National Weather Service Medford

## 2021: May 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).



#### May 2021 Weather Review

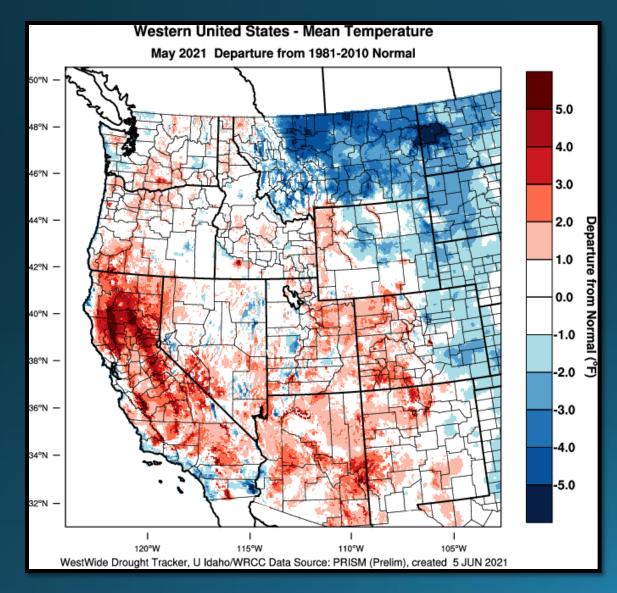
May 2021 was a typical spring month in terms of temperature swings under periods of ridging alternating with periods of troughs. The month started out under a trough that brought light rain to the area as well as a round of thunderstorms across Modoc and Lake counties on the  $1^{st}$  and  $2^{nd}$ . High pressure built over the area from the  $4^{th}$  through the  $6^{th}$  and the first 90-degree day of the year was recorded at the Medford Airport on the  $5^{th}$ . This was about two weeks early compared to the 1991-2020 normals. High pressure didn't last long though, as an upper level trough affected the region from the  $7^{th}$  through the  $10^{th}$ . There wasn't much precipitation associated with this trough, and what little there was, was mostly confined to coastal locations. It did, however, bring a period of below normal temperatures. A brief period of weak upper ridging followed this trough, and brought the return of above normal temperatures and dry conditions.

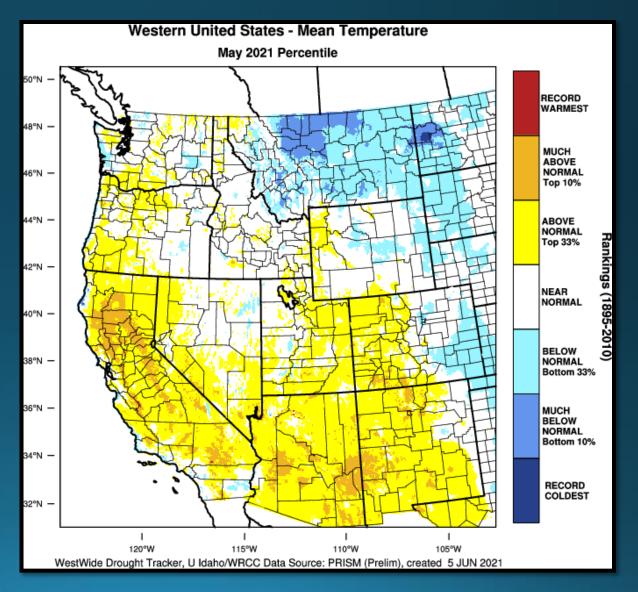
Another upper level trough settled over the region on the 15<sup>th</sup>, and this was the start of a longer duration of below normal temperatures. With the arrival of this trough, more thunderstorms occurred from the 15<sup>th</sup> through the 18<sup>th</sup> across the region, focused along western and central Siskiyou County northeastward across the Cascades/Siskiyous of Jackson and Klamath Counties as well as portions of Modoc County. Again, precipitation was rather limited with this trough. Outside of coastal locations and thunderstorms, many areas remained dry despite an upper trough overhead. Behind this trough, however, another deeper trough settled over the Pacific Northwest This continued the period below normal temperatures and also brought widespread precipitation across the region. This trough lingered through the 24<sup>th</sup> before a "kicker trough" swung through and finally pushed it east of the region by the 25<sup>th</sup>. As this kicker trough moved through, it triggered another round of thunderstorms across the East Side with a few isolated storms across Douglas County on the 25<sup>th</sup>.

