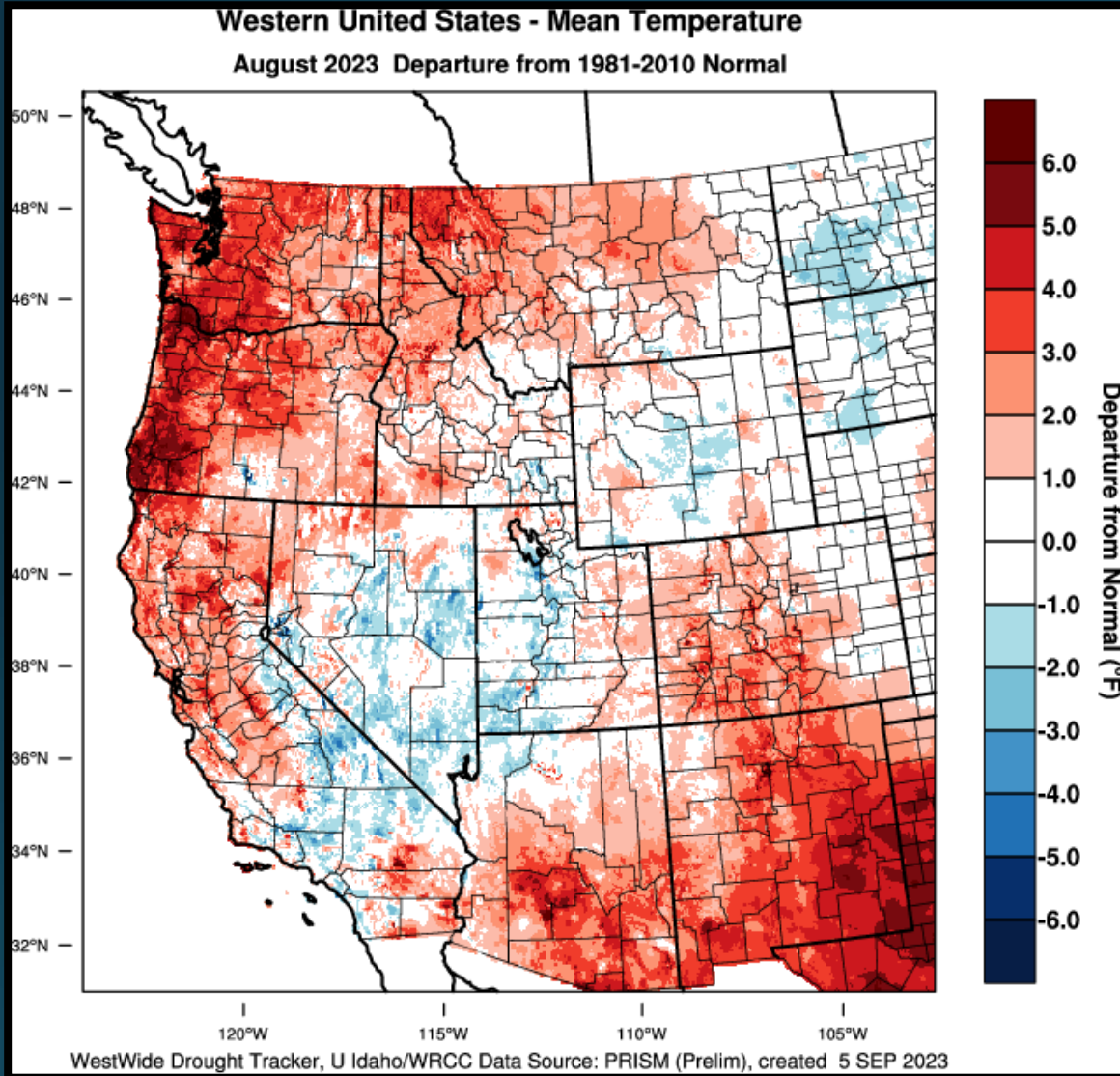
Meanwhile, weak low pressure associated with remnant tropical moisture, lingered off the California coast during this heatwave. This tropical moisture funneled into the region and kicked off multiple days of thunderstorm activity from the 14th – 21st. One round of thunderstorms moved through during the overnight period on the 14th, moving from southwest to northeast across western Siskiyou County and across southern Josephine and Curry counties. This round of lightning ignited several wildfires that burned through the month: Smith River Complex in Del Norte/Josephine Counties and the Happy Camp Complex in western Siskiyou County. Thunderstorms trended wetter during this stretch, and this brought concerns for flash flooding over burn scars. In fact, the McKinney burn scar from the 2022 fire season saw multiple debris flows which led to the closure of Highway 97 in Siskiyou County due to thunderstorms training over the burn scar on the 19th and again on the 21st.

Persistent low pressure maintained southerly flow across the region through the 25th, and this brought thick smoke into the Rogue, Illinois, Klamath River, Scott and Shasta Valleys, which led to very poor and unhealthy air quality. Meanwhile, the position of the low pressure offshore pulled the remnants of Hurricane Hilary northward through southern California into Nevada and east of the Cascades on the 21st – 22nd. This resulted in significant rainfall east of the I-5 corridor and south of Ashland and set a few daily record rainfall totals. Another round of nocturnal thunderstorms moved through Curry, Coos and western Douglas Counties on the night of the 24th and this ignited another wildfire complex, called the Tye Complex west of Sutherlin in Douglas County.

Once this low pressure moved inland on the 25th, another one dropped southward from the Gulf of Alaska and stalled off the Oregon Coast through the 29th. While this low pressure wasn't far enough south to pull in monsoonal moisture and maintain thunderstorm potential, it was far enough south to maintain southerly flow over the region. This flow pushed thick smoke from the Smith River Complex into the Rogue and Illinois Valleys, and maintained very unhealthy air quality for several days. Relief finally arrived on the 29th when the upper level trough pushed through the region, which changed the flow to westerly and brought a decaying front through the area. Unfortunately, this front did not deliver enough rain to put out the fires, but it did help to reduce fire activity and brought a significant improvement to the region's air quality. A taste of fall was on the horizon for the end of the month with temperatures dropping to below normal values and a trough expected to linger over the region and bring beneficial rainfall to the region for the first few days of September.



