National Weather Service Medford

April 2018 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).

April 2018 Weather Review

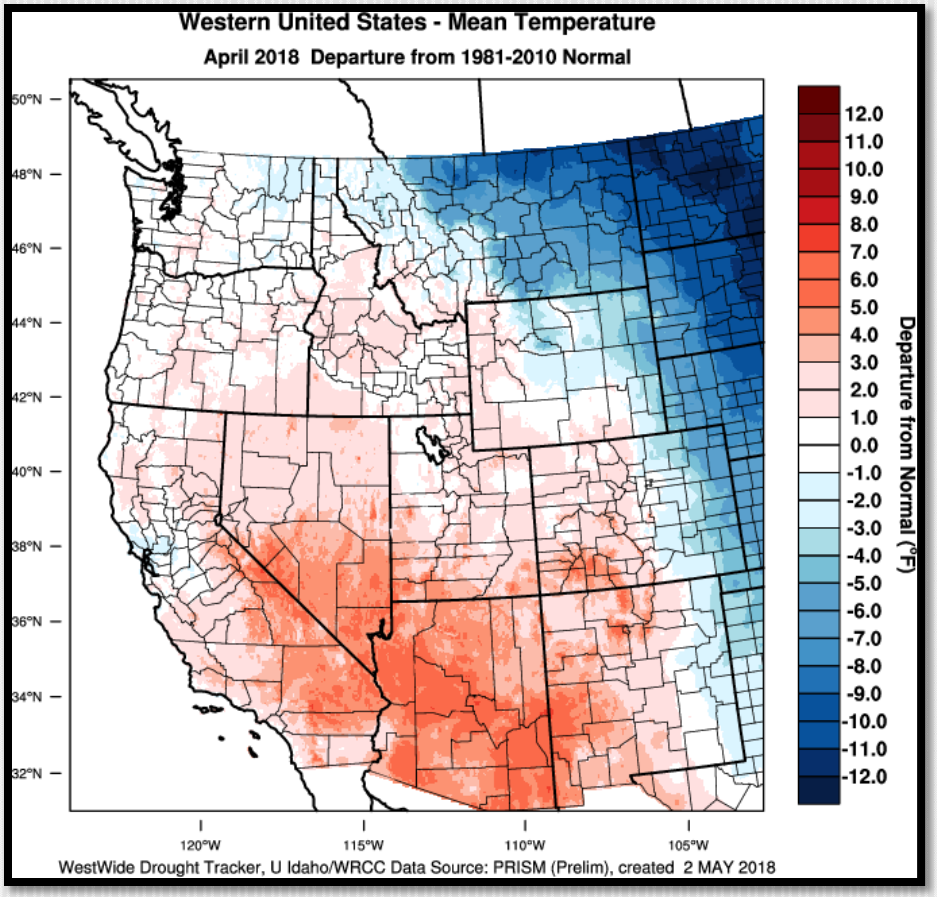
Overall, April 2018 was the typical spring month with swings between cool and wet vs warm and dry weather. The area ended up with slightly warmer than normal average temperatures, and generally above normal in terms of precipitation.

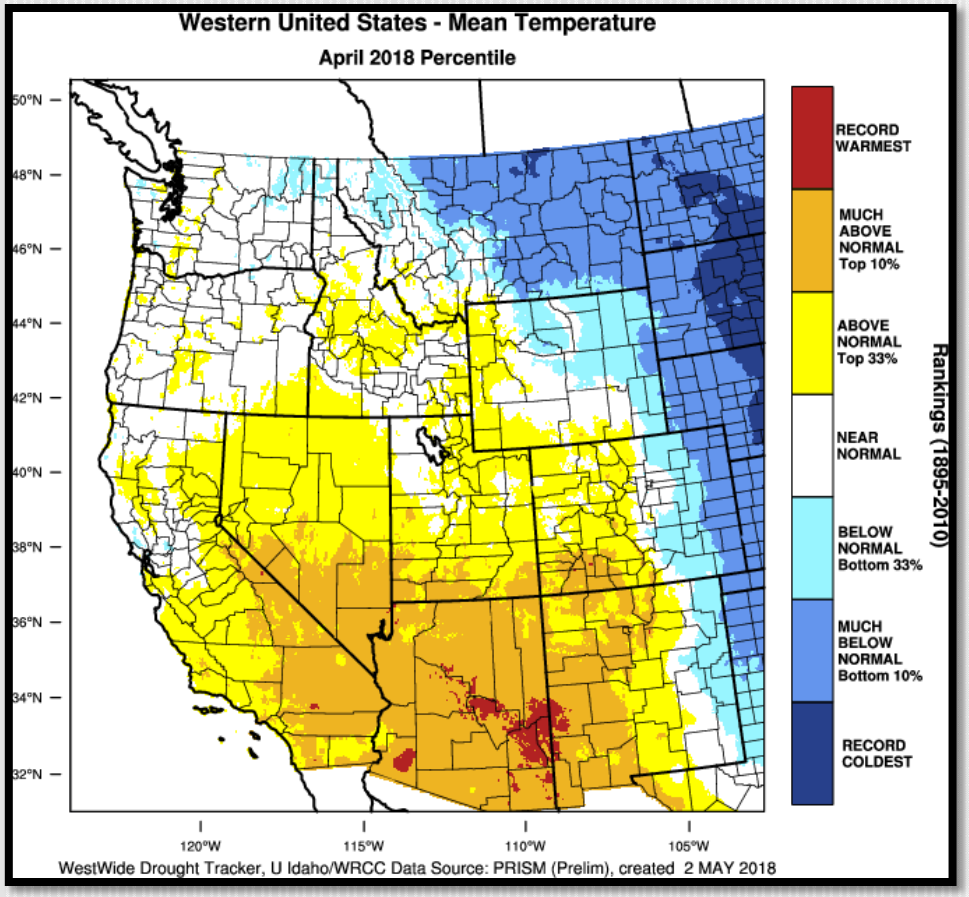
Warm temperatures that were with us at the end of March, dropped by about 10 to 15 degrees during the first week of April. A cold front moved through and this marked the transition from warm and dry conditions to cooler and wetter weather. A few late season systems moved through the area, bringing much needed precipitation, mountain snowfall, and windy conditions. Rainfall amounts with these systems were impressive by April standards, resembling amounts seen with weak atmospheric rivers during the winter. Rainfall records were set east of the Cascades and in northern California.

There was a relative break in the weather before another system moved through the area during the middle of the month. Conditions remained unsettled until around the 21st, with multiple rounds of mountain snow, valley rain, and breezy conditions. Thanks to the late season systems, Mt. Ashland and other local winter recreation activities were able to carry on beyond their normal closing dates.

After the 21st, a strong ridge built in over the area, and temperatures soared to above normal values. High temperatures from the 22nd through the 26th resembled more summer like temperatures that would normally be experienced during July and into August. Numerous records were set across the area during this hot streak. Low pressure settled over the area and ended the hot temperature streak during the last week of the month. This system brought multiple days of showers to finish the month. These showers delivered relatively hefty amounts, and three-day storm totals for some locations were among the top ten wettest three days (April 28th – 30th). This helped to push monthly precipitation totals to above normal for most locations.