The extended period of below normal temperatures came to an end late in the month as strong high pressure took hold of the region. High temperatures on the last day of the month averaged around 20 degrees above normal for late May. Despite the multiple periods of below normal temperatures during the month of May, much of the region ended up with above normal temperatures for the month. The lack of precipitation with many of these troughs resulted in below normal precipitation values for the month. This combined with the previously drier than normal spring months worsened drought conditions across the region.



## May 2021 Observed Temperatures







## Average Temperatures

|                     | Average<br>(°F) | Departure<br>from<br>Normal | Average Max<br>(°F) | Departure<br>from<br>Normal | Average Min<br>(°F) | Departure<br>from<br>Normal |
|---------------------|-----------------|-----------------------------|---------------------|-----------------------------|---------------------|-----------------------------|
| North Bend          | 53.1            | -1.1°                       | 59.8                | -0.7°                       | 46.4                | -1.6°                       |
| Roseburg            | 60.5            | 1.00                        | 73.8                | 2.8°                        | 47.2                | -0.7°                       |
| Medford             | 62.7            | 2.3°                        | 77.5                | 3.6°                        | 48.o                | 1.1°                        |
| Klamath Falls       | 52.5            | o.8°                        | 70.3                | 3.1°                        | 34.6                | -1.6°                       |
| Montague, CA        | 59.0            | 1.8°                        | 78.1                | 4.4°                        | 40.0                | -0.7°                       |
| Mt. Shasta City, CA | 58.2            | 3.3°                        | 73.8                | 5.1°                        | 42.6                | 1.6°                        |
| Alturas, CA         | 53.4            | 0.9°                        | 71.6                | 3.7°                        | 35.2                | -2.0°                       |

