National Weather Service Medford

## October 2020 Climate Summary





#### October 2020 Weather Review

Summer like conditions continued into the beginning of October, with record breaking high temperatures and critical fire weather concerns. Smoke from the fires in Northern California continued to effect the area, although it wasn't nearly as thick or impactful to air quality as what occurred during early September.

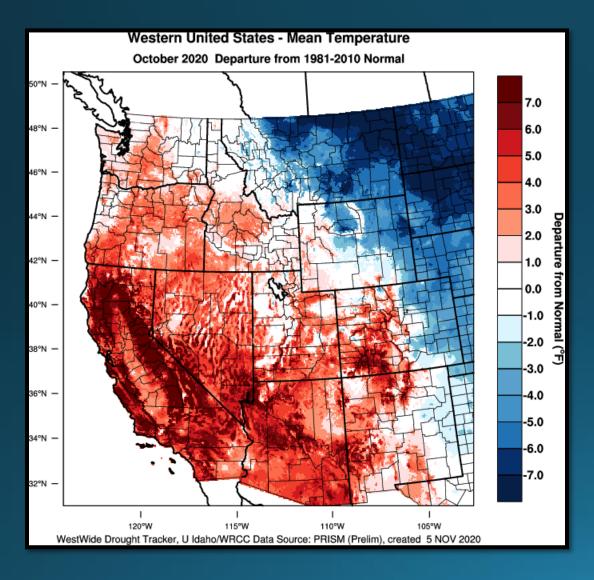
Temperatures gradually moderated during the first week, then the first fall-like pattern change arrived on the 10<sup>th</sup>. This system produced the only measurable rainfall during the month for many areas. It was significant, however, as it was enough to aid firefighting efforts, reduce wildfire risks across the area and provide a reprieve from smoky conditions. A weaker system followed a few days later, continuing the break from smoke. Precipitation, however, was much less and measurable rainfall was limited to coastal areas and locations north of the Umpqua Divide. High pressure quickly rebuilt over the area following this front, and conditions quickly turned drier and warmer again.

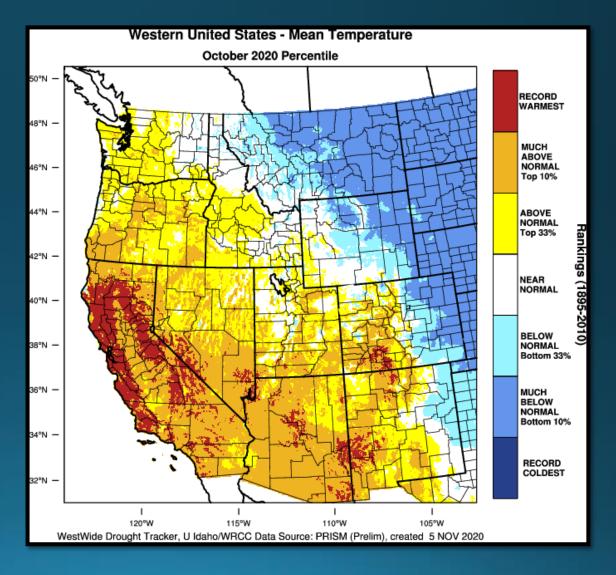
With clear skies and a dry atmosphere in place, there were large diurnal swings in temperatures with cold mornings giving way to warm afternoons with well above normal temperatures. East of the Cascades, the difference between morning lows and afternoon highs was on the order of 40 to 50 degrees! For the remainder of the month, largely dry conditions persisted. A few weak marine pushes moved into the area, bringing very light precipitation to areas along the coast and north of the Umpqua Divide. Towards the end of the month, another "inside slider" moved south into Idaho bringing a very cold, arctic air mass to the region. This also resulted in another east wind event, although no where near the magnitude of the early September 2020 event. Thankfully, the region had received enough beneficial precipitation to mitigate fire weather concerns. The cold air mass, however, brought widespread frost and freezing temperatures to the valleys west of the Cascades, resulting in the end of the growing season. Teens and single digit lows occurred east of the Cascades under this arctic air mass and low temperature records were set across the area. Temperatures quickly moderated and rebounded to well above normal values during the last few days of the month. High pressure returned over the area and brought another round of well above normal temperatures to the region.