August 2023 Observed Temperatures





Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	63.8	3.4°F	70.7	3.4°F	56.9	3.3°F
Roseburg	75.4	3.9°F	90.0	4.1°F	60.8	3.7°F
Medford	78.4	3.9°F	93.6	2.5°F	63.2	5.3°F
Klamath Falls	67.0	1.4°F	84.5	-0.3°F	49.5	3.0°F
Montague, CA	74.5	2.1°F	92.5	0.3°F	56.6	4.0°F
Mt. Shasta City, CA	70.1	2.8°F	87.5	2.9°F	52.7	2.8°F
Alturas, CA	66.9	1.1°F	86.3	-1.0°F	47.4	3.2°F



Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
<i>North Bend</i>	79°	14th	51°	19th
<i>Roseburg</i>	109°	14th	52°	23rd
<i>Medford</i>	111°	14th	53°	30th
<i>Klamath Falls</i>	97°	14th	36°	30th
<i>Montague, CA</i>	107°	14th	45°	31st
<i>Mt. Shasta City, CA</i>	102°	14th	42°	27th
<i>Alturas, CA</i>	97°	14th	37°	30th



August Record Temperatures

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	78.4	2023-08-31	0
3	78.1	2017-08-31	0
4	77.9	1967-08-31	0
5	77.3	2016-08-31	0
6	77.1	1986-08-31	0
7	77.0	2014-08-31	0
8	76.8	2020-08-31	0
9	76.3	2012-08-31	0
10	76.2	2021-08-31	0

Last value also occurred in one or more previous years.

Period of record: 1911-03-11 to 2023-09-10

Maximum 31-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	75.5	2023-08-31	1
2	75.4	2017-08-31	0
3	75.0	2022-08-31	0
4	74.8	2014-08-31	0
5	74.1	2016-08-31	0
6	73.7	2015-08-31	0
7	73.5	2020-08-31	0
8	73.4	2021-08-31	0
9	72.9	2019-08-31	0
10	72.8	2013-08-31	0

Period of record: 1900-04-01 to 2023-09-10

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	74.5	2023-08-31	0
5	74.3	2021-08-31	0
6	74.0	2012-08-31	0
7	73.7	2014-08-31	0
8	73.6	2019-08-31	0
9	73.5	2016-08-31	0
10	73.2	2015-08-31	0

Period of record: 1948-07-01 to 2023-09-10

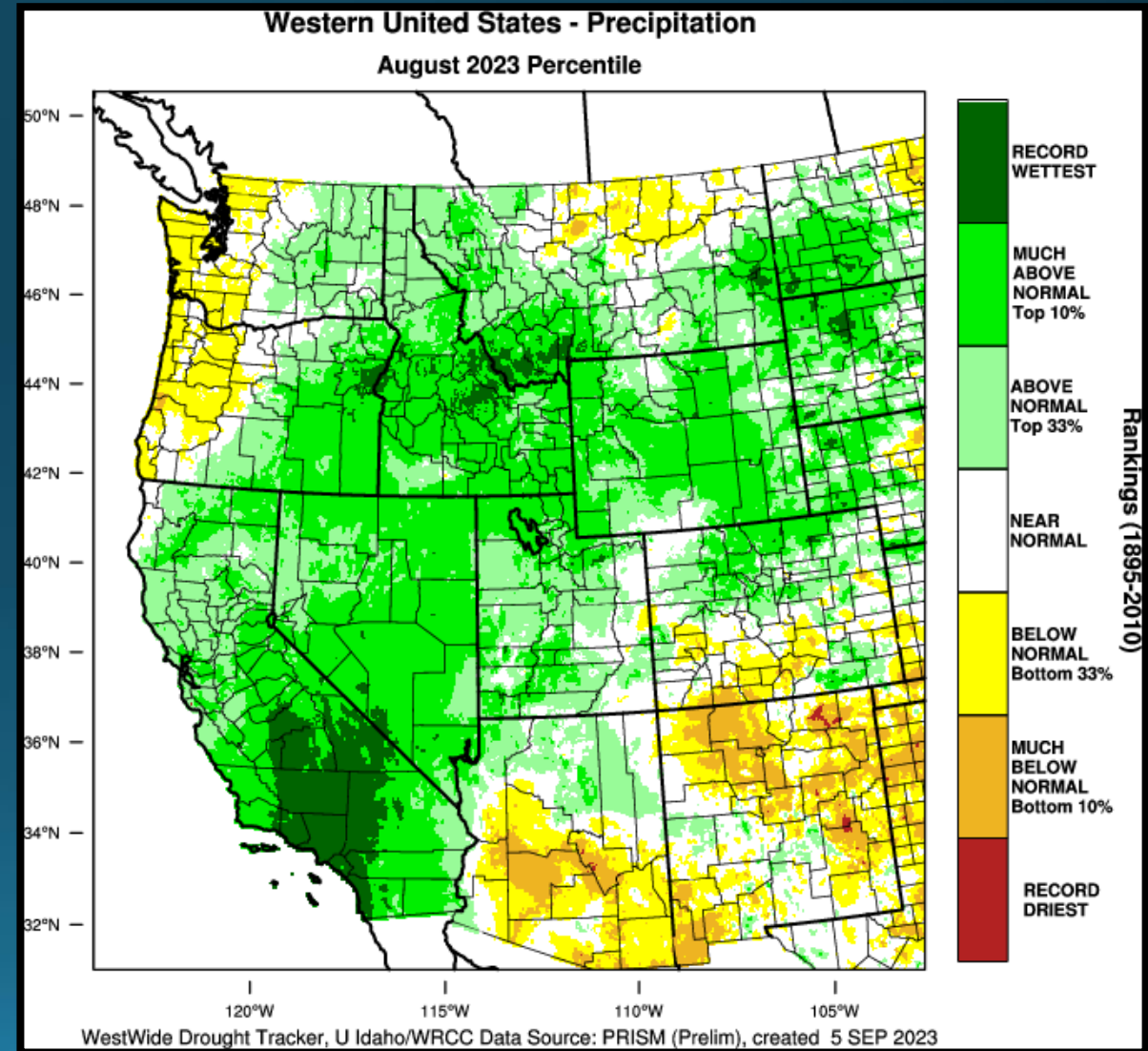
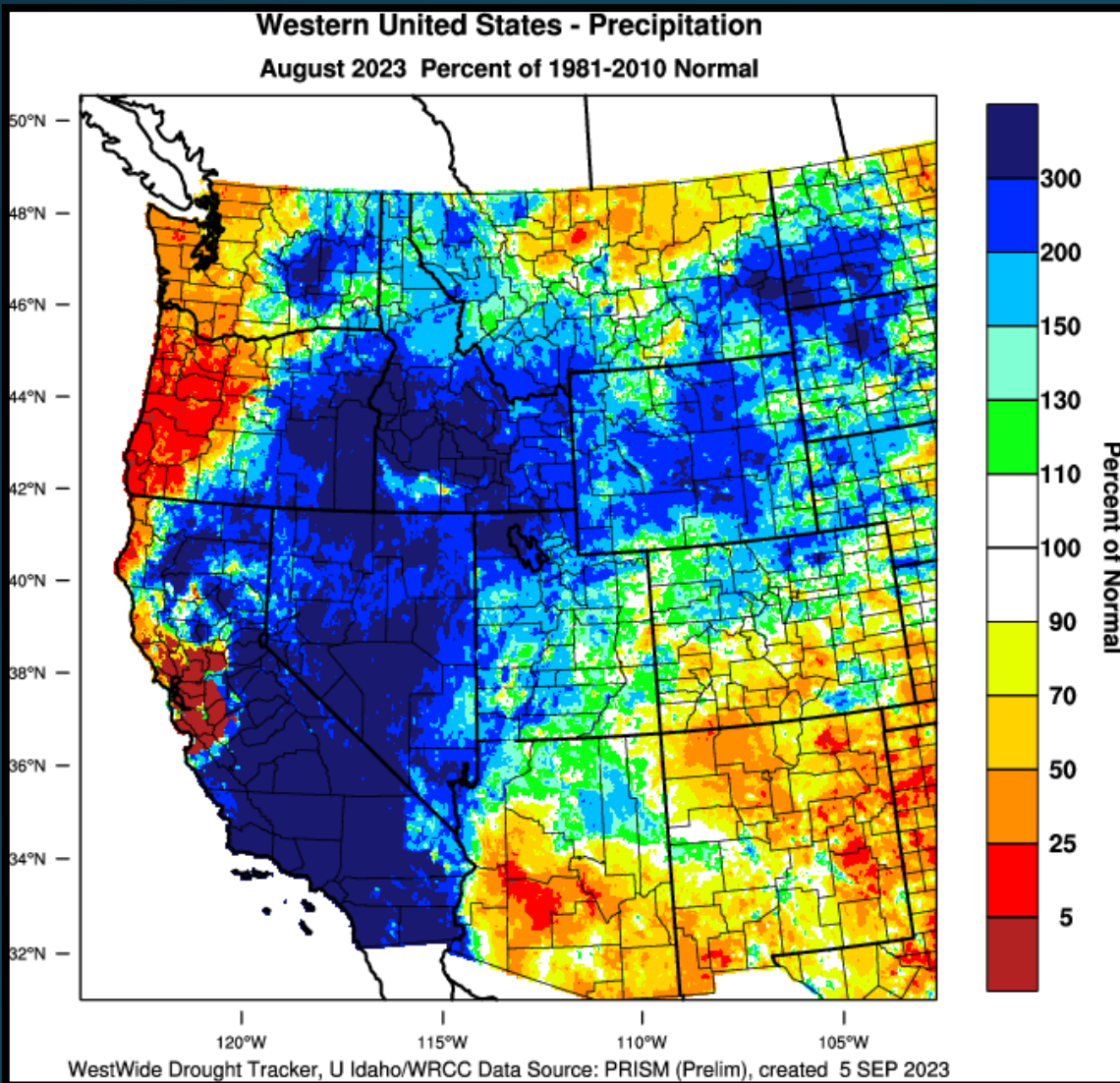
Daily Record High Temperatures

