National Weather Service Medford

March 2017 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).

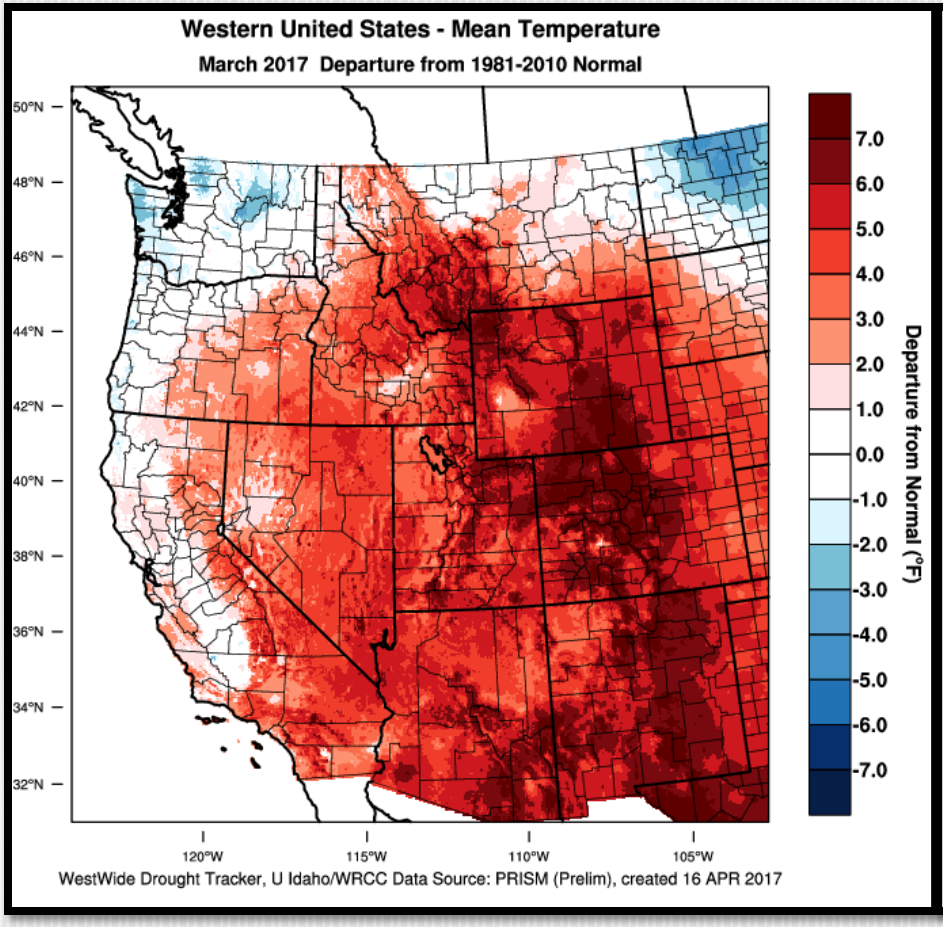
March 2017 Weather Review

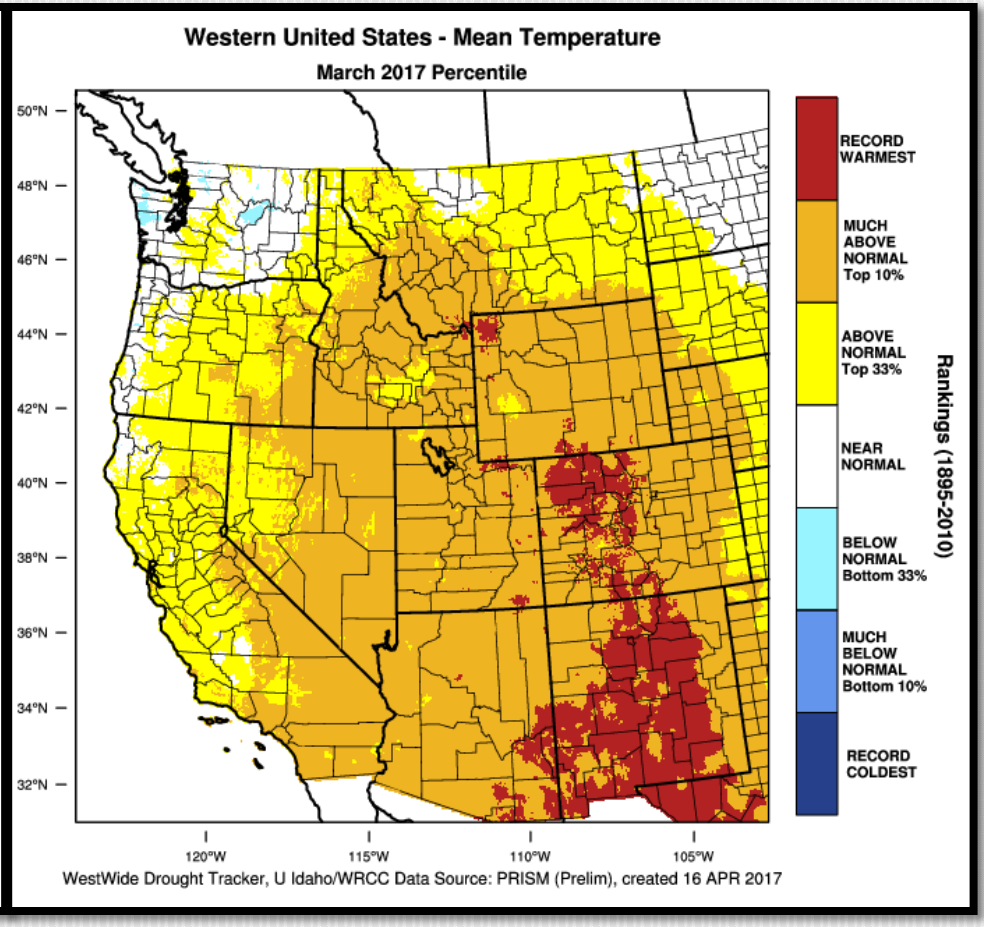
March 2017 was typical of the seasonal transition months as winter changed to spring, with active weather continuing throughout the month. A series of fronts moved through the Pacific Northwest and brought showers for an eight day stretch from the 3rd to the 11th. The cold air mass associated with the upper level storm, brought snow levels all the way down to valley floors and even the beaches received snow on the morning of the 5th. Even during the day with daytime heating, a few showers were heavy enough to temporarily lower snow levels to valley floors on the 5th and again on the 6th. A trace of snow was reported at the Medford airport on those days, with locally higher amounts reported around the Rogue Valley. Snow accumulations at lower elevations were short lived however, as the March sun angle and warm ground temperatures caused the snow to melt quickly.