The abnormally warm temperatures throughout the month resulted in the 4<sup>th</sup> warmest October on record for the Medford Airport. In addition, the minimal amount of precipitation recorded during the month, resulted in October 2020 being the 6<sup>th</sup> driest on record for the Medford Airport.



## October 2020 Observed Temperatures







## Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	55.4	2.0°	63.6	2.7°	47.2	1.2°
Roseburg	58.4	2.9°	71.6	5·3°	45.3	0.5°
Medford	60.5	4.5°	77-4	7.5°	43.5	1.5°
Klamath Falls	49.5	2.5°	70.1	7.2°	28.8	-2.2°
Montague, CA	56.2	4.4°	76.2	8.6°	36.2	0.2°
Mt. Shasta City, CA	56.2	5.0°	72.4	6.4°	40.1	3.6°
Alturas, CA	48.7	2.0°	72.1	6.9°	25.2	-3.1°



## Monthly Max & Min Temperatures

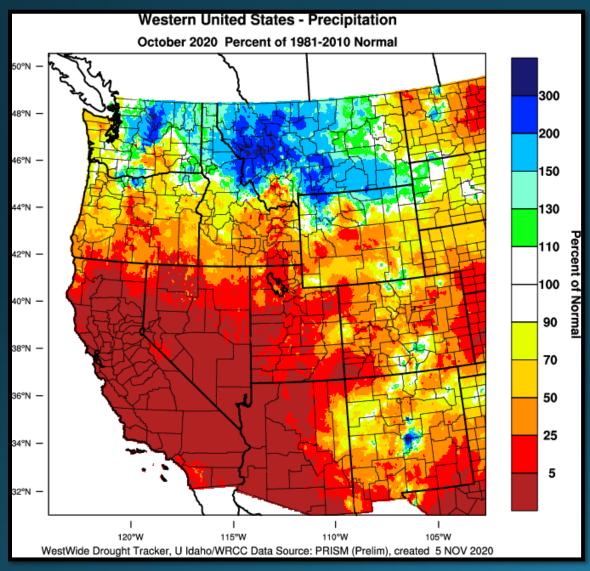
	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	69°	6 <sup>th</sup>	36°	26 <sup>th</sup>
Roseburg	93°	2 <sup>nd</sup>	27°	26 <sup>th</sup>
Medford	94°	<b>1</b> <sup>st</sup>	30°	26 <sup>th</sup>
Klamath Falls	87°	<b>1</b> <sup>st</sup>	13°	26 <sup>th</sup>
Montague, CA	92°	1 <sup>st</sup> & 2 <sup>nd</sup>	23°	26 <sup>th</sup>
Mt. Shasta City, CA	87°	<b>1</b> <sup>st</sup>	21°	26 <sup>th</sup>
Alturas, CA	91°	1 <sup>st</sup>	7°	26 <sup>th</sup>

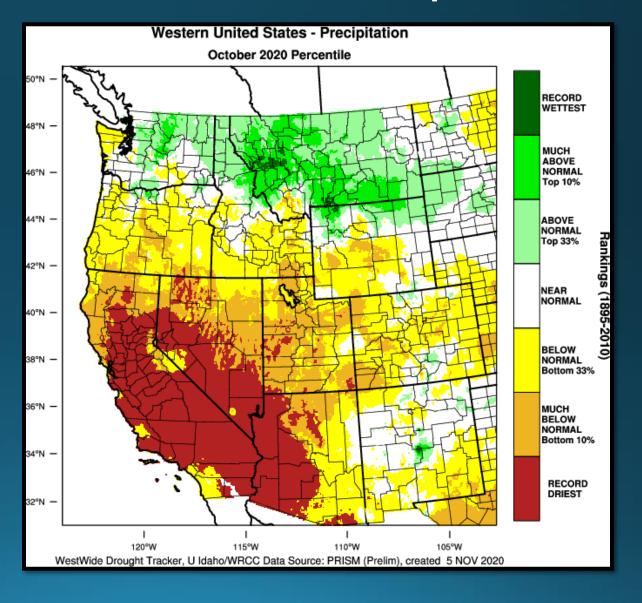
	Record High	Date	Old Record/Year
Alturas	91°	1 <sup>st</sup>	Ties with 2010
	89°	3 <sup>rd</sup>	Ties with 1980
Montague	92°	1 <sup>st</sup>	Ties with 2010
	92°	2 <sup>nd</sup>	Ties with 1952
Roseburg	93 <b>°</b>	2 <sup>nd</sup>	91°/1952
	92°	3 <sup>rd</sup>	91°/1958