	Date	Record High	Old Record/Year
North Bend	14 th	79°F	Ties w/1927
Roseburg	14 th	109°F	104°F / 2002
	16 th	108	102°F / 2008
Medford	14 th	111°F	108°F / 1933
Montague	13 th	105°F	104°F / 1922
	14 th	107°F	105°F / 2008
Mt Shasta City	14 th	102°F	100°F / 2008
	15 th	100°F	98°F / 2008

Record Hot August

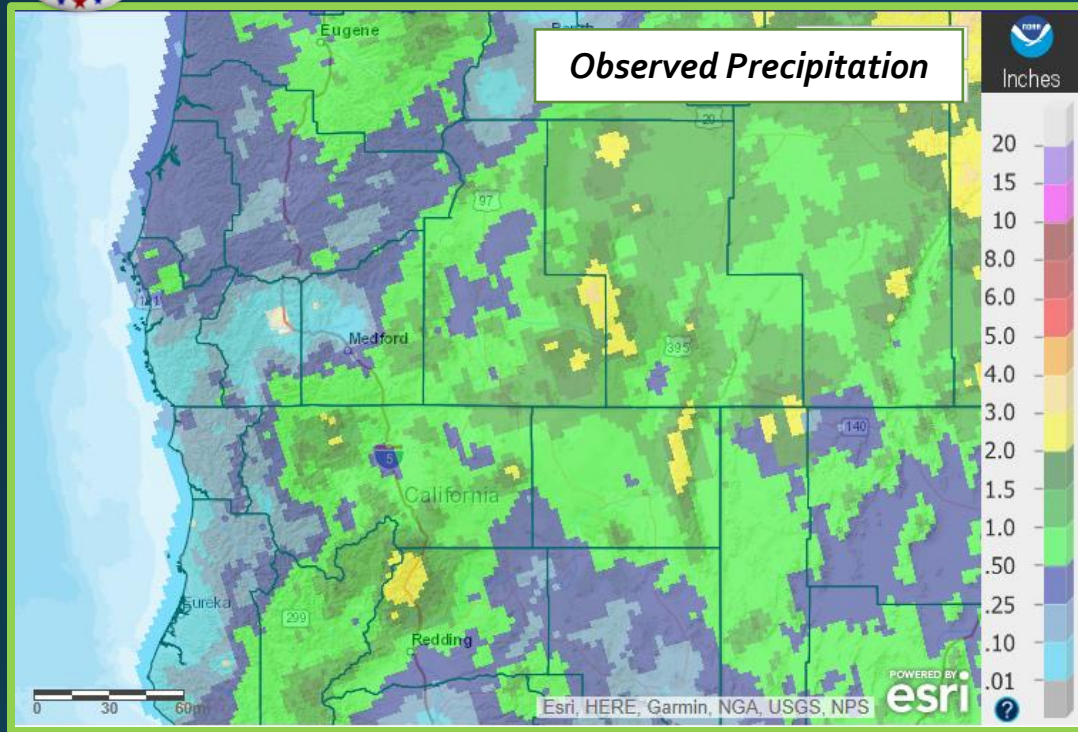


August 2023 Observed Precipitation





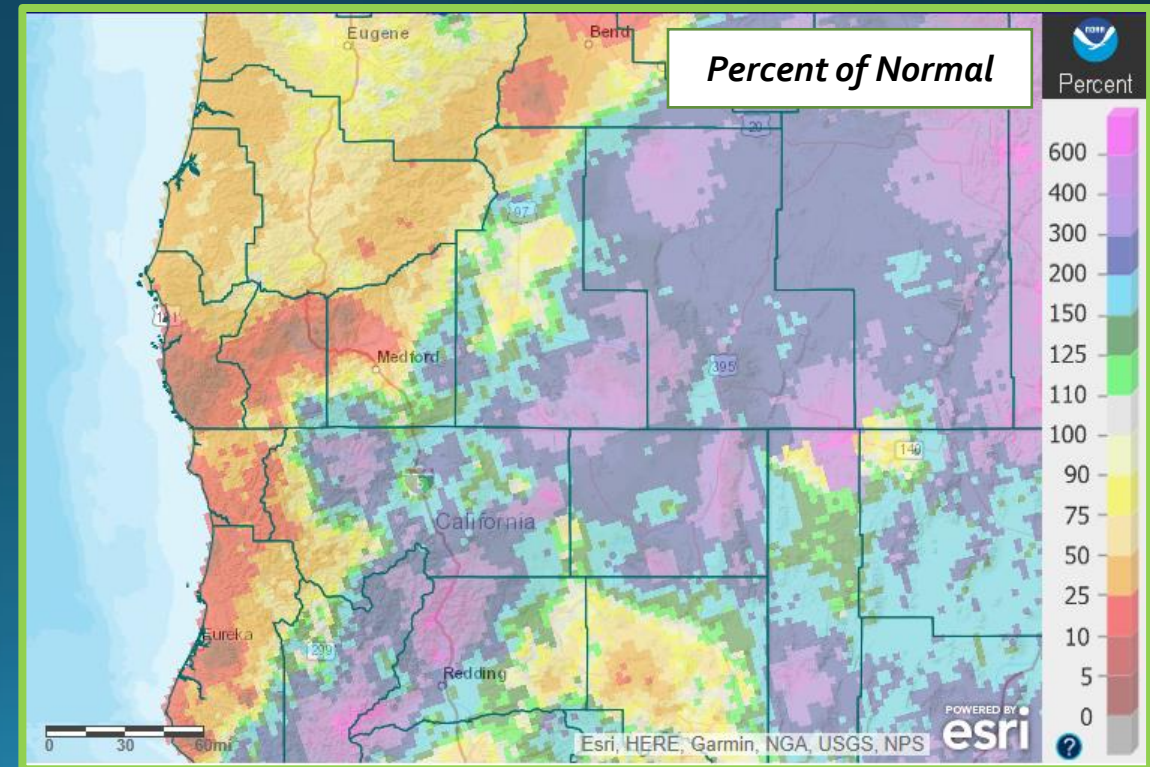
Precipitation



	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	0.44"	0.02"	0.30"	31 st