April 2018 *Observed Temperatures*



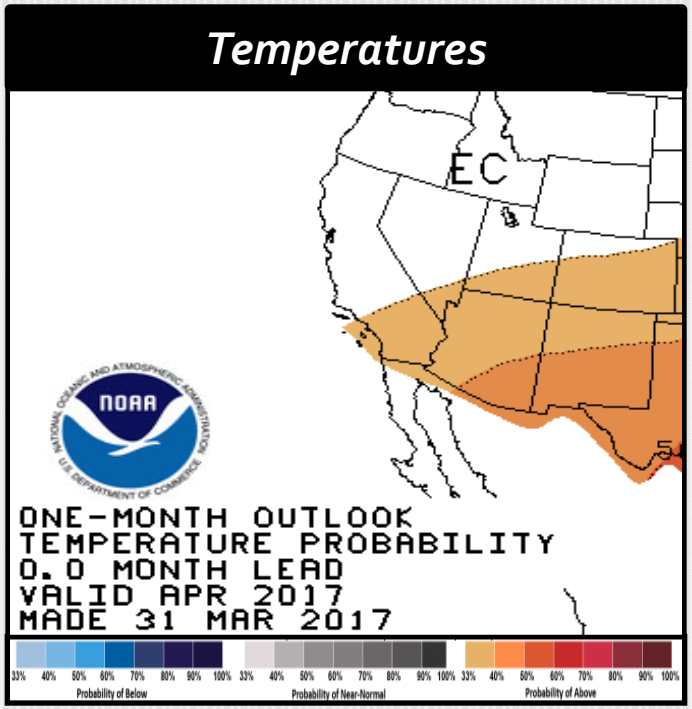


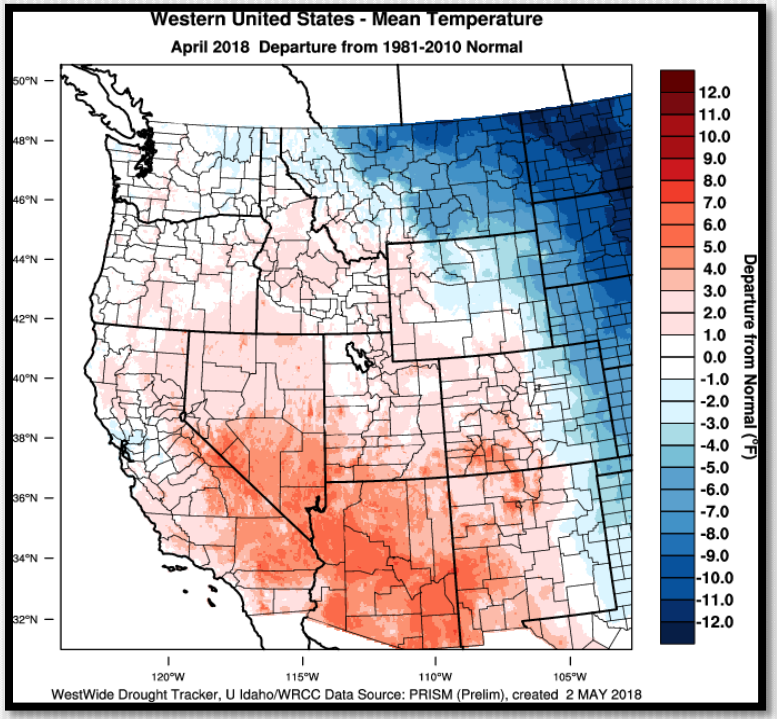
Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	50.3	***+1.1°***	56.9	***+1.6°***	43.7	***+0.6°***
Roseburg	53.8	***+1.6°***	64.3	***+1.9°***	43.3	***+1.3°***
Medford	53.2	***+0.4°***	64.8	***-0.1°***	41.5	***+0.7°***
Klamath Falls	44.6	***+1.5°***	57.7	***+1.2°***	31.5	***+1.8°***
Montague, CA	49.4	***+2.3°***	63.2	***+2.3°***	35.6	***+2.4°***
Mt. Shasta City, CA	48.2	***+1.0°***	61.0	***+0.1°***	35.3	***+1.9°***
Alturas, CA	44.9	***+1.7°***	59.2	***+1.4°***	30.5	***+1.8°***

A Look Back at the April 2018 Temperature Outlook

- ***Was the forecast anomaly correct?*** Generally, yes. CPC's forecast was correct in indicating temperatures were most likely to be near normal across the forecast area. The localized outlook indicated temperature anomalies were most likely to be within 2 degrees of the 1981-2010 averages, which was more precise. The only place it was slightly warmer was along portions of the Warner Mountains.
- ***Was the expected impact correct?*** Yes. Snowpack melt off slowed during April since temperatures were, on average, around normal and precipitation was mostly near to above normal.
- ***Did our forecast improve upon the CPC forecast?*** Yes. Rather than forecasting "Equal Chances", we indicated "that temperatures for all of April are most likely to be within 2 degrees of the 1981-2010 averages". We also were able to accurately key in on a cooler period with some frost/freeze potential the 12th-19th followed by above normal temperatures. An upper level low pressure system the last 3-4 days of April brought a cooler and wetter period. This was indicated in the outlook as an area of uncertainty/lower confidence because the GEFS was indicating such low pressure.





Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	74°	23rd	35°	3rd
Roseburg	90°	25th	32°	3rd
Medford	89°	25th	30°	3rd
Klamath Falls	82°	26th	18°	3rd
Montague, CA	86°	26th	20°	3rd
Mt. Shasta City, CA	81°	25th & 26th	24°	3rd
Alturas, CA	81°	26th	14°	3rd

Records

RECORD DAILY PRECIPITATION

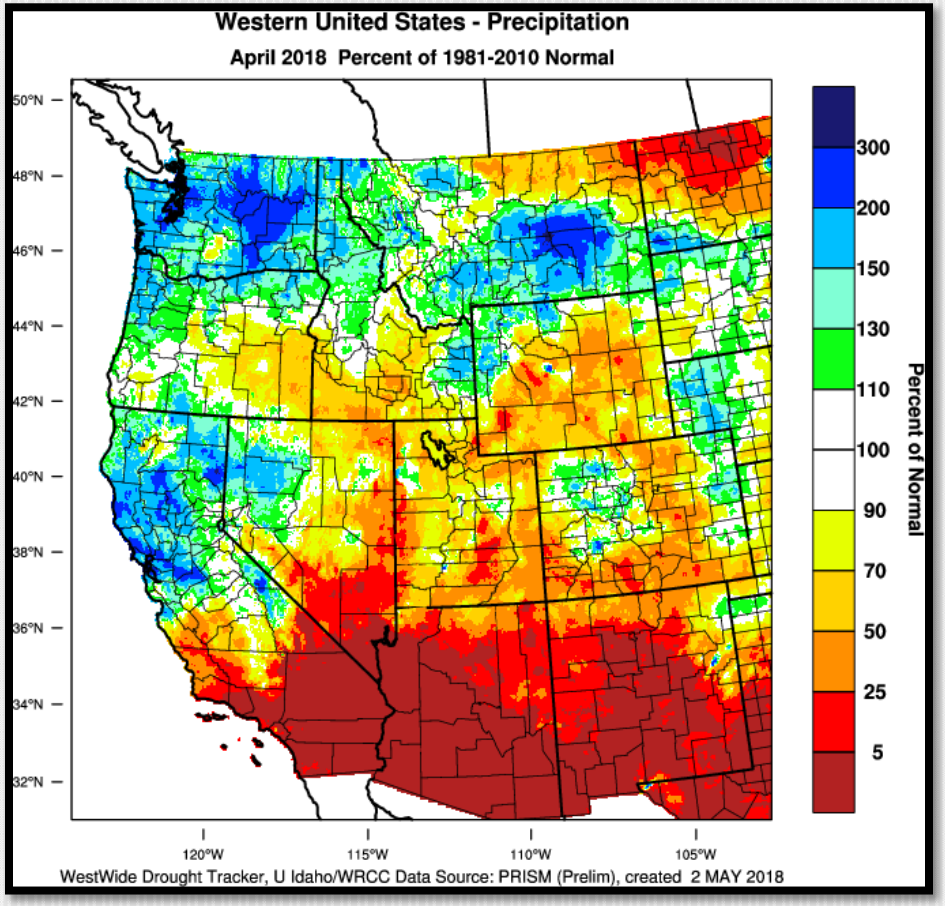
	New Record	Date	Old Record	Year
North Bend	1.83"	15th	1.58"	2006
	0.75"	29th	0.72"	1992
Roseburg	0.46"	28th	0.41"	1995
Klamath Falls	0.39"	5th	0.16"	1954
Montague, CA	0.50"	6th	0.45"	1978
Alturas	1.00"	6th	0.53"	1954

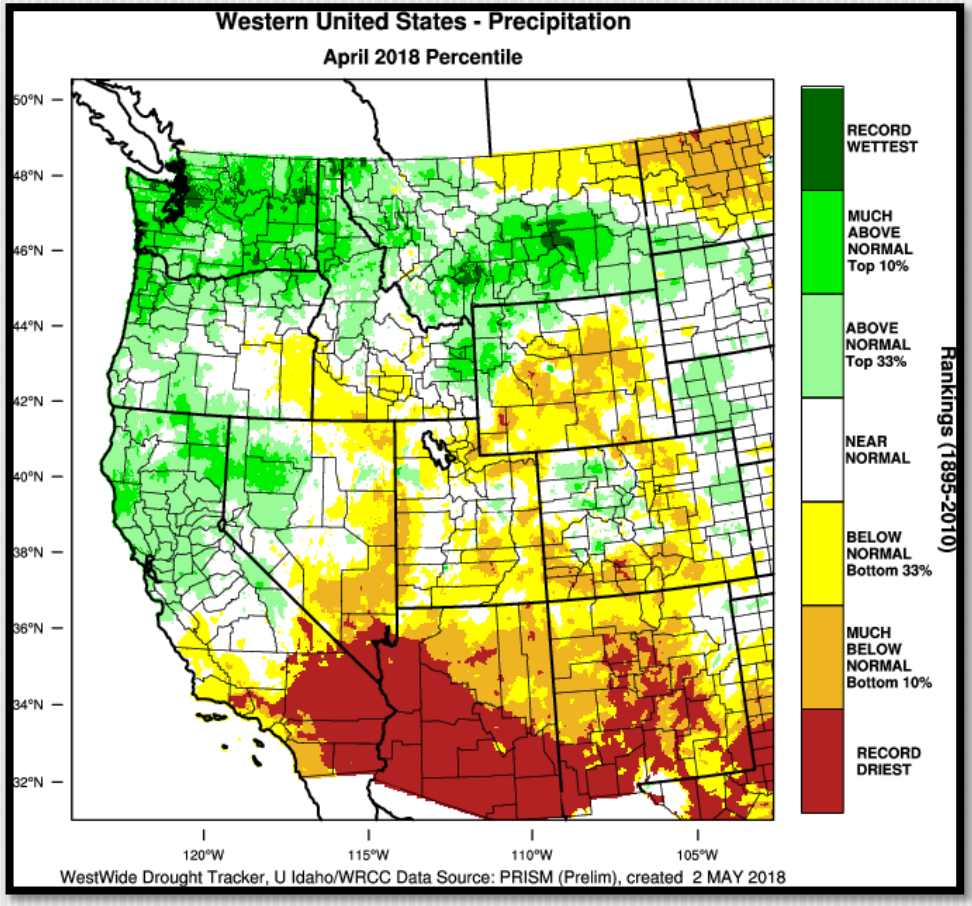
Record Temperatures

	Record Low Temperature / Date	Old Record/Year
Montague, CA	20° / 3rd	22° / 2008
Alturas, CA	14° / 3rd	15° / 2015