	Record Low	Date	Old Record/Year
Alturas	7°	26 <sup>th</sup>	13°/2011
Klamath Falls	13°	26 <sup>th</sup>	20° / 2011
Montague	23°	26 <sup>th</sup>	Ties with 2011
Mt Shasta City	24°	25 <sup>th</sup>	25° / 1997
	21°	26 <sup>th</sup>	25°/2011
Roseburg	27°	26 <sup>th</sup>	28° / 1954



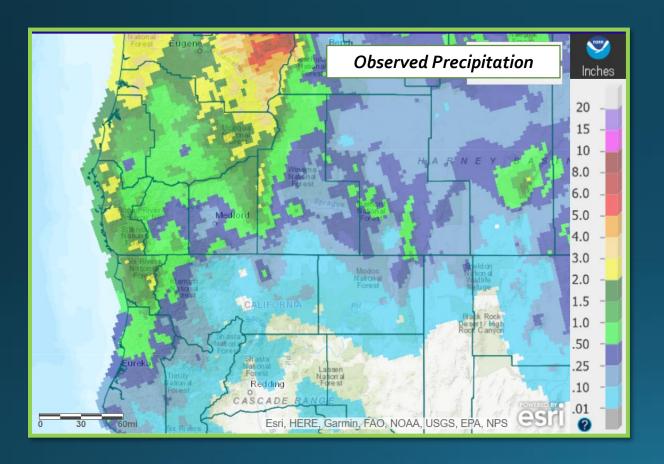
## October 2020 Observed Precipitation



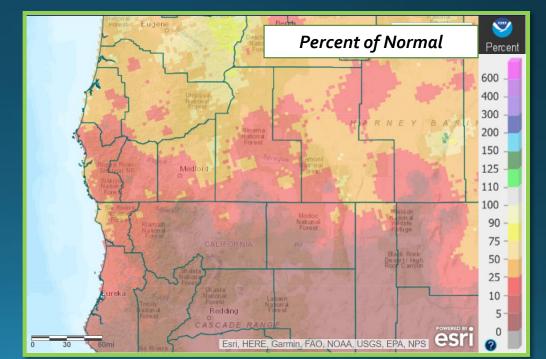




## Precipitation



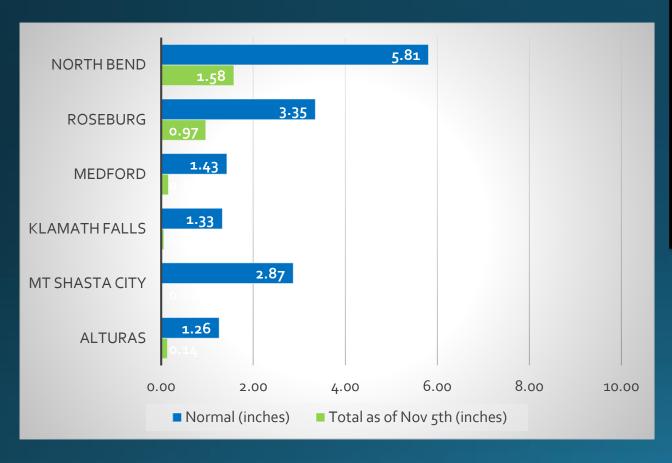
	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	1.57"	-3.16"	0.93"	10 <sup>th</sup>
Roseburg	0.97"	-1.70"	0.79"	10 <sup>th</sup>
Medford	0.16"	-0.97"	0.16"	10 <sup>th</sup>
Klamath Falls	0.06"	-0.99"	0.06"	10 <sup>th</sup>
Montague, CA	Trace	-1.20"	Trace	10 <sup>th</sup>
Mt. Shasta City, CA	0.01"	-2.27"	0.01"	10 <sup>th</sup>
Alturas, CA	0.14"	-0.87"	0.14"	10 <sup>th</sup>