Roseburg	0.21"	-0.02"	0.18"	31 st
Medford	0.07"	-0.26"	0.07"	31 st
Klamath Falls	0.54"	0.26"	0.54"	21 st – 22 nd
Montague, CA	0.83"	0.49"	0.52"	21 st – 22 nd
Mt. Shasta City, CA	0.69"	0.49"	0.69"	21 st – 22 nd
Alturas, CA	1.10"	0.83"	0.57"	4 th

Record Precipitation

	Date / Amount	Old Record / Year
Klamath Falls	21 st / 0.52"	0.22" / 1965
Mt Shasta City	21 st / 0.62"	0.30" / 1983
Alturas	4 th / 0.57"	0.08" / 2014

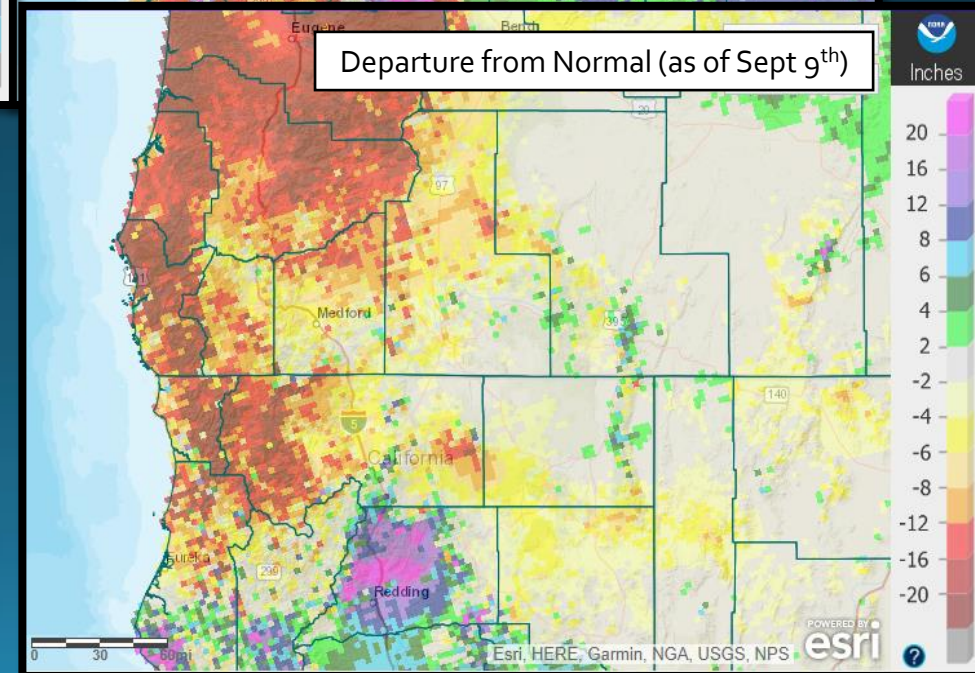
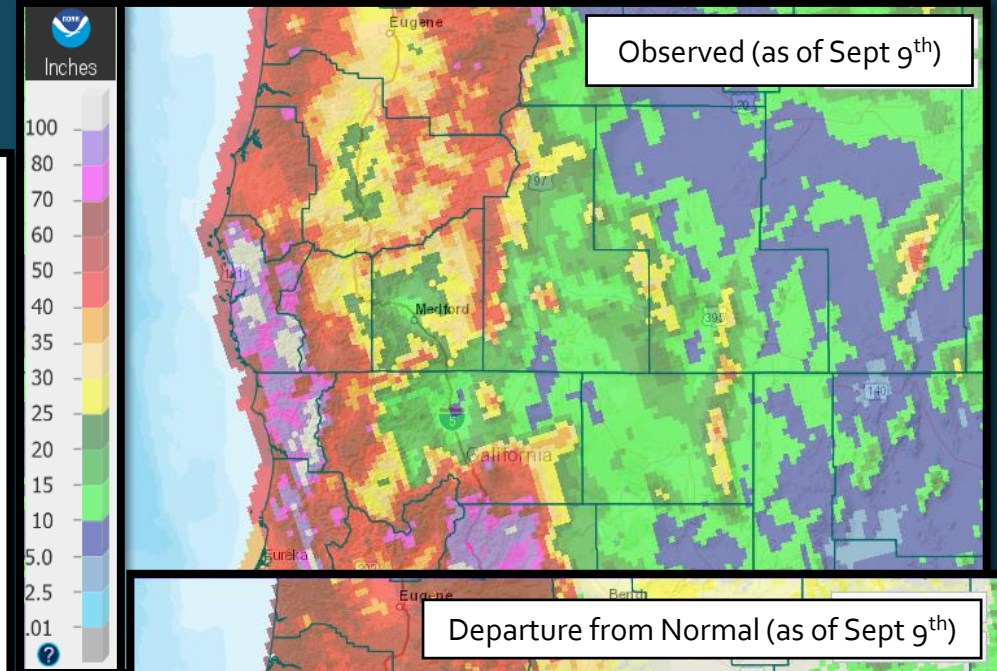
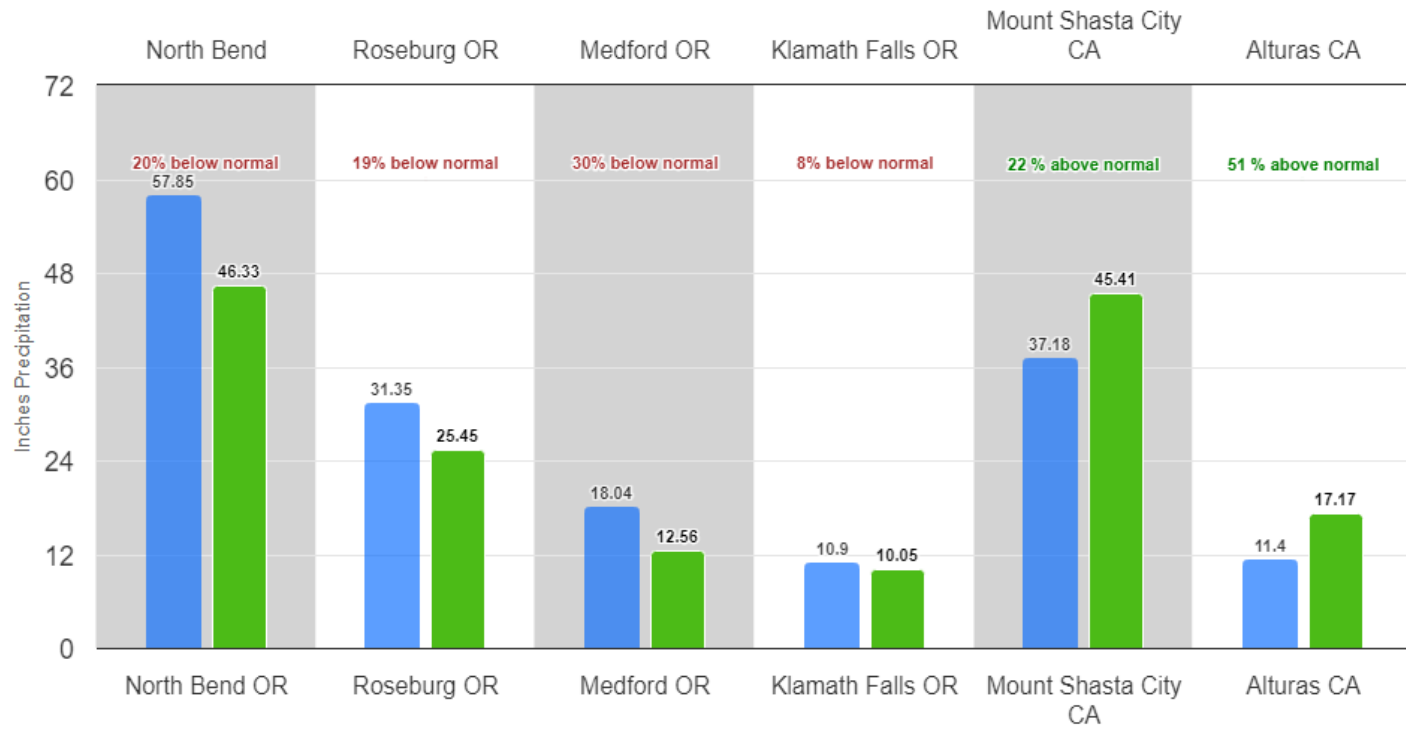