	Record High Temperature / Date	Old Record/Year
North Bend	74° / 23rd	Ties with 1992
Roseburg	88° / 24th	82° /1999
	90° / 25th	84° / 2001
Klamath Falls	80° / 25th	77° / 2001
Montague, CA	85° / 25th	83° /2001

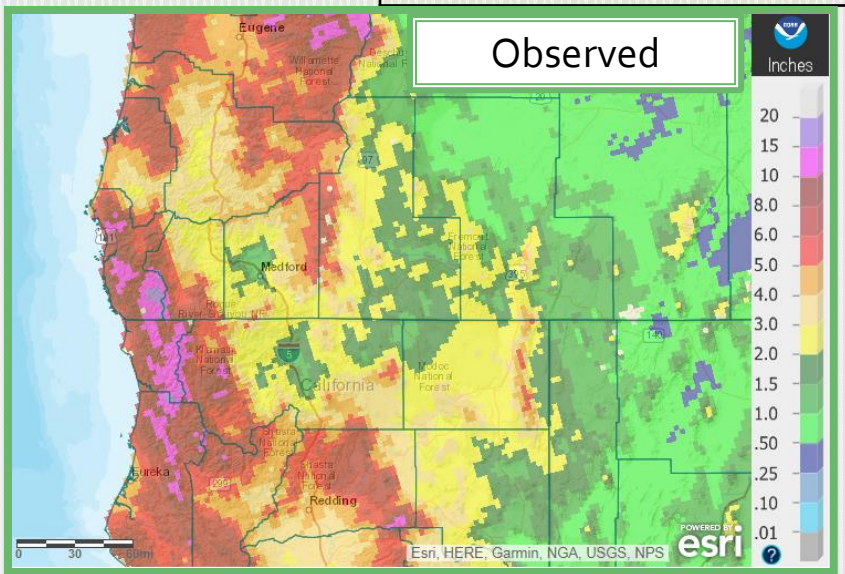
April 2018 *Observed Precipitation*

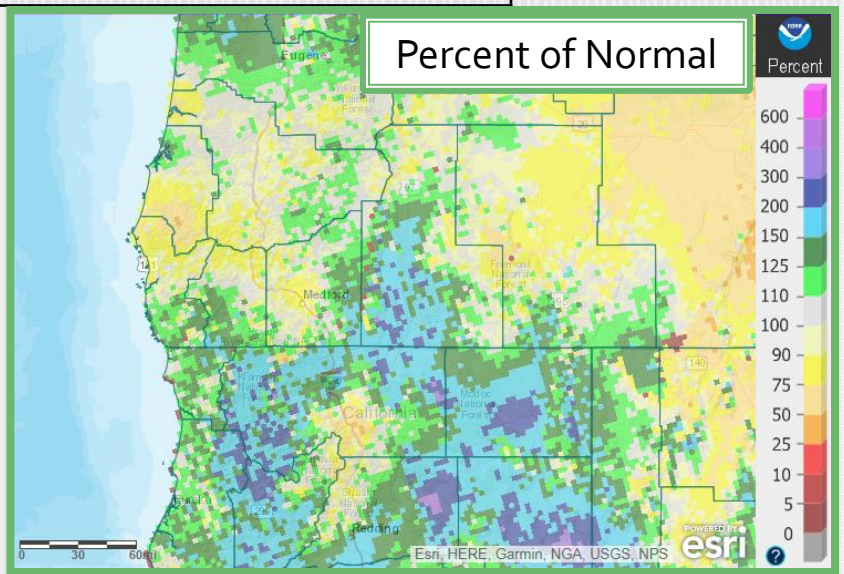




April Precipitation

	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	6.46"	**1.29"**	1.83"	15th
Roseburg	2.62"	**-0.20"**	0.48"	7th
Medford	1.07"	**-0.31"**	0.31"	5th
Klamath Falls	1.69"	**0.32"**	0.42"	6th
Montague, CA	1.73"	**0.17"**	0.50"	6th
Mt. Shasta City, CA	2.35"	**-0.58"**	0.78"	6th
Alturas, CA	2.88"	**1.32"**	1.00"	6th



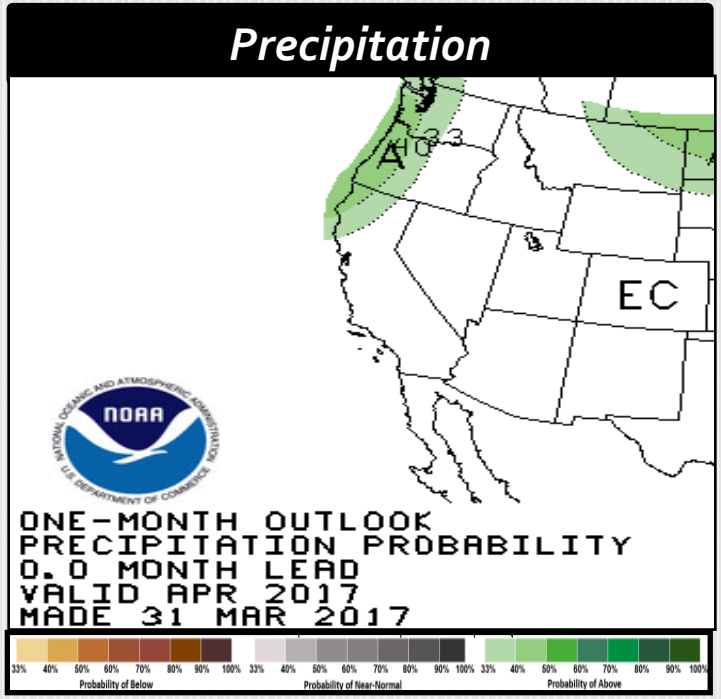


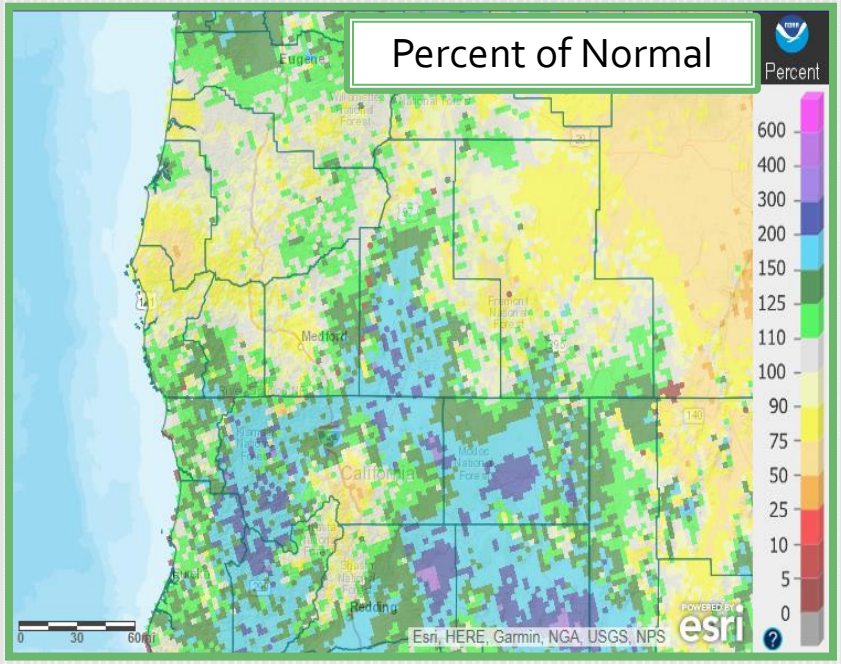
A Look Back at the April 2018 Precipitation Outlook

- ***Was the forecast anomaly correct?*** Generally, yes. CPC's forecast indicated increased chances for above average precipitation across the forecast area, focused from the Cascades westward. While most of the forecast area got above average precipitation, the distribution was such that it was mainly in the southern portion of the forecast area. Also, there were some below normal areas.

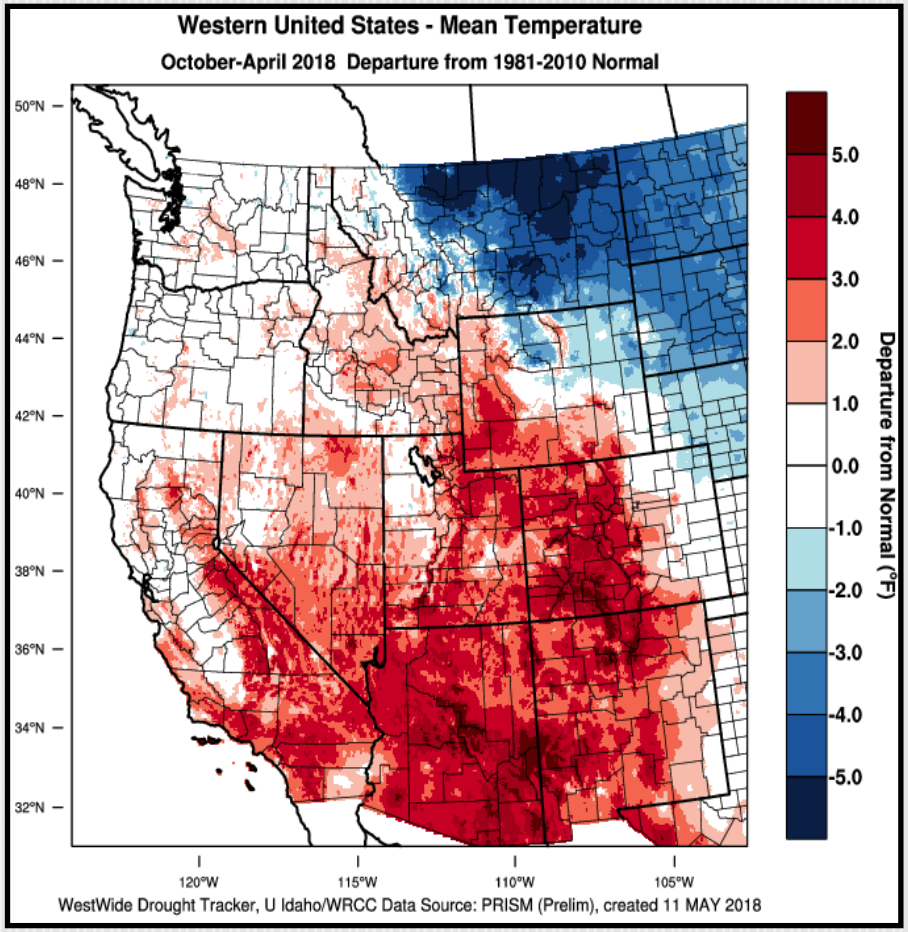
- ***Was the expected impact correct?*** Yes, the general improvement to water storage and snow pack was accurately predicted.