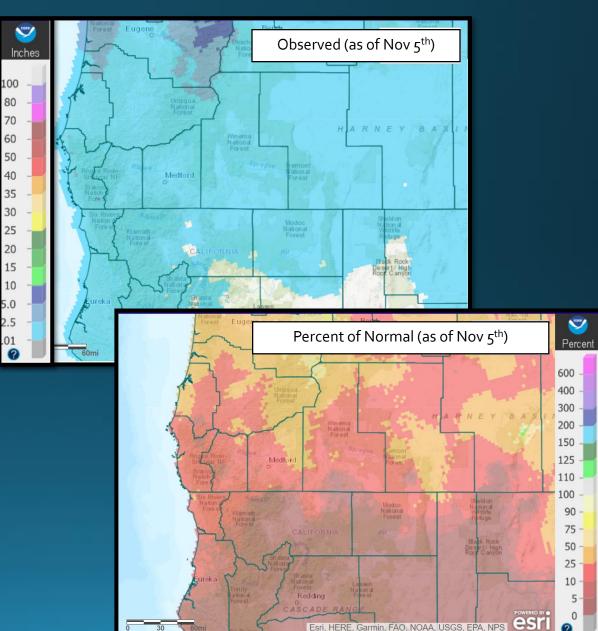




2020-2021 Water Year Status

(as of Nov 5<sup>th</sup>)