Water Year Status (as of September 9th)

Climate Sites Water Year Precipitation (Since Oct 1) and Percent of Normal as of 132AM SEP09

■ Normal Precipitation Since Oct 1 ■ 2022/2023 Observed Precipitation Since Oct 1



Highcharts.com

POWERED BY Esri, HERE, Garmin, NGA, USGS, NPS

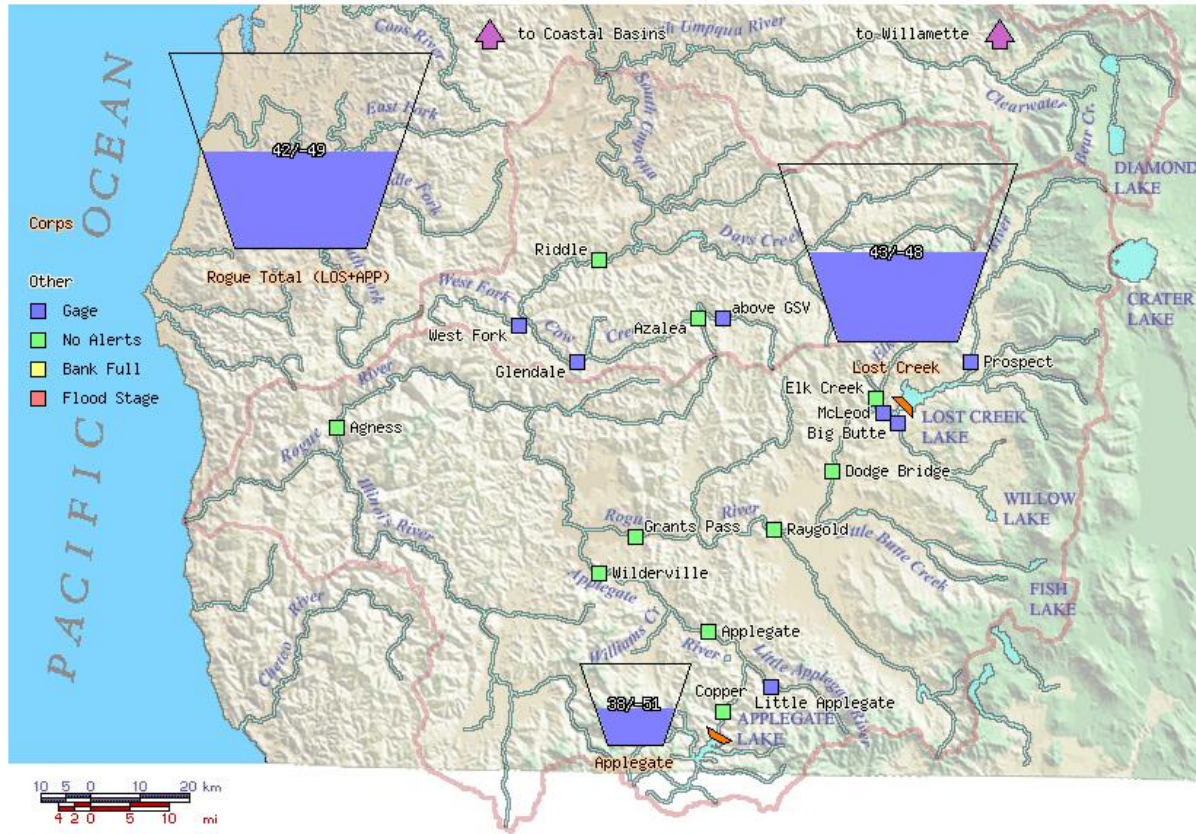


Reservoir Status

Data courtesy of [US Army Corps of Engineers](#)

Data courtesy of [Bureau of Reclamation](#)