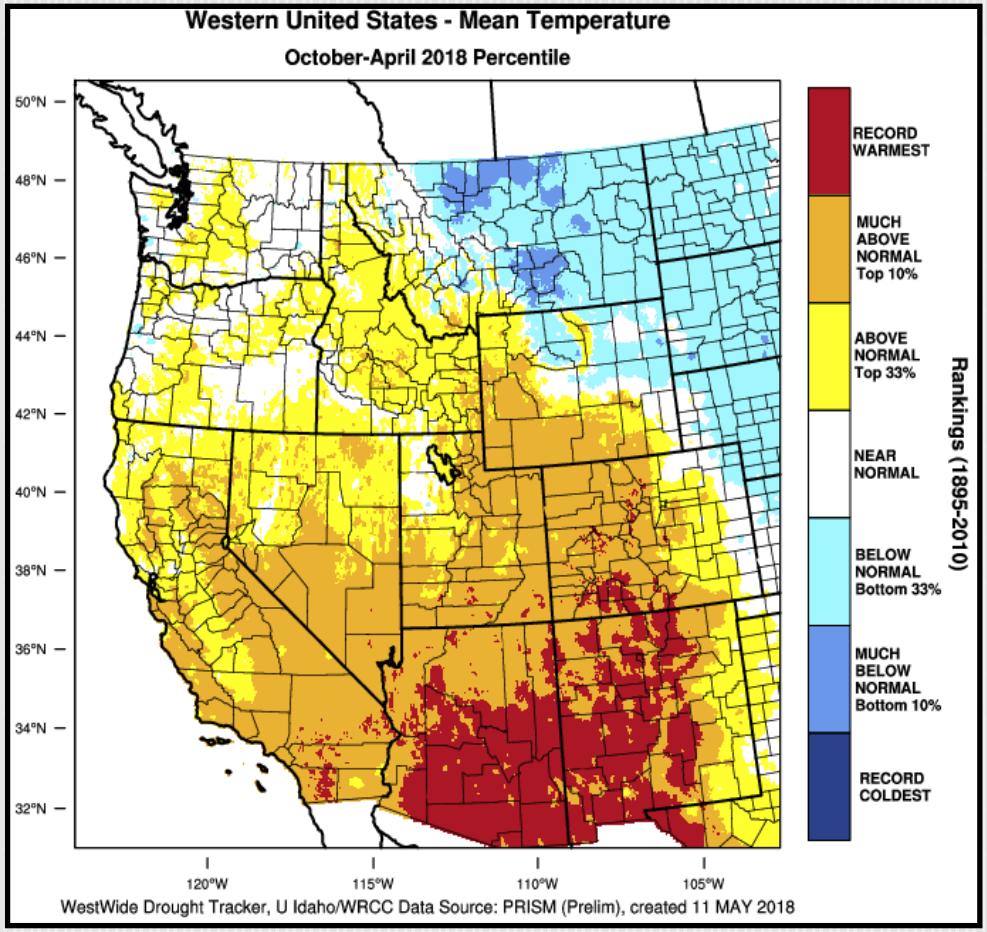
- ***Did our forecast improve upon the CPC forecast?*** Yes. We were able to accurately depict a wet period in the middle of the month and accurately indicate that snowpack would also grow during that time frame. Like CPC, we generally got the signal right for precipitation, but the spatial distribution was a bit different than expected.