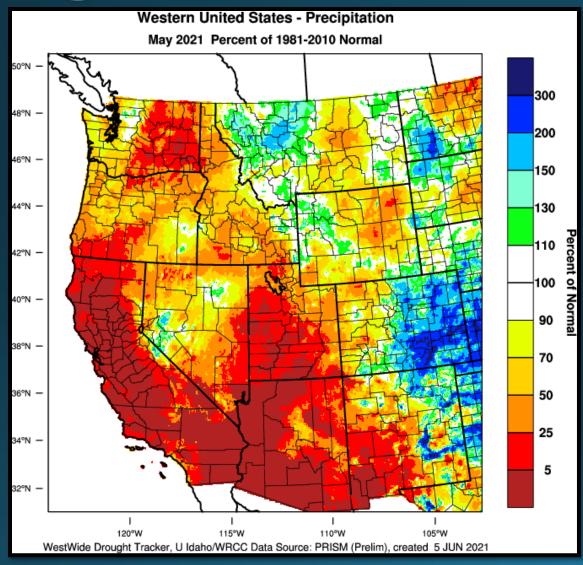


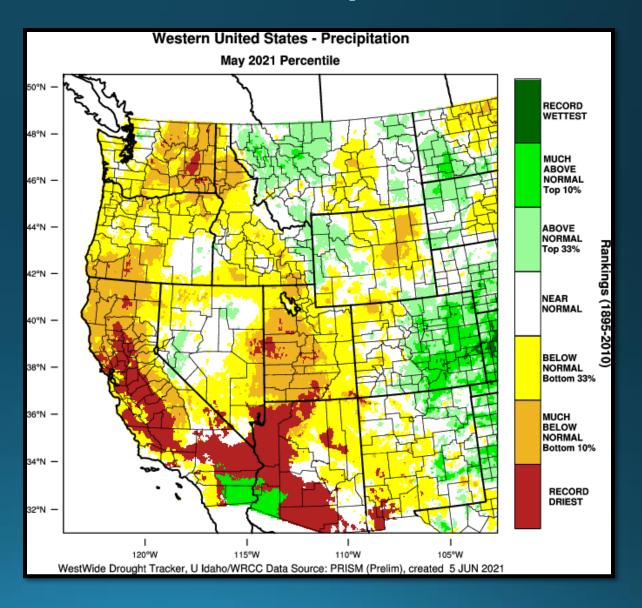
## Monthly Max & Min Temperatures

|                     | Max (°F)    | Date(s)                 | Min (°F)    | Date(s)          |
|---------------------|-------------|-------------------------|-------------|------------------|
| North Bend          | 69°         | 31 <sup>st</sup>        | <i>39</i> ° | 8 <sup>th</sup>  |
| Roseburg            | 92°         | 31 <sup>st</sup>        | 38°         | 8 <sup>th</sup>  |
| Medford             | 96°         | 31 <sup>st</sup>        | 38°         | 8 <sup>th</sup>  |
| Klamath Falls       | 88°         | 31 <sup>st</sup>        | 23°         | 8 <sup>th</sup>  |
| Montague, CA        | <i>97</i> ° | 31 <sup>st</sup>        | 30°         | 8 <sup>th</sup>  |
| Mt. Shasta City, CA | 91°         | <b>31</b> <sup>st</sup> | <i>33</i> ° | 20 <sup>th</sup> |
| Alturas, CA         | 89°         | 31 <sup>st</sup>        | 26°         | 8 <sup>th</sup>  |