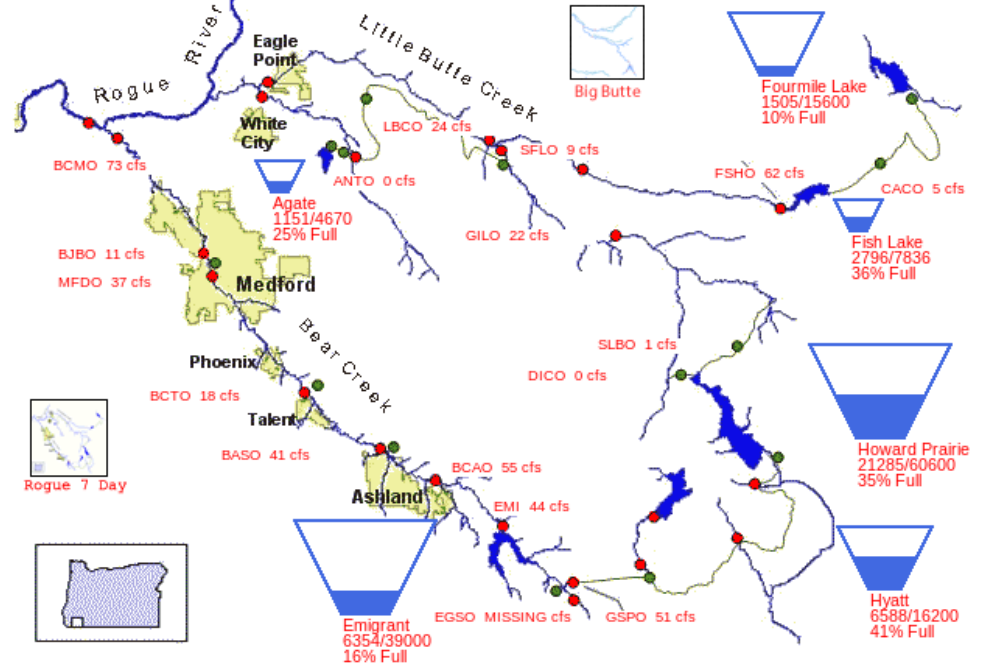
Rogue Basin Teacup Diagram



Created: Sat Sep 9 10:55:52 2023
 WCD: Water Control Diagram
 Project numbers: percent full / percent above WCD, where
 $\text{percent full} = \frac{\text{current storage} - \text{minimum conservation storage}}{\text{maximum conservation storage} - \text{minimum conservation storage}}$
 $\text{percent above water control diagram} = \frac{\text{current storage} - \text{WCD storage}}{\text{maximum conservation storage} - \text{minimum conservation storage}}$

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

09/08/2023

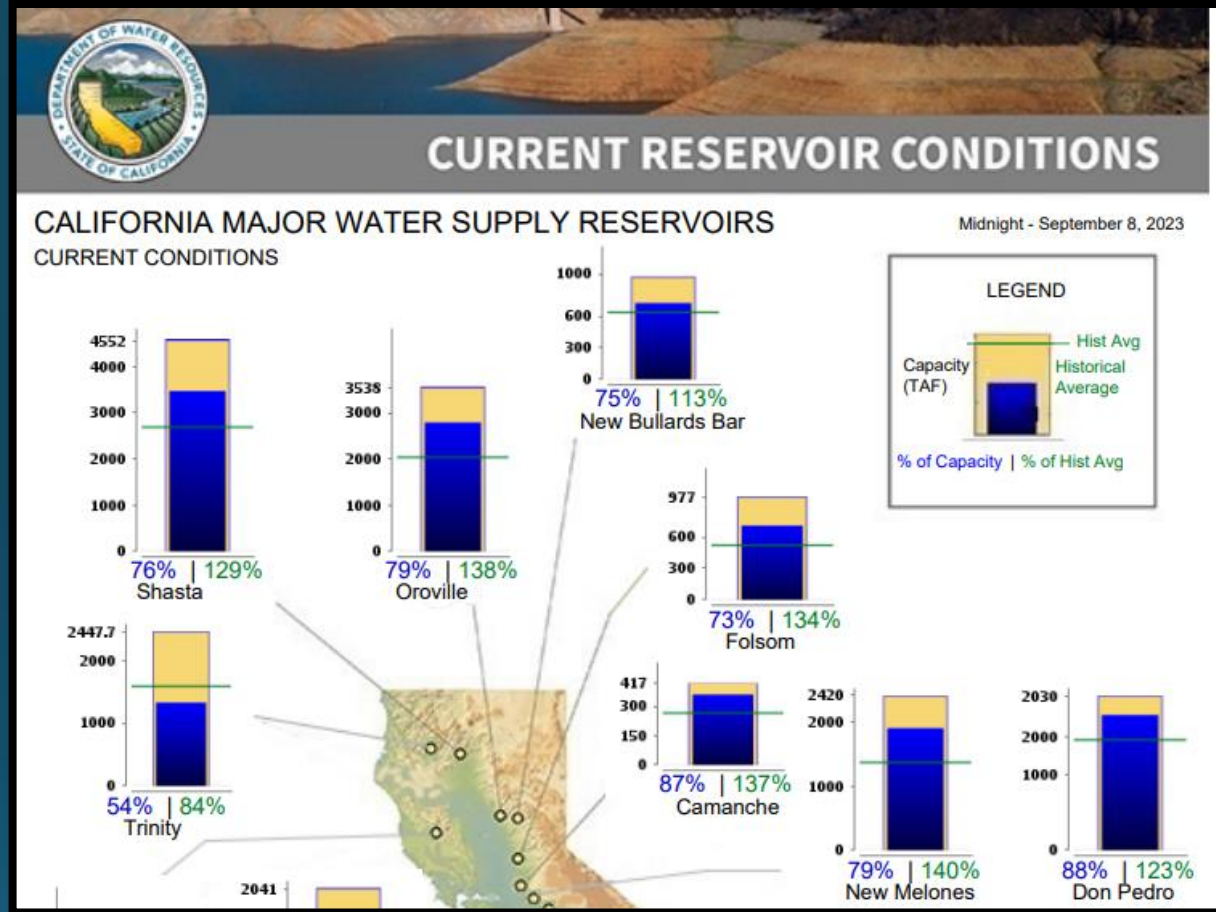
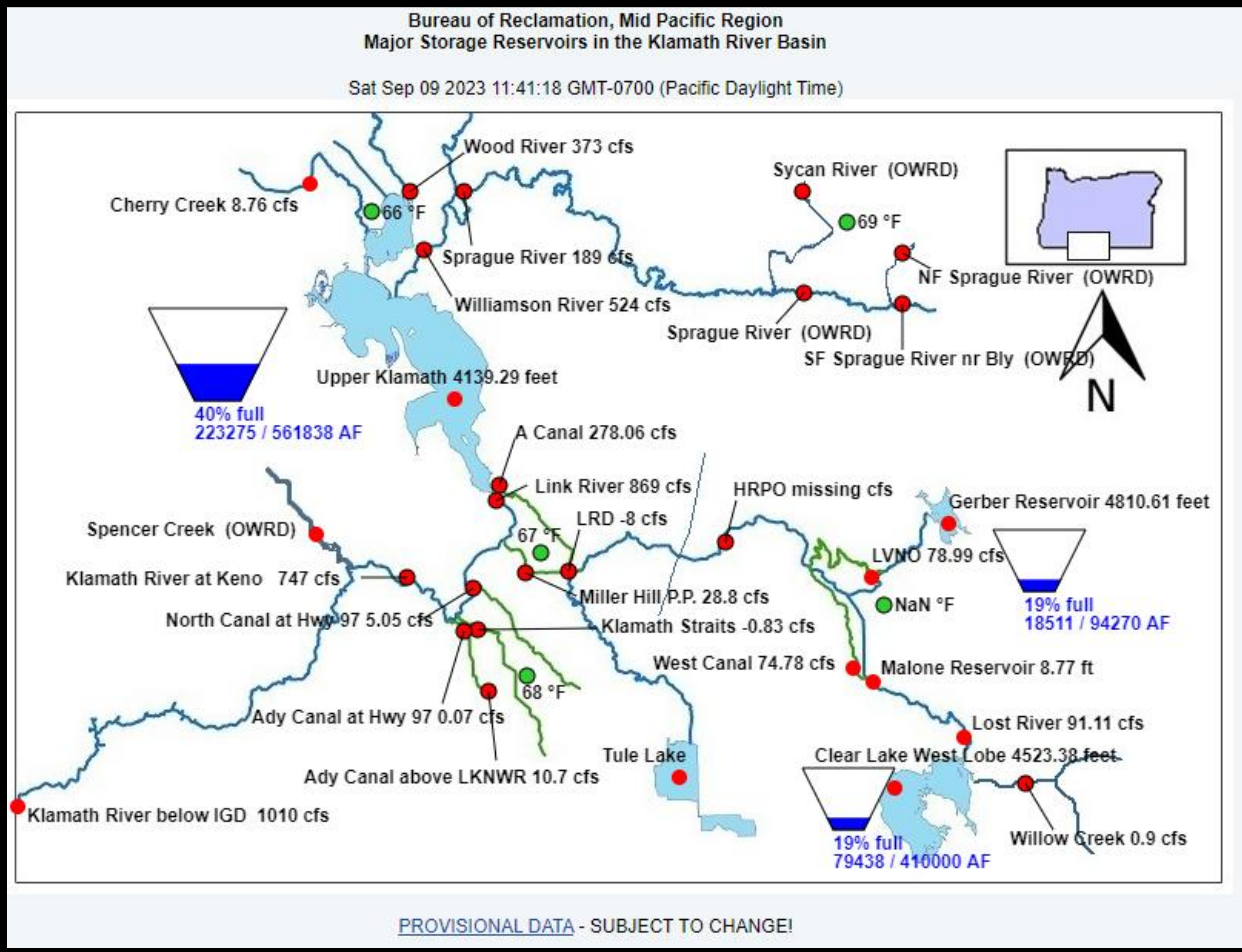