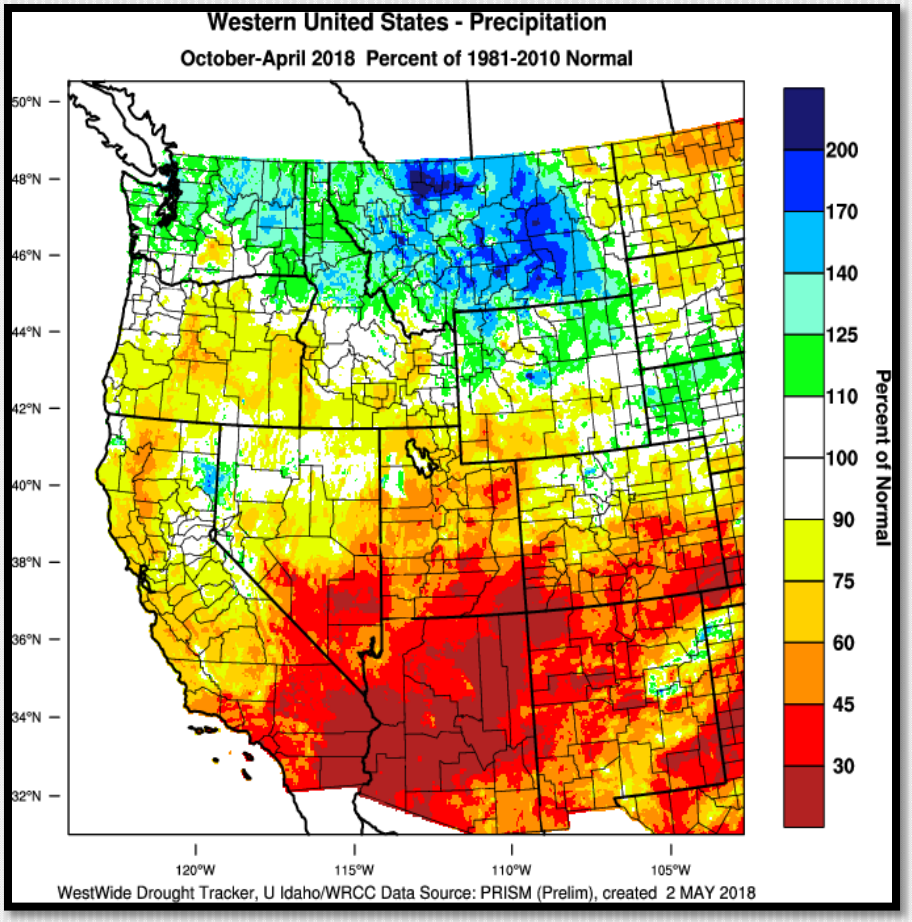


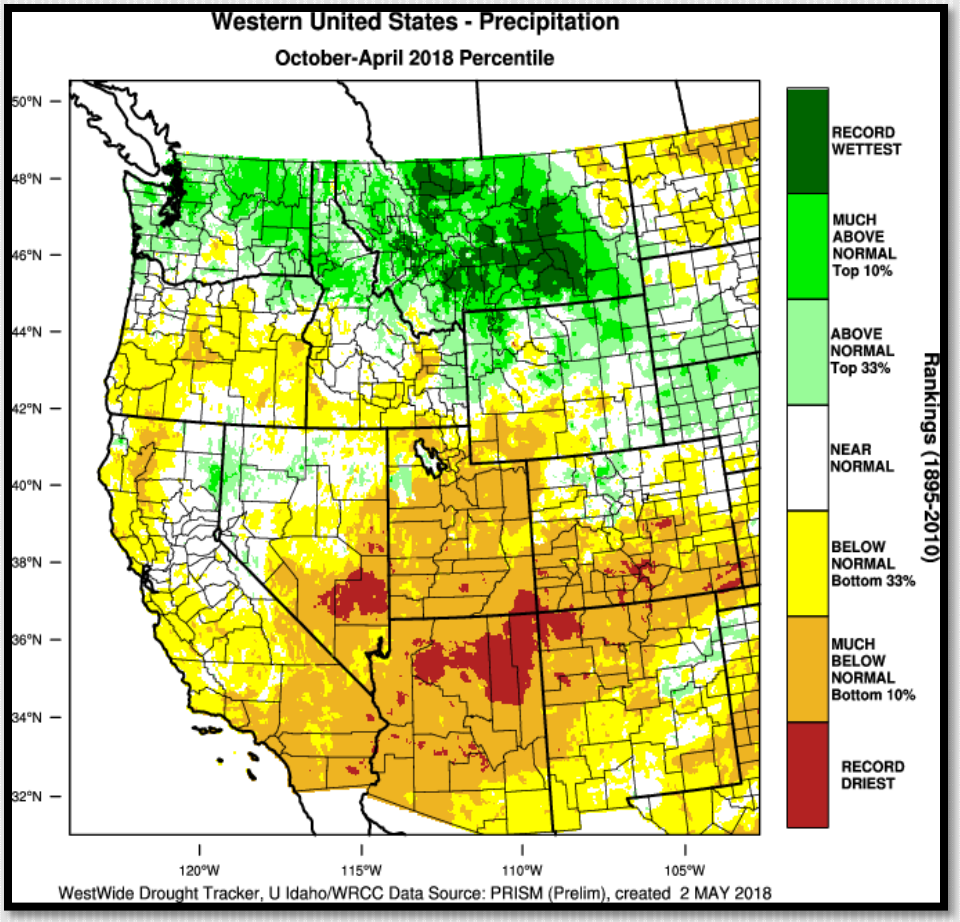
Temperatures, Water Year to Date



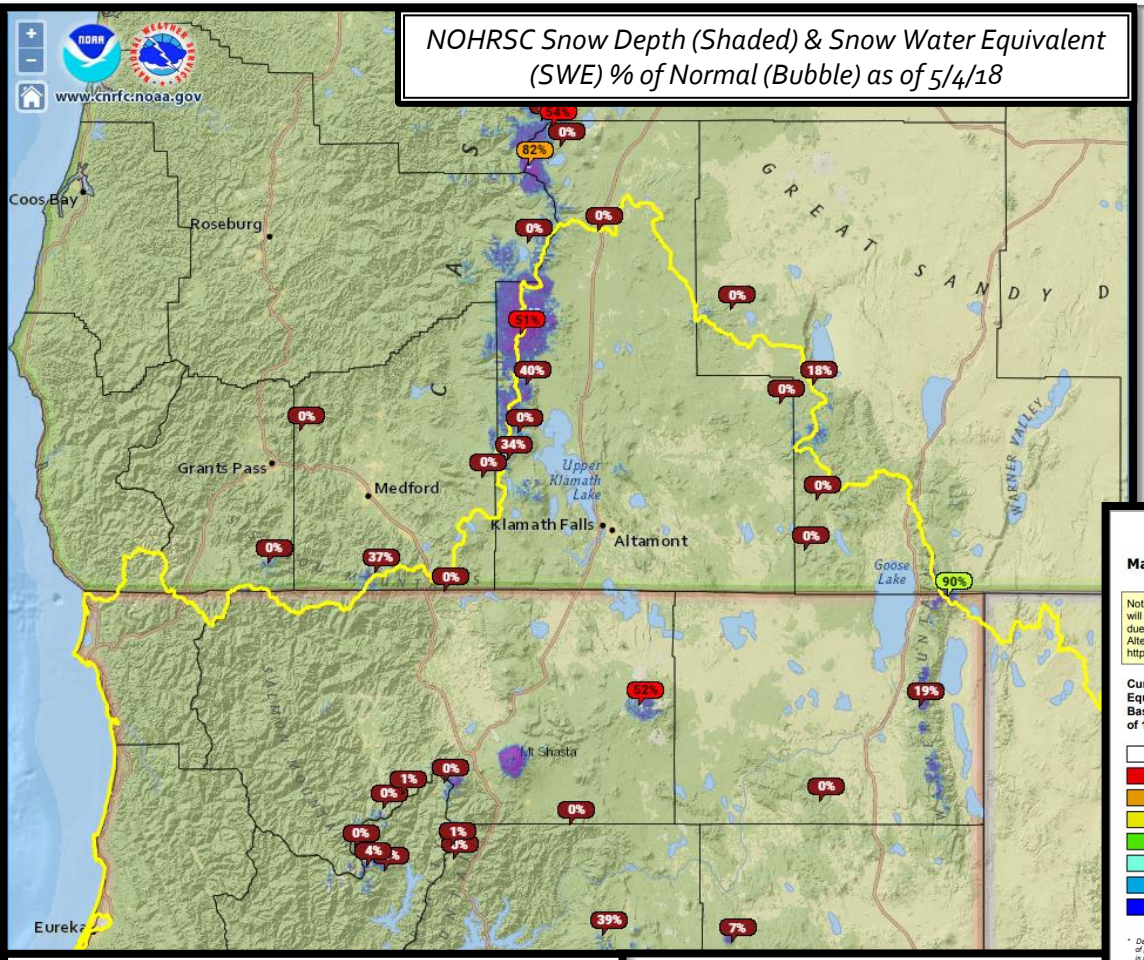


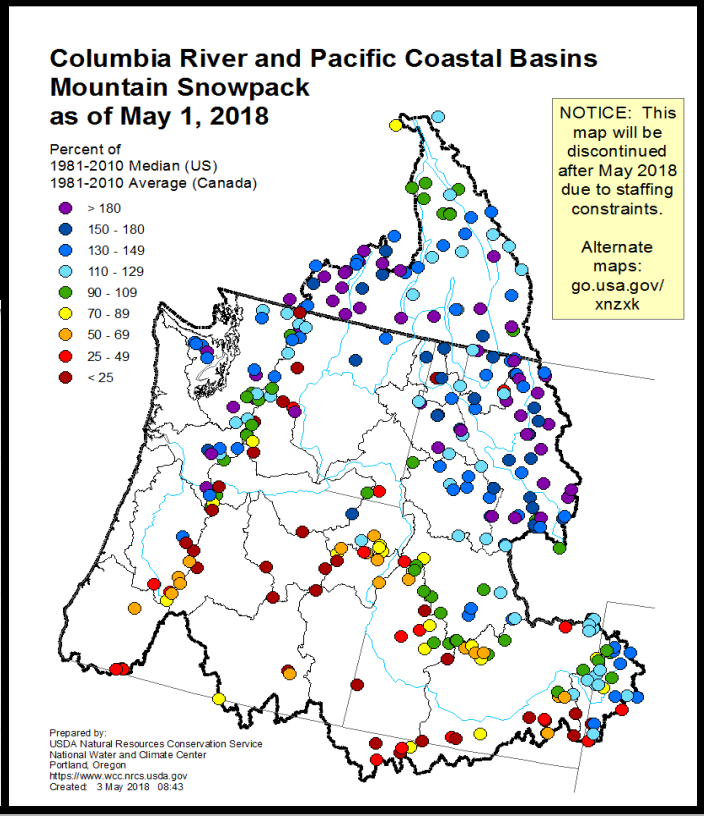
Precipitation, Water Year to Date

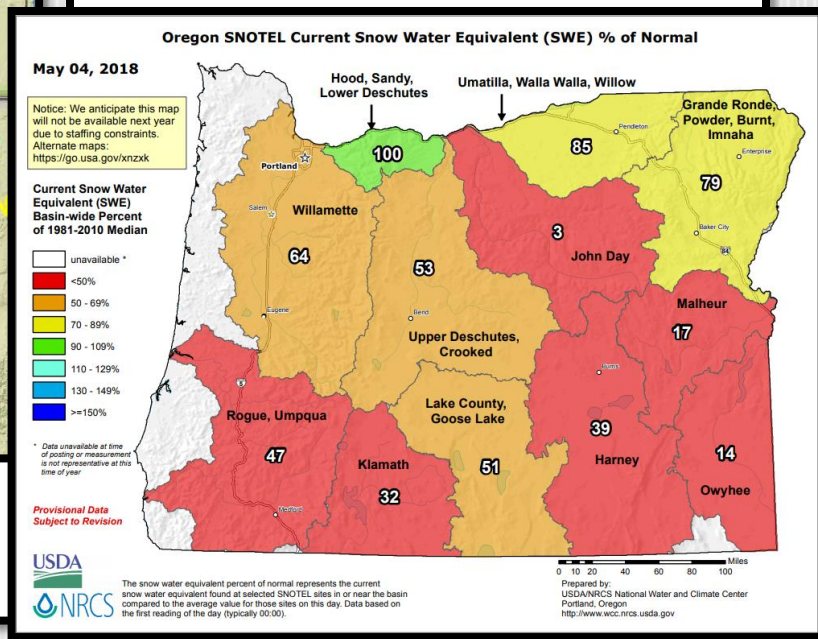




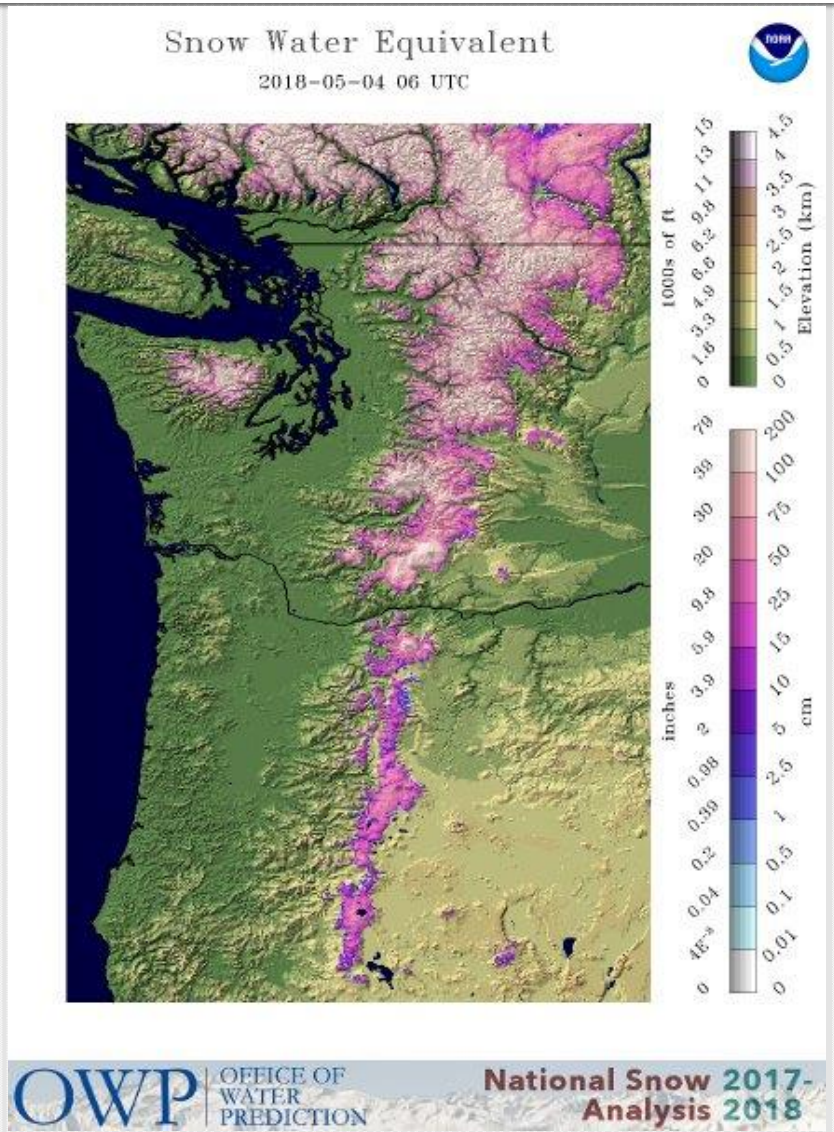
Snowpack Status

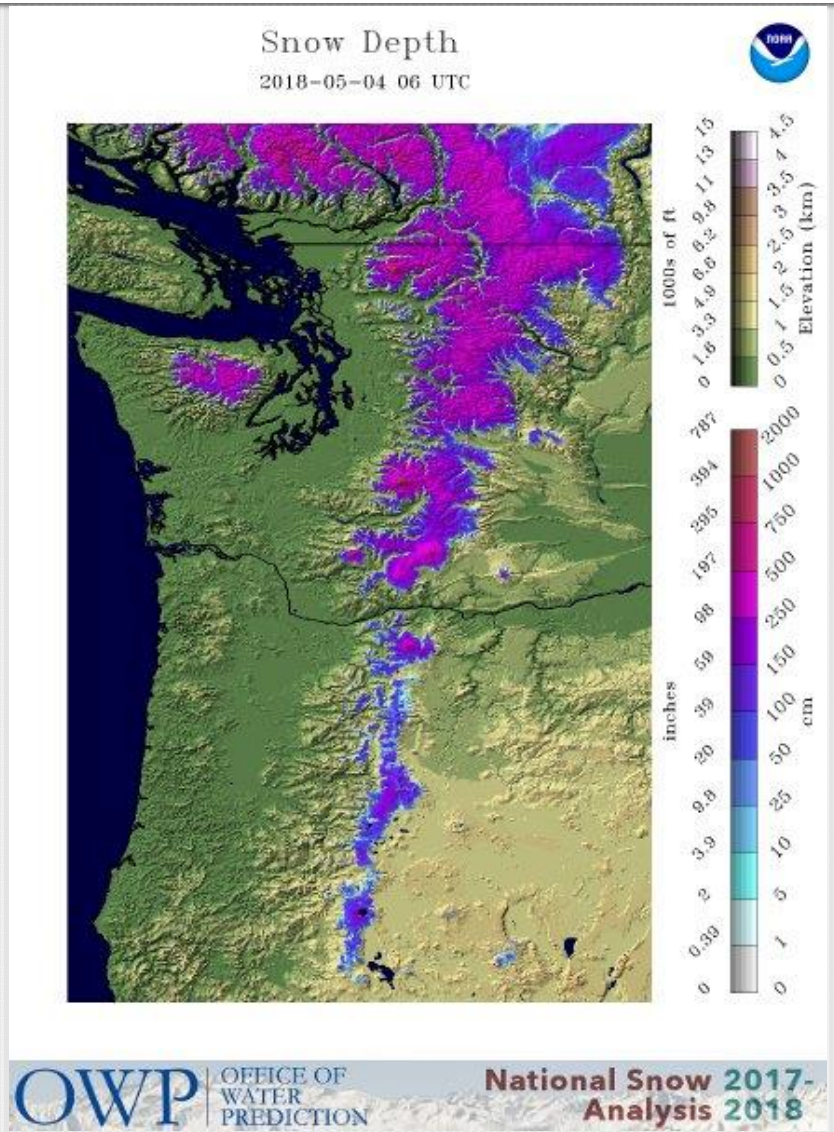




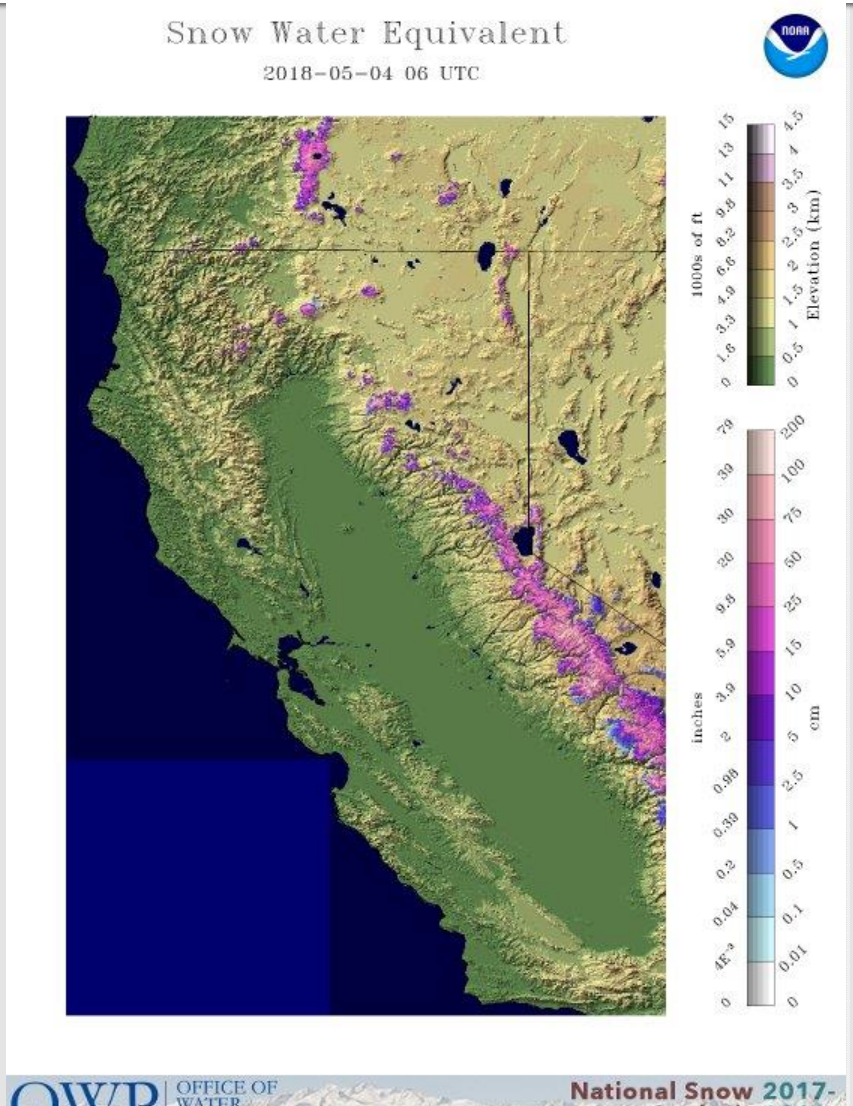


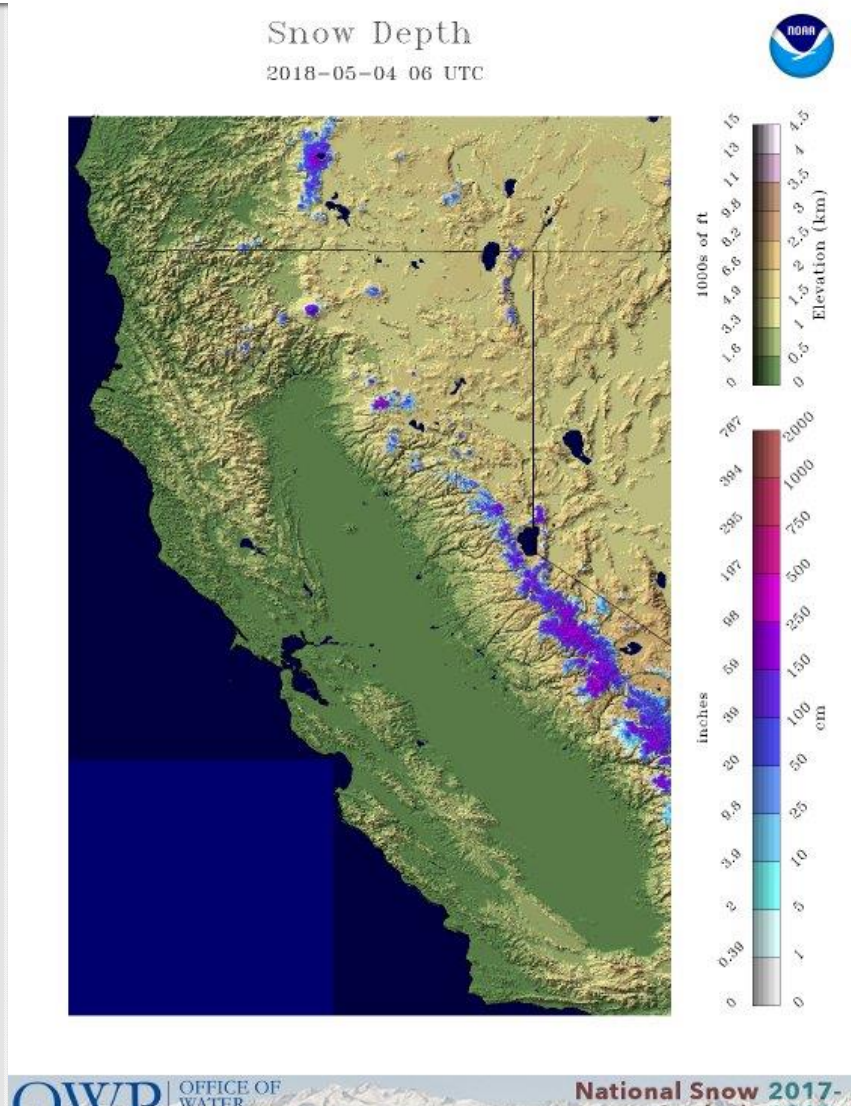
PacNW SWE & Snow Depth as of 5/4/18





California SWE & Snow Depth as of 5/4/18

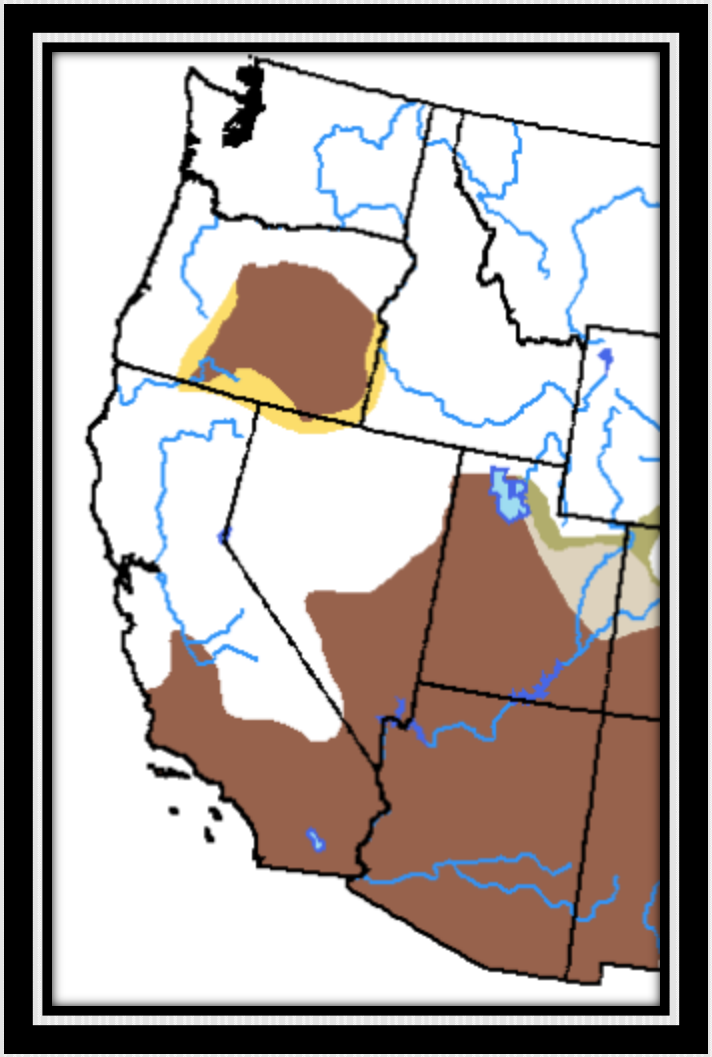




Crater Lake

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 04/30/18	Highest Max/ Lowest Min
April	40.6°	24.2°	6.97"	37.6"	61"	65° on 27th / 13° on 2nd & 3rd
Normal (1981-2010)	41.8°	22.6°	5.46"	46.7"	96"	N/A

Drought Outlook: May



Drought persists

Drought remains but improves

Drought removal likely

Drought development likely

Valid for May 2018