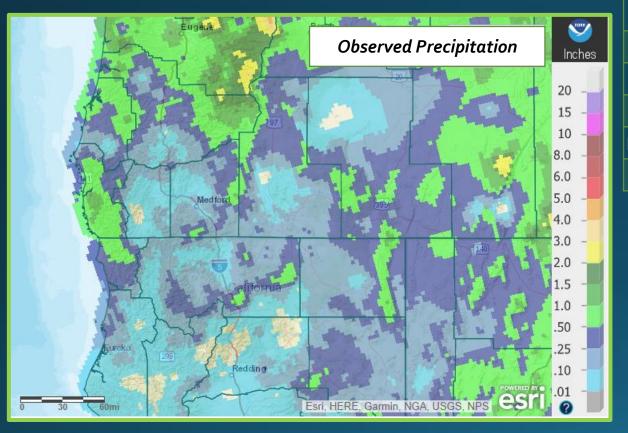
## May 2021 Observed Precipitation



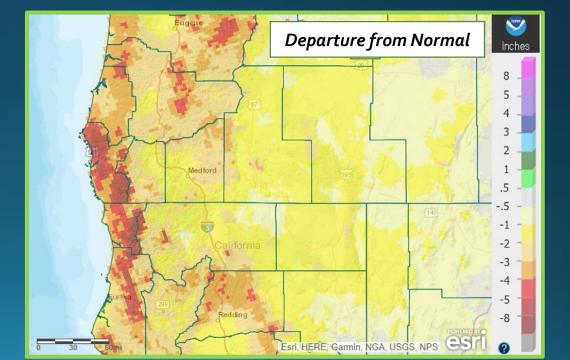




### Precipitation

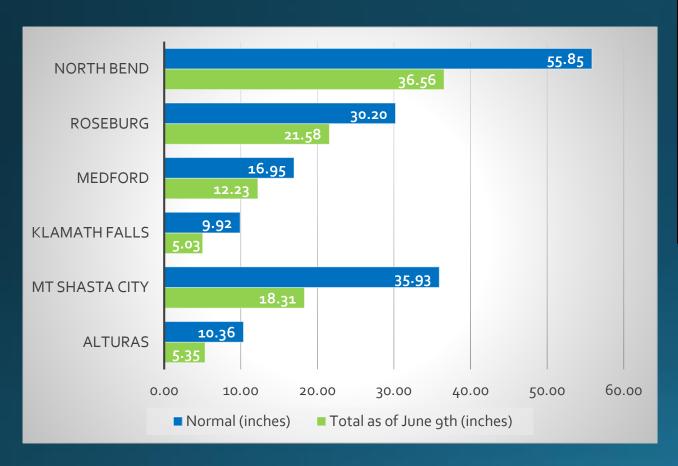


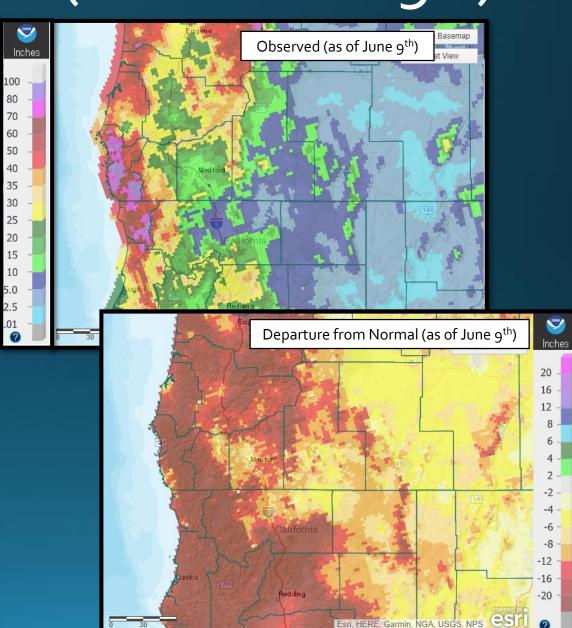
|                     | Total | Departure<br>from Normal | Greatest<br>24-hr Total | Date(s)                                      |
|---------------------|-------|--------------------------|-------------------------|--|
| North Bend          | 0.63" | -2.32"                   | 0.31"                   | April 30 <sup>th</sup> – May 1 <sup>st</sup> |
| Roseburg            | 0.75" | -1.34"                   | 0.48"                   | April 30 <sup>th</sup> – May 1 <sup>st</sup> |
| Medford             | 0.13" | -1.21"                   | 0.07"                   | 20 <sup>th</sup>                             |
| Klamath Falls       | 0.10" | -0.94"                   | 0.07"                   | <b>21</b> <sup>st</sup>                      |
| Montague, CA        | 0.03" | -1.02"                   | 0.02"                   | 14 <sup>th</sup> – 15 <sup>th</sup>          |
| Mt. Shasta City, CA | 0.65" | -1.45"                   | 0.48"                   | 14 <sup>th</sup>                             |
| Alturas, CA         | 0.20" | -1.06"                   | 0.10"                   | 20 <sup>th</sup>                             |





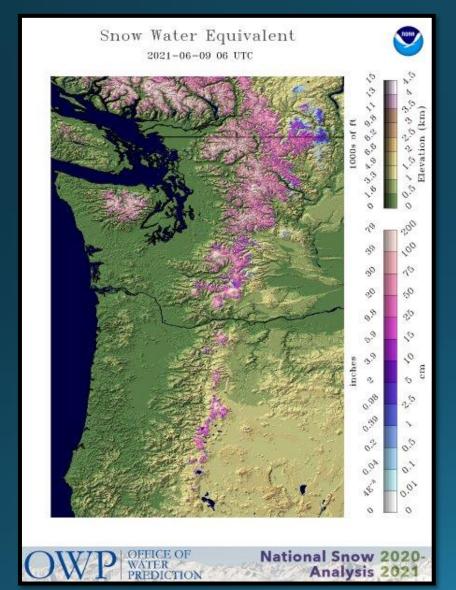
### Water Year Status (As of June 9<sup>th</sup>)