PROVISIONAL DATA - SUBJECT TO CHANGE!



Reservoir Status

Klamath River Basin. Data courtesy of [Bureau of Reclamation](#)



Northern California. [California Data Exchange Center](#)



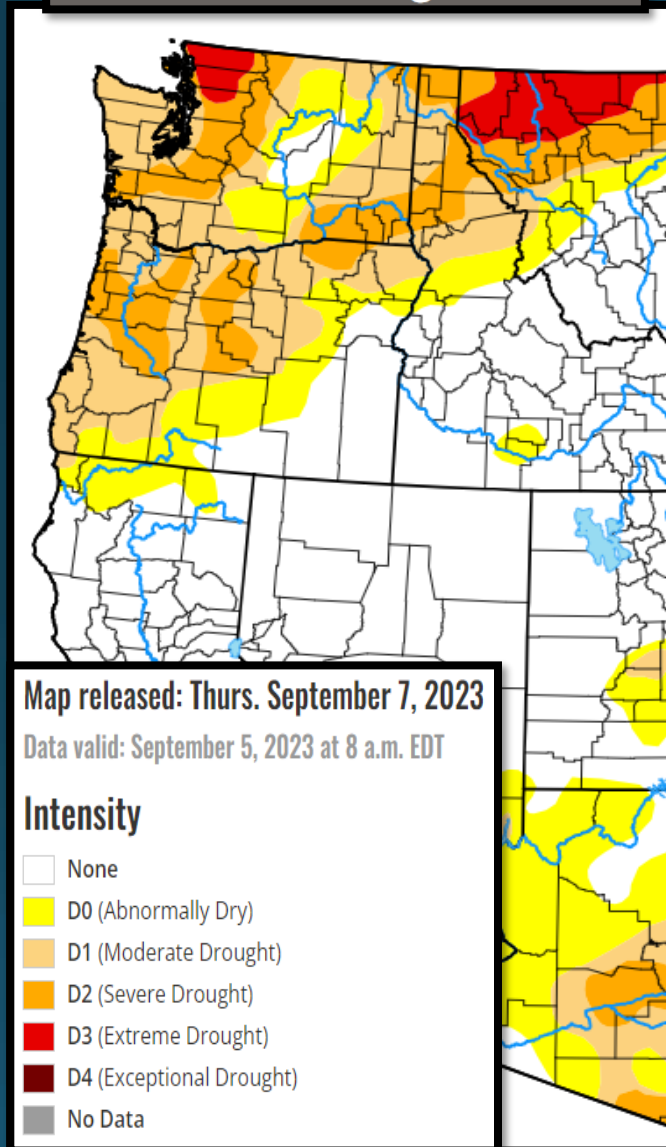
Crater Lake

Image: NPS

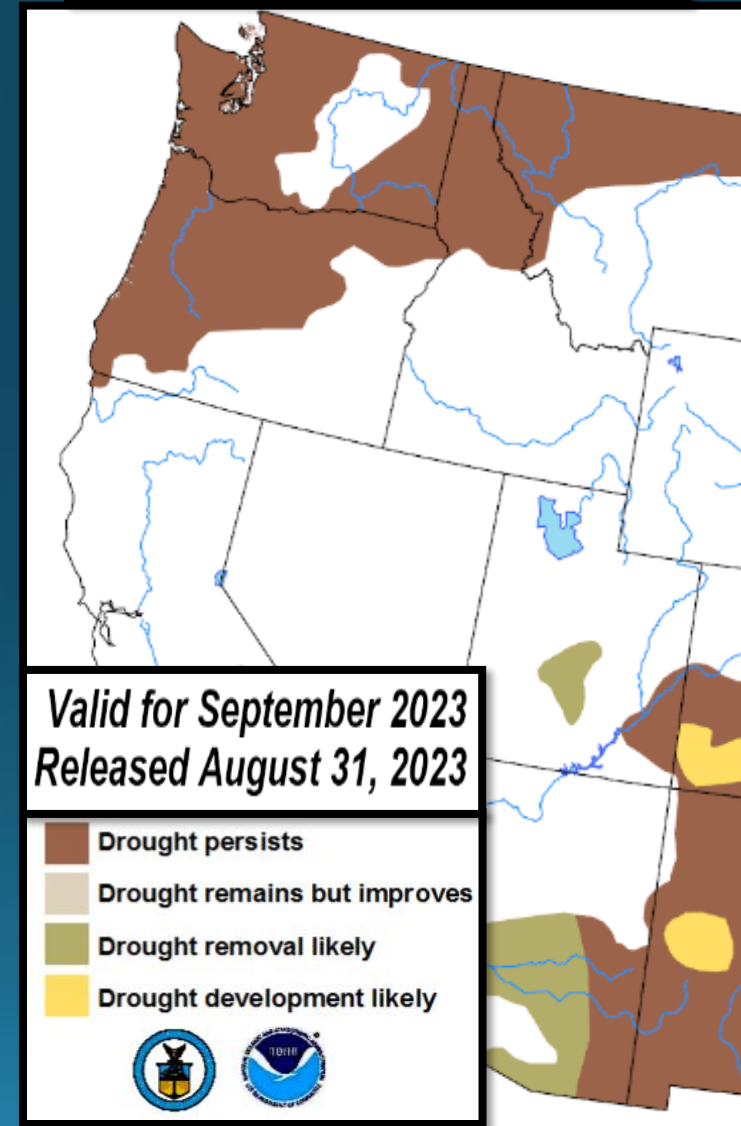
	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 8/31/23	Highest Max/ Lowest Min
August	69.9°	47.7°	0.25"	0.0"	0"	82° on 15 th & 17 th / 36° on 30 th
Normal (1991-2020)	69.3°	41.5°	0.83"	0.0"	0"	N/A