Released April 30, 2018

http://www.cpc.ncep.noaa.gov/products/expert_assessment/month_drought.png

Looking Ahead: Normals for May (1981-2010)

Temperatures:

Along the coast, lows are typically in upper 40s to lower 50s with highs in the upper 50s to mid 60s. The Interior West Side valleys usually experiences average lows in the 40s to 50s and highs in the lower 60s to mid 70s. Lows are typically in the 30s across the higher mountains west of the Cascades and the majority of the East Side. Highs across even the higher elevations are typically in the 40s and 50s, while across the valleys east of the Cascades highs are typically 60-70 degrees.

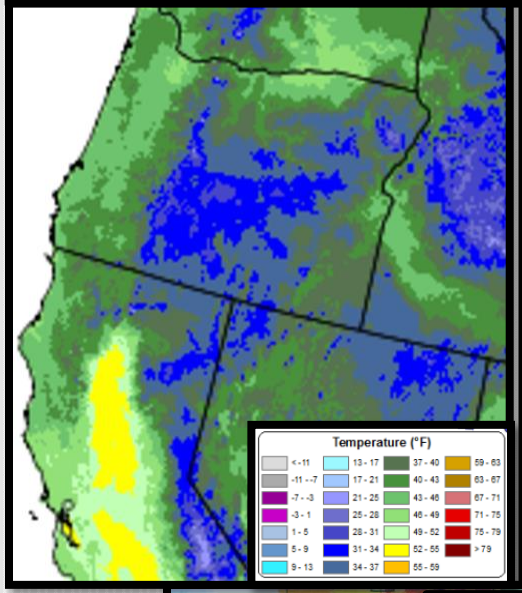
Precipitation:

Curry County usually gets 4 to 10 inches of water. South and southwest flow favored areas west of the Cascades, the Mount Shasta area, and the Cascades and Siskiyous typically get 2 to 5 inches. The remainder of the West Side has a wide range