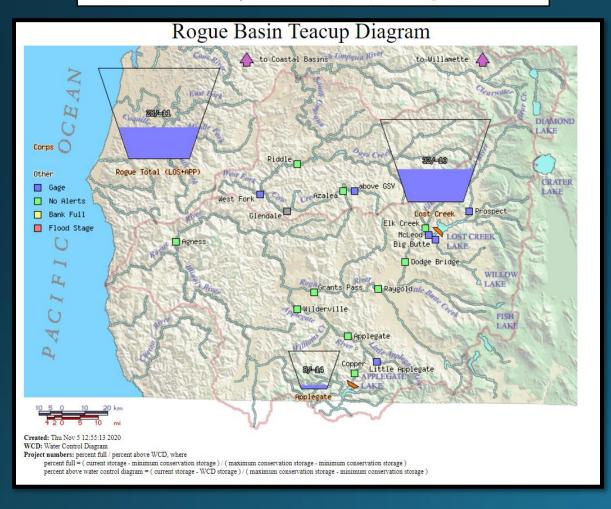




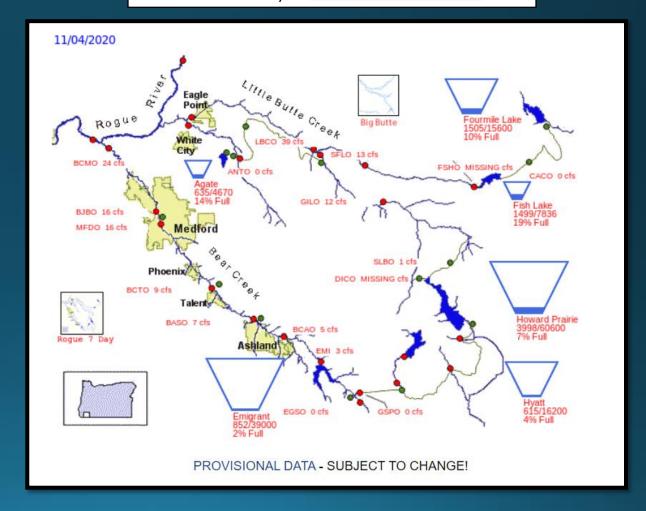


#### Reservoir Status

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



Data courtesy of **Bureau of Reclamation** 



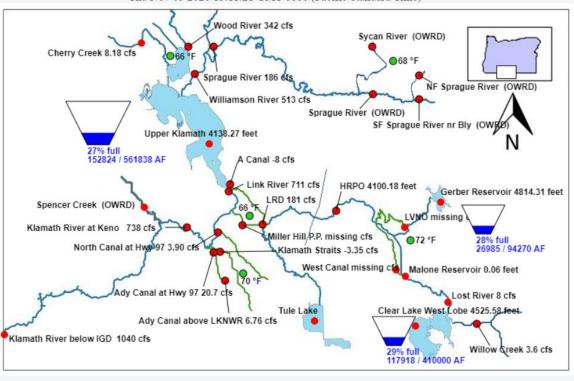


### Reservoir Status

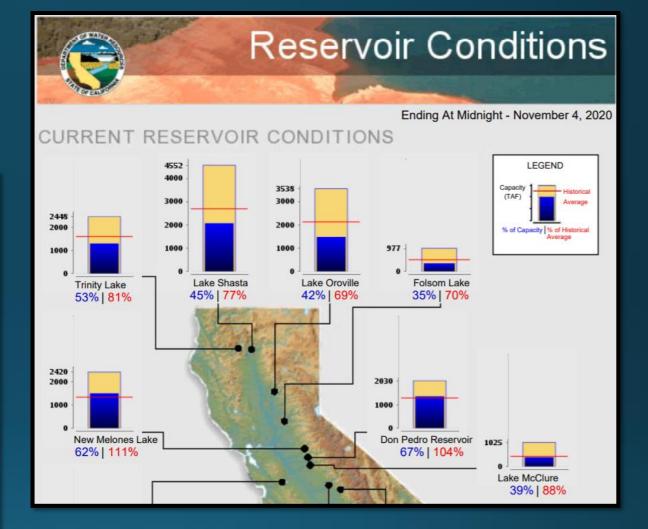
Klamath River Basin. Data courtesy of **Bureau of Reclamation** 

#### Bureau of Reclamation, Mid Pacific Region Major Storage Reservoirs in the Klamath River Basin

Thu Nov 05 2020 13:11:21 GMT-0800 (Pacific Standard Time)

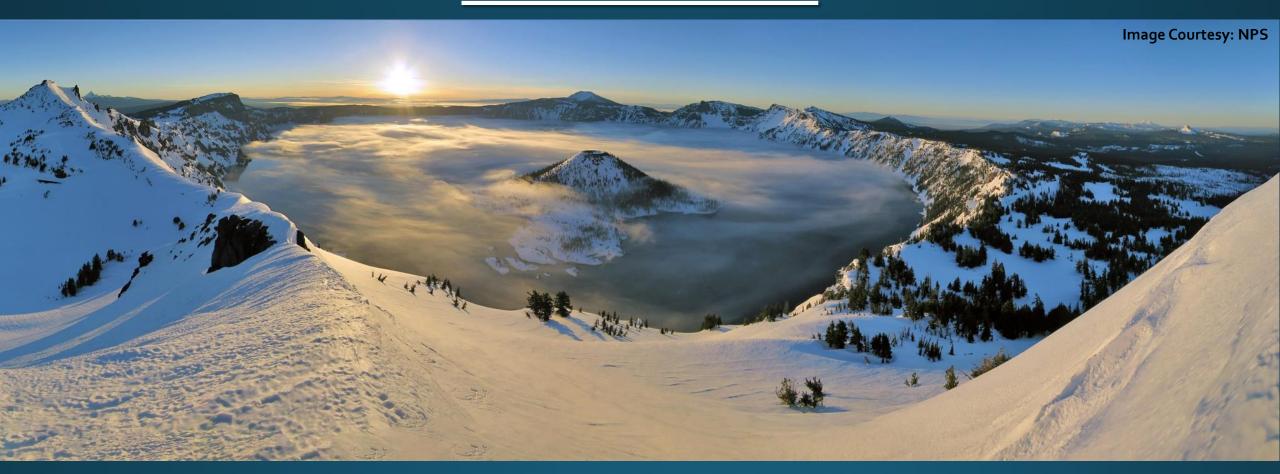


PROVISIONAL DATA - SUBJECT TO CHANGE!