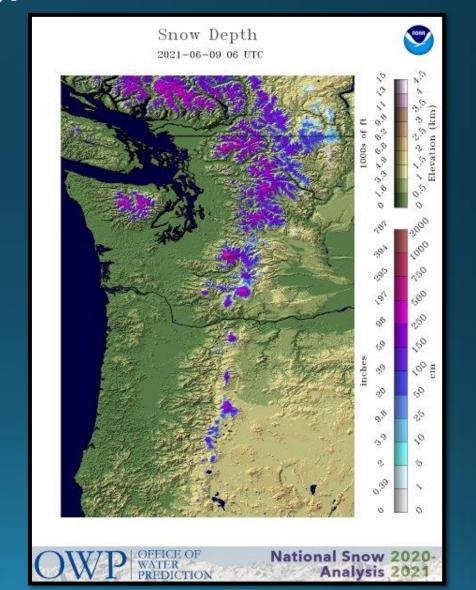






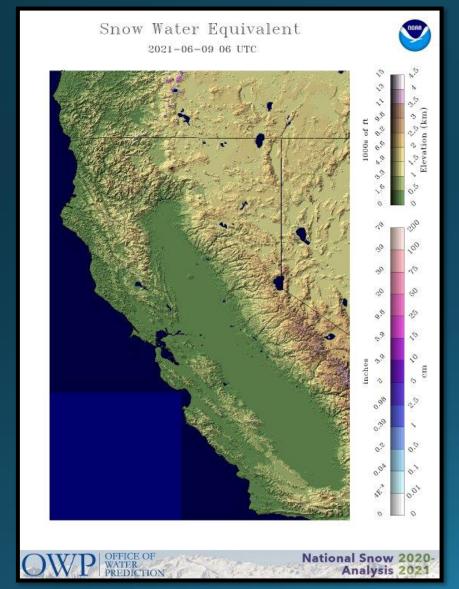
## PacNW SWE & Snow Depth as of 6/9/21

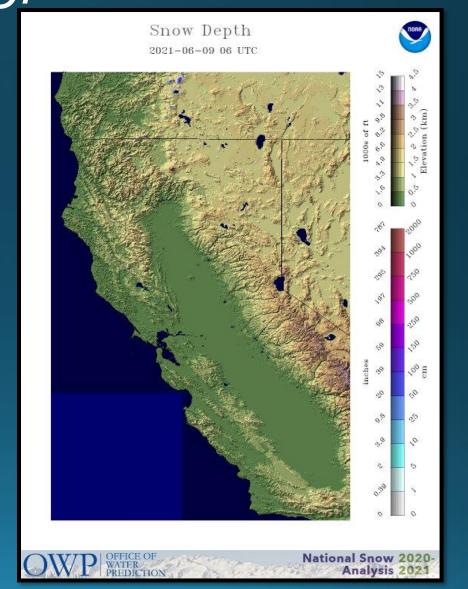






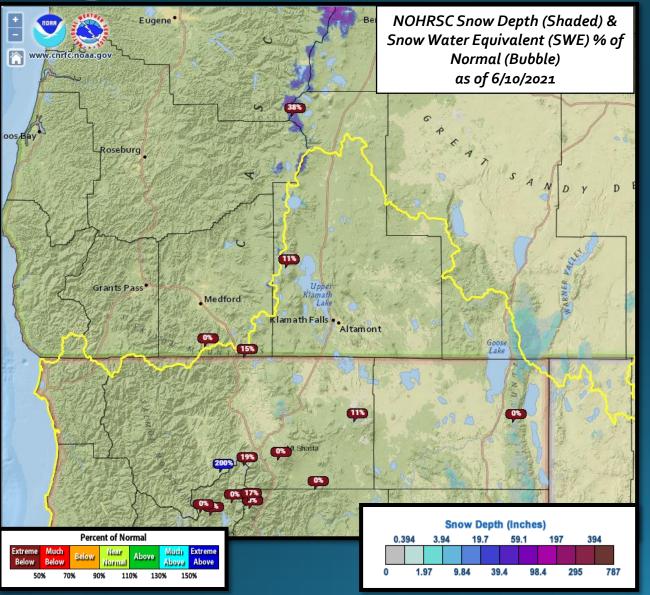
# California SWE & Snow Depth as of 6/9/21