Drought Monitor (Current) & Outlook (September)

United States Drought Monitor



U.S. Monthly Drought Outlook
Drought Tendency During the Valid Period

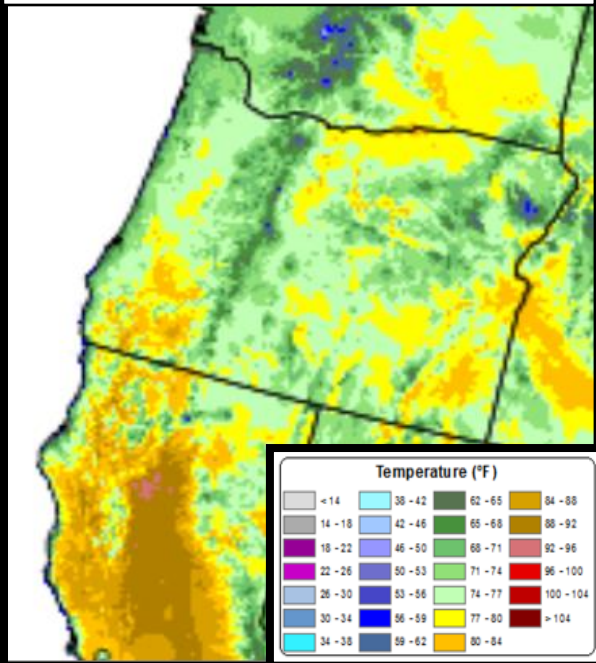




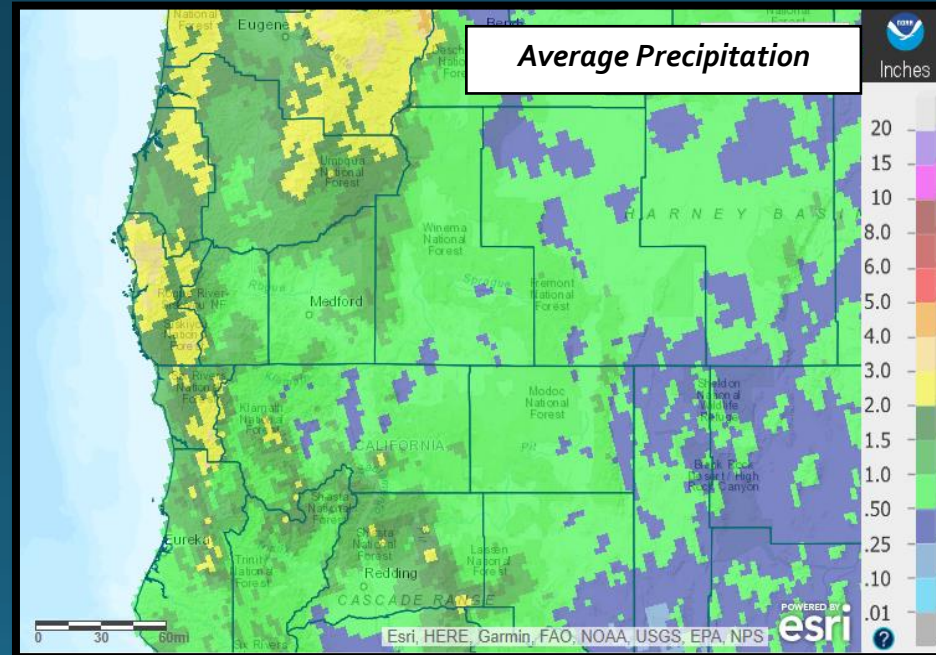
Looking Ahead: September Normals (1991-2020)

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.

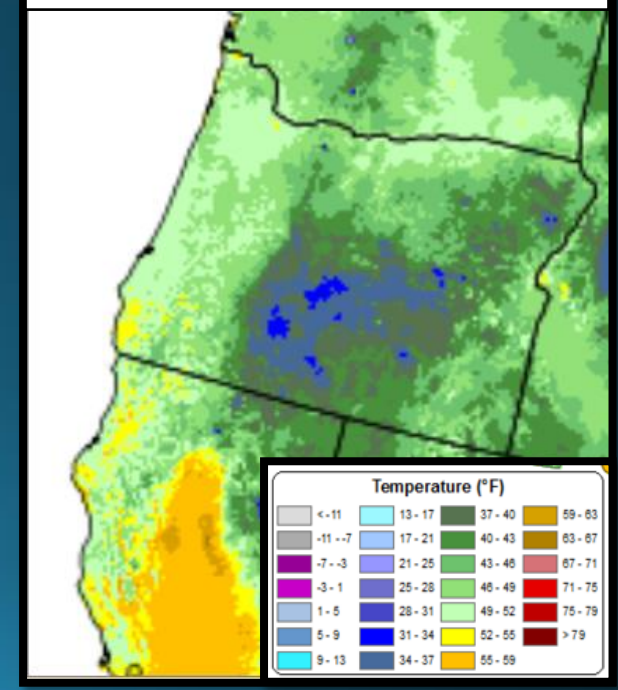
Average Maximum Temperatures



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**