Northern California. California Data Exchange Center

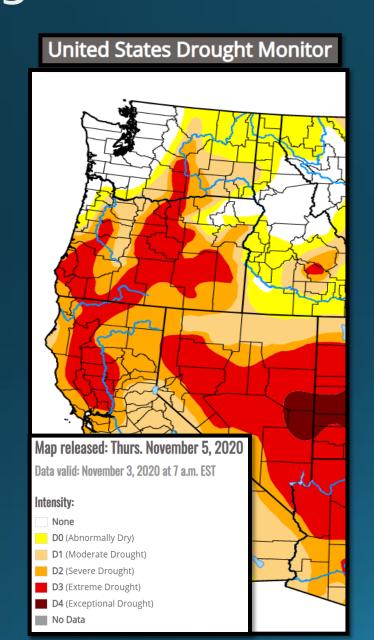
## Crater Lake

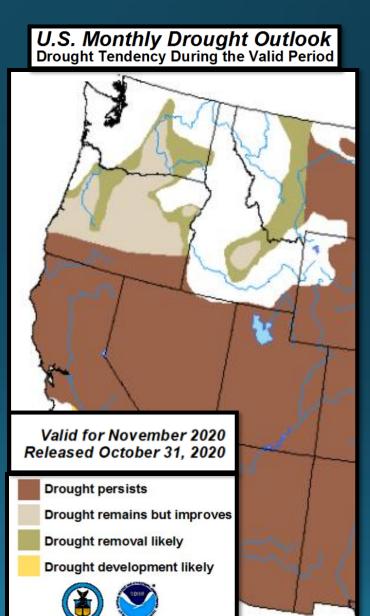




	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 10/31/20	Highest Max/ Lowest Min
October	58.0°	34.0°	3.10"	0.2"	o"	74° on 2 <sup>nd</sup> / 15° on 25 <sup>th</sup> – 27 <sup>th</sup>
Normal (1981-2010)	52.0°	30.0°	4.42"	18.3″	7"	N/A

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

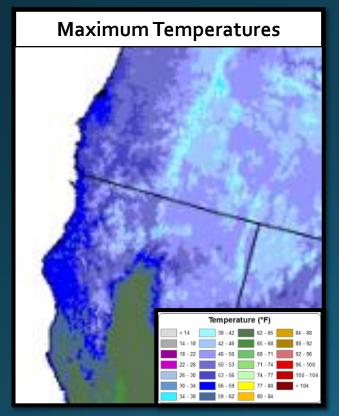


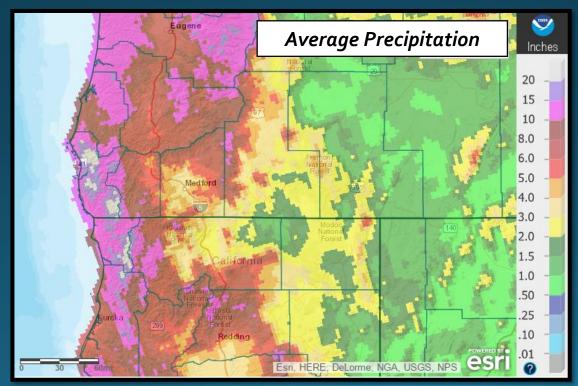


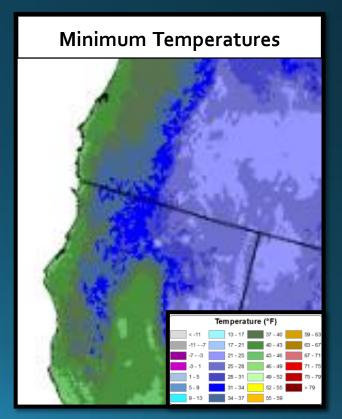


## Looking Ahead: Normals for November (1981-2010)

November is a key month for the wet season, resulting in, on average, the second greatest single month precipitation totals across the area. Typically, this is the month when snowpack starts to build in the mountains. The historical average snow depth (1931-2000) at Crater Lake NP Headquarters is 7 inches on the Nov 1<sup>st</sup> and grows to 29 inches by the 30<sup>th</sup>. More appreciable snowpack is typical above 7,000 feet in the Cascades. Daily high temperatures are typically in the 30s to lower 40s in the mountains, in the 40s for valleys east of the Cascades, and in the 50 to 60 degree range in the valleys west of the Cascades. Daily low temperatures are in the 20s east of the Cascades, in the 30s and 40s from the Cascades westward, and in the lower 50s along the immediate coast. Precipitation is usually an inch or more for most of the forecast area, with 8 inches or more for all mountainous areas from the Cascades westward. Valleys west of the Cascades generally get 2-8 inches of water, while the valleys east of the Cascades get 1-3 inches. The Cascades typically receive 8 inches or more of water, with 10 to 20+ inches in the Coastal Mountains.









# \*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
- <u>Medford</u>: 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
- <u>Alturas, CA</u>: 05/1935 Present