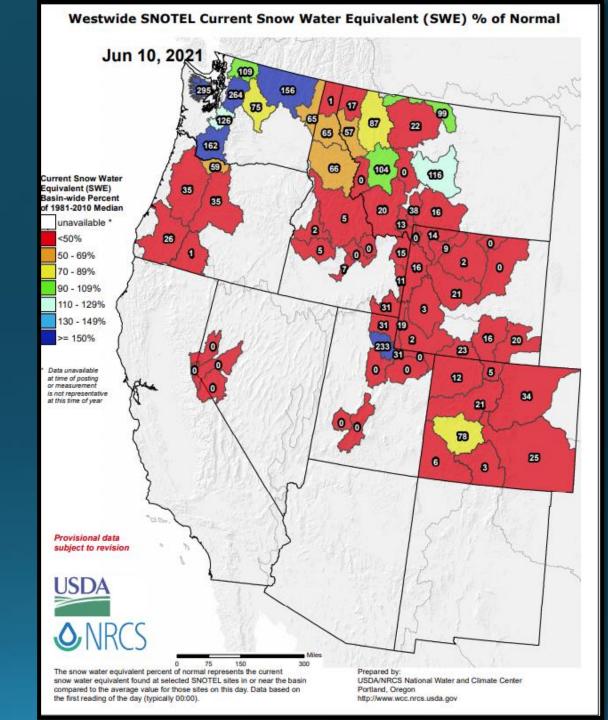






#### Snowpack Status



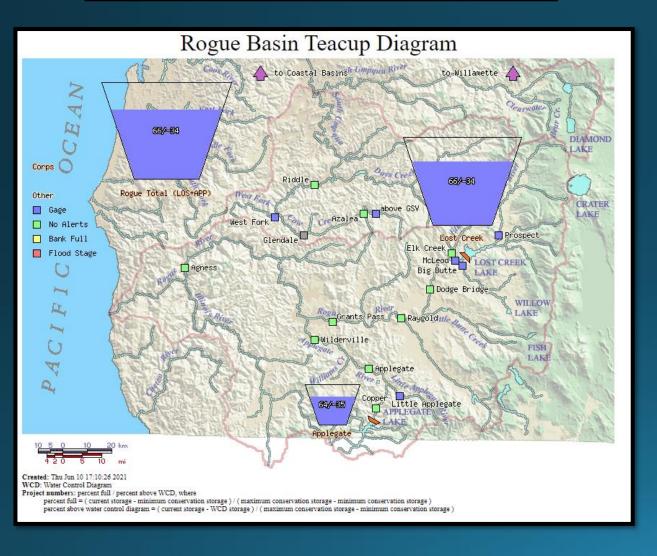




#### Reservoir Status

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

Data courtesy of **Bureau of Reclamation** 

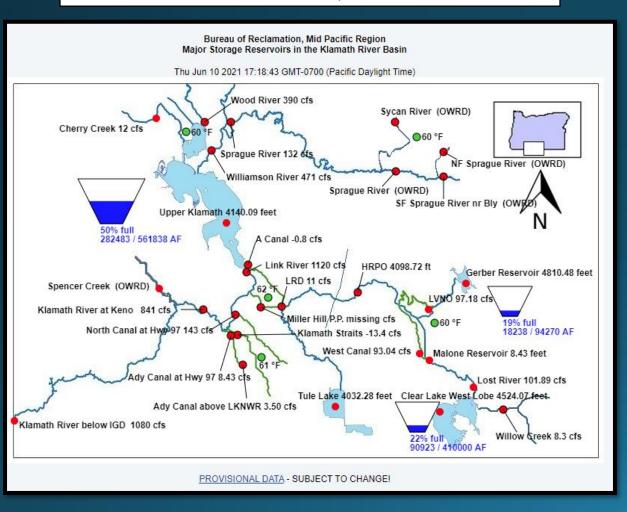


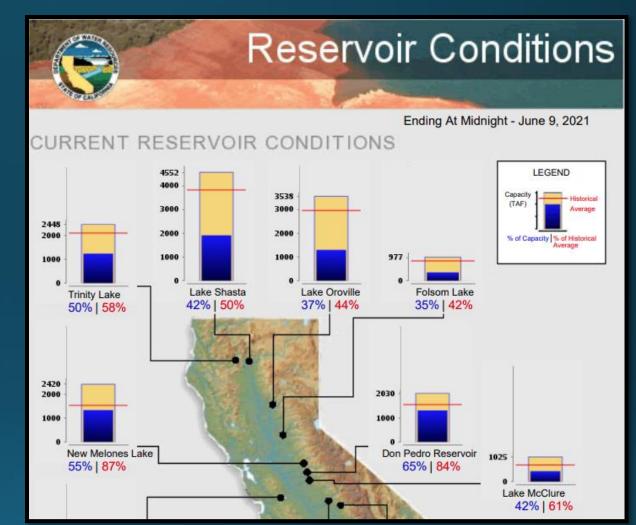
US Bureau of Reclamation, Pacific Northwest Region Bear Creek and Little Butte Creek Basins 06/09/2021 GILO 21 cfs MFDO 46 cfs SLBO 1 cfs Phoenix DICO 0 cfs BASO 45 cfs PROVISIONAL DATA - SUBJECT TO CHANGE!