in normals, from as low as 0.50 up to 2 inches. East of the Cascades, the drier portions of Lake County can expect 0.50 to 1.5 inches, while most of the rest of the East Side gets 1 to 3 inches of water, though some of the mountains typically see up to around 4 inches.

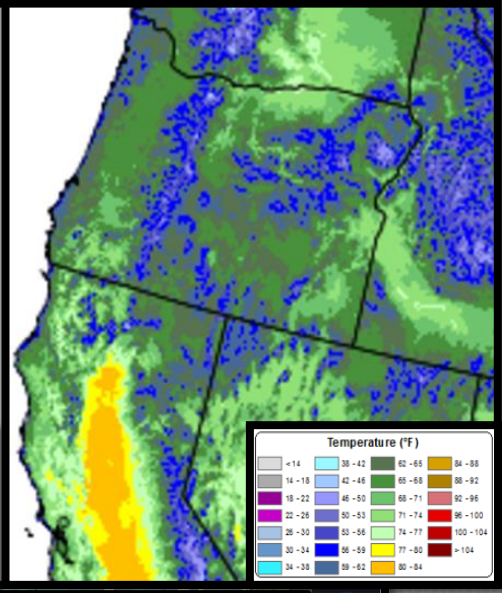
Snow:

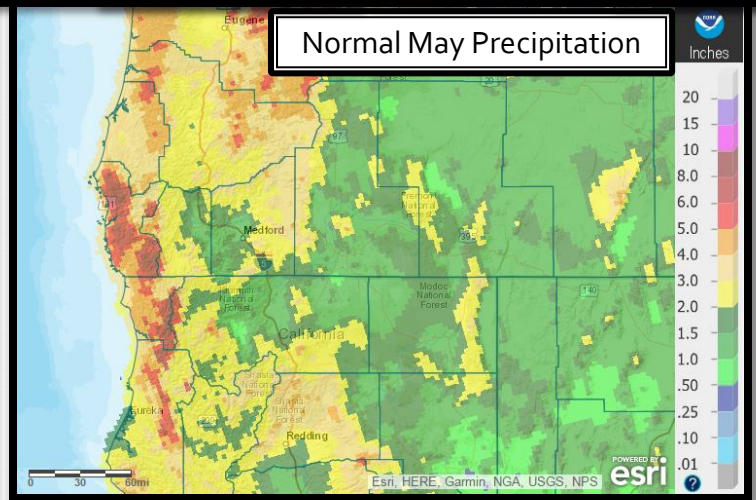
With peak snow water equivalent normally having occurred in mid-March, we expect the snowpack to be melting off. However, in some years the snowpack peaks in April. Also, we do sometimes get mountain snow in May that slows the melting process. The snowpack typically melts off much faster on southerly slopes than northerly slopes due to exposure and related temperatures. Snowpack at and above 7000 feet usually remains through the month of May, though it is melting much of the time. Snowfall drops precipitously at Crater Lake NP HQ in May, to 15.9 inches per the 1981-2010 normal period.