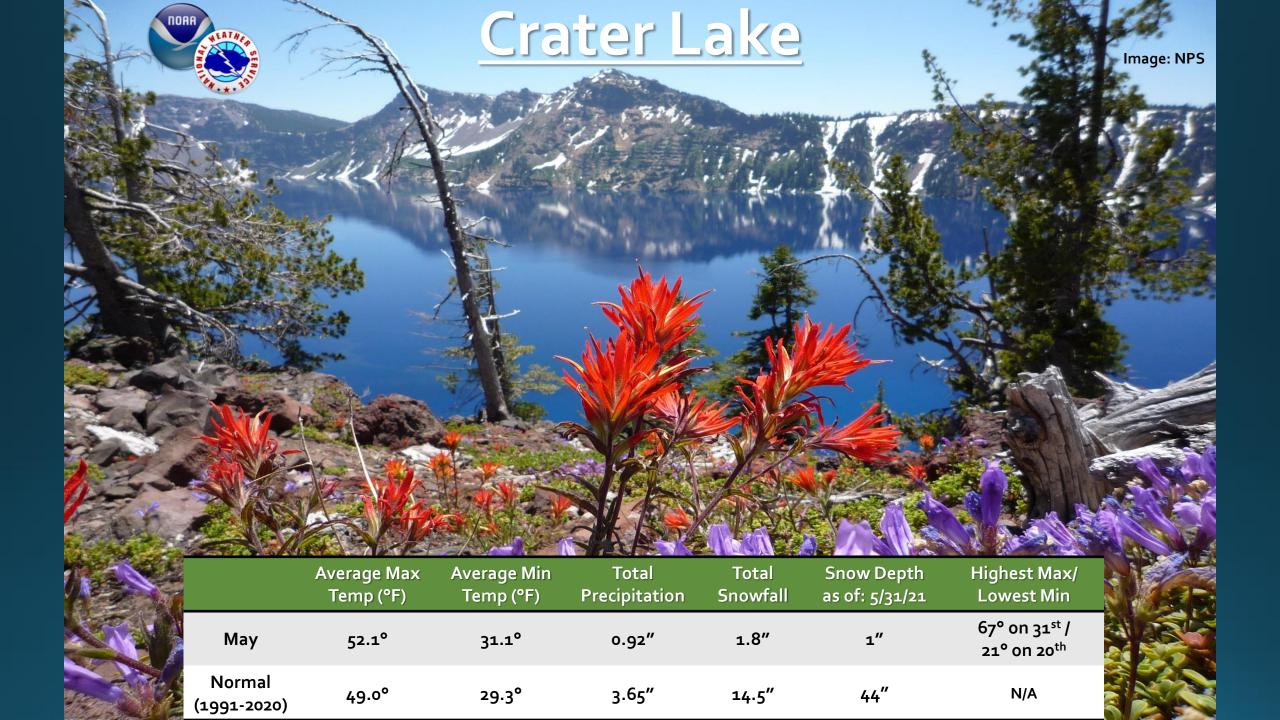
#### Reservoir Status

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

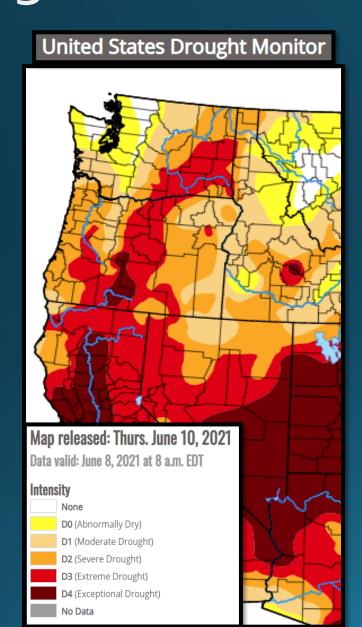


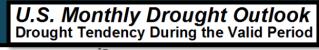


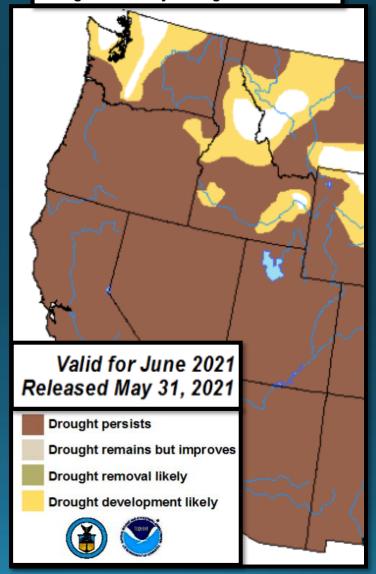
Northern California. California Data Exchange Center



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









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

#### **Temperatures:**

Along the coast lows are around 50 with highs in the 60s. Inland, valley high temperatures are usually in the 70s to mid 80s. Nights are typically cool, with average minimum temperatures in the 30s and 40s in the valleys east of the Cascades, and in the 40s to near 50 in the valleys west of the Cascades. The higher mountains typically experience highs in the 50s and 60s, with lows in the 30s to lower 40s.

#### <u>Precipitation:</u>

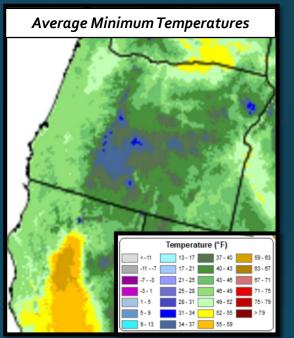