Minimum Temperatures



Maximum Temperatures

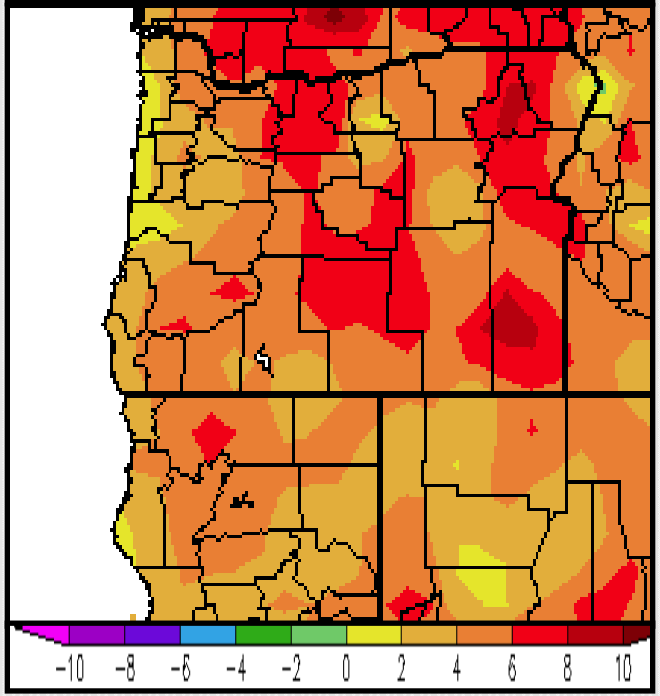




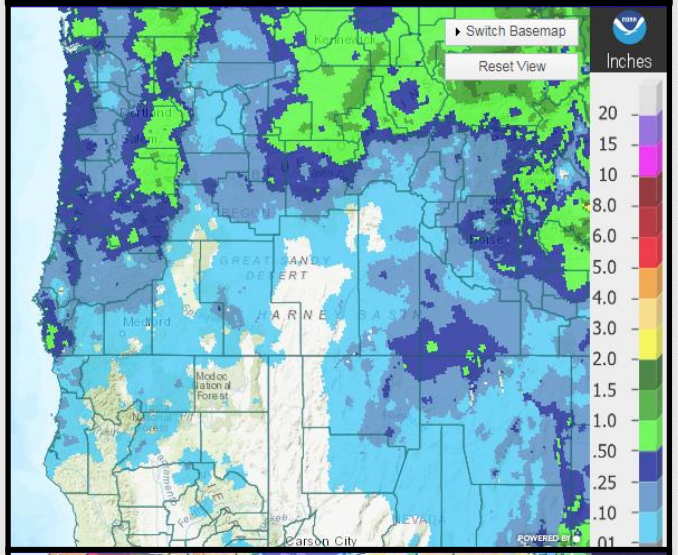
May 1-10th, 2018: Observed

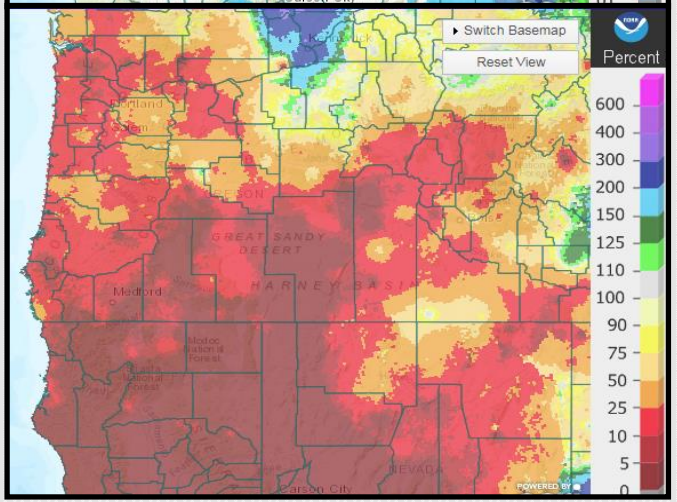
- Average temperatures have been above normal by 1°F-8°F during the first 10 days of May.
- Precipitation has been light compared to climatology with most of the area getting 25% or less of what we normally get during the first 10 days of May.

Temperatures



Precipitation

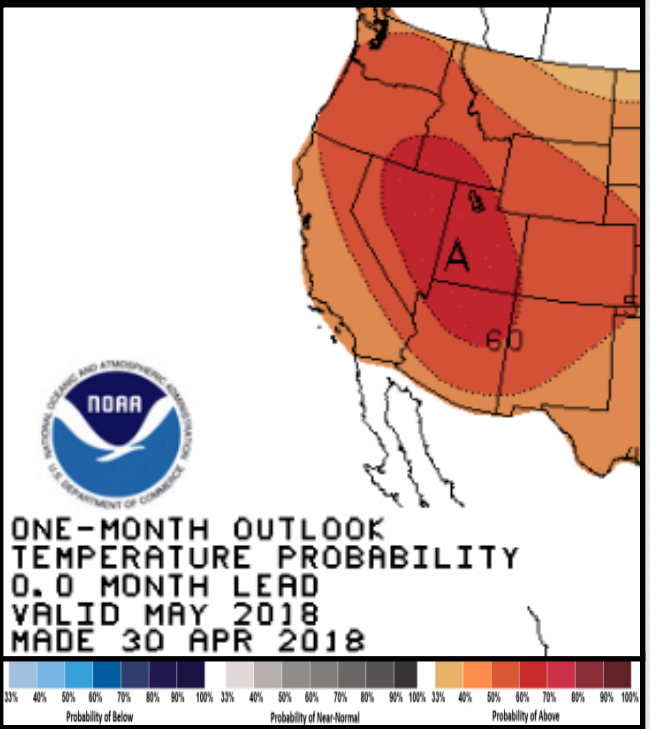




May 2018 Outlook

The official CPC outlook calls for enhanced probabilities of above normal temperatures (50-60%) and below normal precipitation (35-45%) across the forecast area. The localized enhancement to CPC's forecast is that we're very confident that temperatures will be above normal across the forecast area for this month. The highest temperature anomalies appear as if they will be across Oregon, with lesser positive anomalies across Northern California due to more influence from low pressure. Positive anomalies of 3-7 degrees appear likely. The GEFS indicates significant precipitation from near the Cascades and Marble Mountains eastward from about May 15th-25th. It appears that this will result in near to above normal precipitation for the month for some areas east of the Cascades and Marble Mountains, with the greatest probability of this occurring across Modoc and Lake counties. It does appear that precipitation will be below normal from the Cascades and Marble Mountains westward. Since precipitation will mostly be showers and thunderstorms, the areas of above normal precipitation are likely to be patchy.

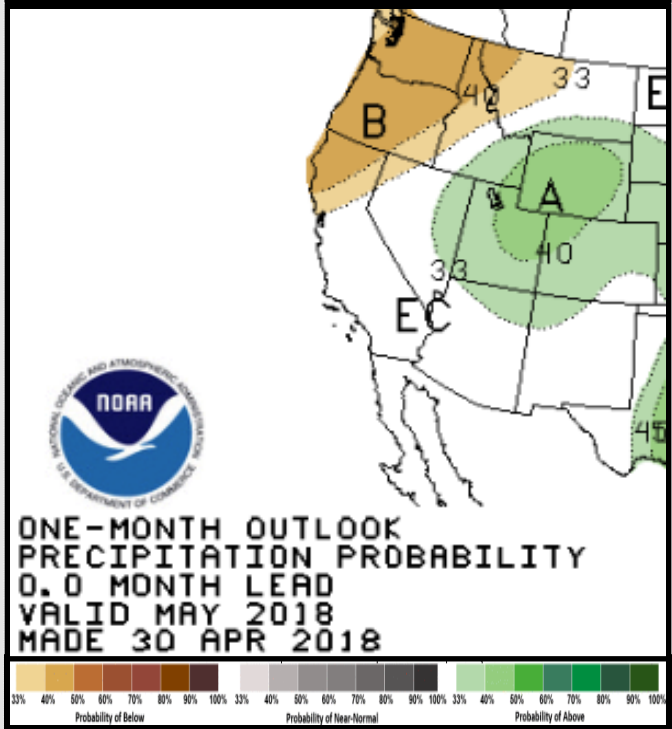
Temperatures



Expected Impact, May 2018:

Below normal snowpack and a below normal water year across all but portions of Lake and Modoc counties, combined with the conditions we're expecting for May mean that the growing season will continue to be off to a head start across the area. General troughing along/near the West Coast should result in enough precipitation to keep fire season from beginning in May, but we'll have plenty of tall and drying grass by the time June starts. Snowpack is likely to be mostly gone below 7kft by May's end. There is the possibility that some thunderstorms will be strong, with gusty winds and small hail, at times during May 15th-25th. Altogether, a drier and warmer May will set the stage for an early start to fire season in June. This does not apply to areas east of the Cascades due to expected wetter conditions and the usually later green-up there.

Precipitation



*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 may have records 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 may 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: 1/1/1902 – Present**
- **Roseburg: 4/1/1900 – Present**
  - *Missing:*
    - *05/1900-01/1901*
    - *03/1901-06/1902*
    - *08/1902-12/1930*
    - *10/1965-06/1997*
- **Medford: 3/11/1911 – Present**
- **Klamath Falls: 1/1/1948 – Present**
  - *Missing:*
    - *08-10/1970*
    - *1971-10/1997*
- **Montague, CA: 7/1/1948 – Present**
  - *Missing:*
    - *08-09/1952*
    - *02/1953-06/2000*
- **Mount Shasta City, CA: 4/15/1948 – Present**
  - *Missing:*
    - *10/1984-01/1985*
    - *10/1985-03/1986*
    - *09/1986-07/1997*
- **Alturas, CA: 6/1/1998 – Present**
  - *Missing:*
    - *08/1998*