June is a dry season month, so it typically features limited precipitation. Precipitation often comes in the form of showers and thunderstorms, but a frontal systems do still occur, though much less frequently than in the wetter months of the year. Nearly half of the forecast area receives, on average, and inch or less of precipitation in June. The mountains get 1 to 3 inches of water in June, except in portions of the Cascades and Coast Range, where 3 to as much as 6 inches occurs, on average. West of the Coast Range and in eastern Douglas County normal precipitation is 2 to 4 inches.

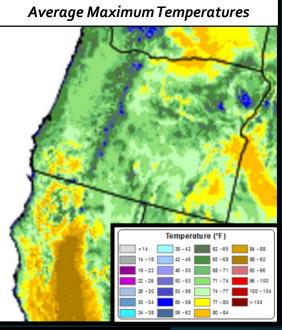
#### Snow:

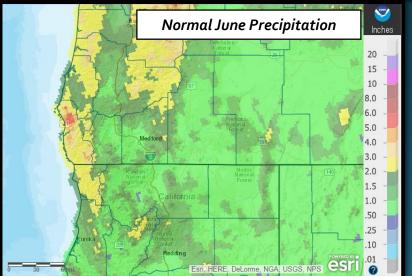
Crater Lake NP HQ's average June snowfall is 4.1 inches, per the 1981-2010 normal period. Average snow depth there for the 1931-2000 time period is 51 inches on June  $1^{st}$ , and 6 inches on June  $30^{th}$ .

#### Lightning, 2003-2017 Average:

The average number of cloud to ground lightning strikes in the Medford County Warning Area during the month of June from 2003 to 2017 was 3,080. For comparison, the average for May is 2,466 and 4,196 for July.









## \*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