Afterwards, brief high pressure allowed for temperatures to warm across the area, with many locations reporting the warmest temperatures of the year thus far. The break in the weather was short lived as another series of fronts moved through the area, bringing rounds of heavier rainfall interspersed with dry days. The rainiest day for southern Oregon and northern California occurred on the 21st when multiple rainfall records were broken.

Many of these frontal boundaries also brought gusty winds to the area, including the typically more sheltered valleys. The Medford airport recorded six days with 2-minute sustained wind speeds of 20 mph or greater.

March 2017 *Observed Temperatures*





Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	49.8	+2.2°	55.5	+1.7°	44.0	+2.5°
Roseburg	50.1	+1.5°	58.1	+0.3°	42.2	+2.9°
Medford	49.7	+1.4°	58.4	-1.1°	41.0	+3.9°
Klamath Falls	42.0	+3.5°	53.3	+2.7°	30.7	+4.3°
Montague, CA	45.1	+2.1°	57.8	+1.5°	32.4	+2.7°
Mt. Shasta City, CA	44.5	+2.2°	54.7	+0.3°	34.3	+4.1°
Alturas, CA	42.3	+3.9°	54.3	+2.3°	30.4	+5.6°

Monthly Max & Min Temperatures

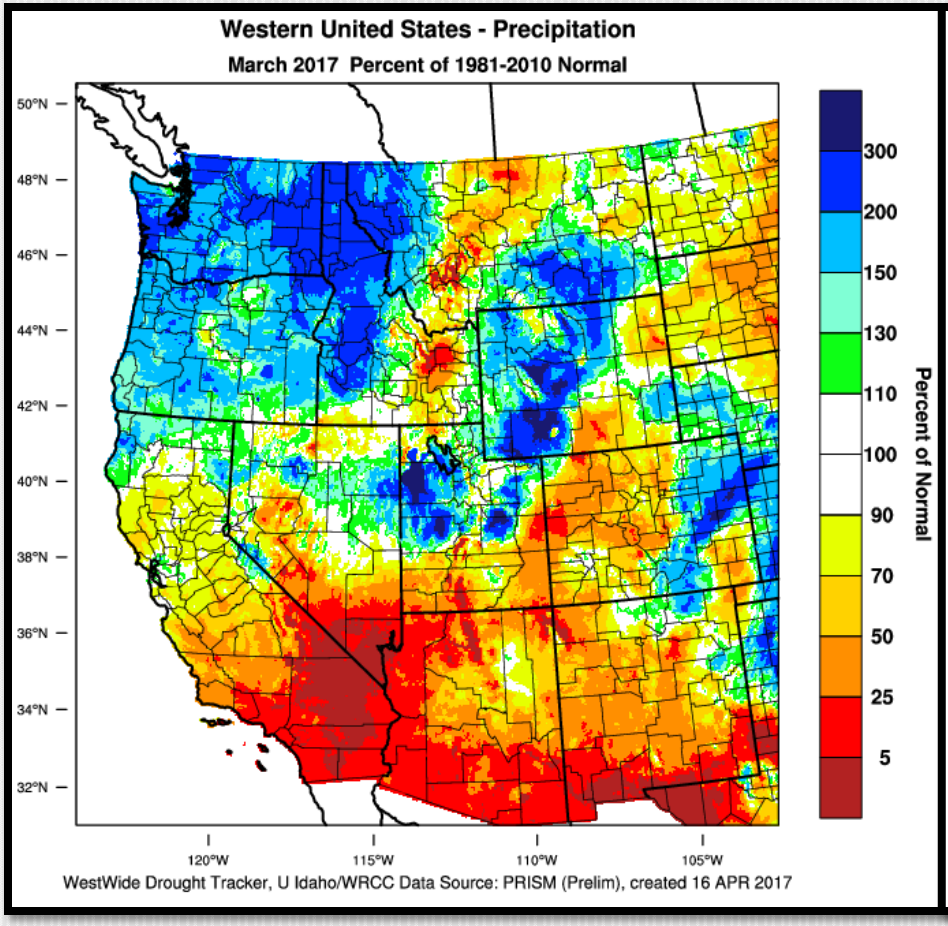
	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	64°	17th	34°	5th
Roseburg	69°	13th	32°	5th
Medford	70°	12th	29°	2nd
Klamath Falls	71°	14th	17°	5th
Montague, CA	76°	14th	18°	2nd
Mt. Shasta City, CA	71°	14th	21°	1st
Alturas, CA	70°	13th & 14th	14°	1st

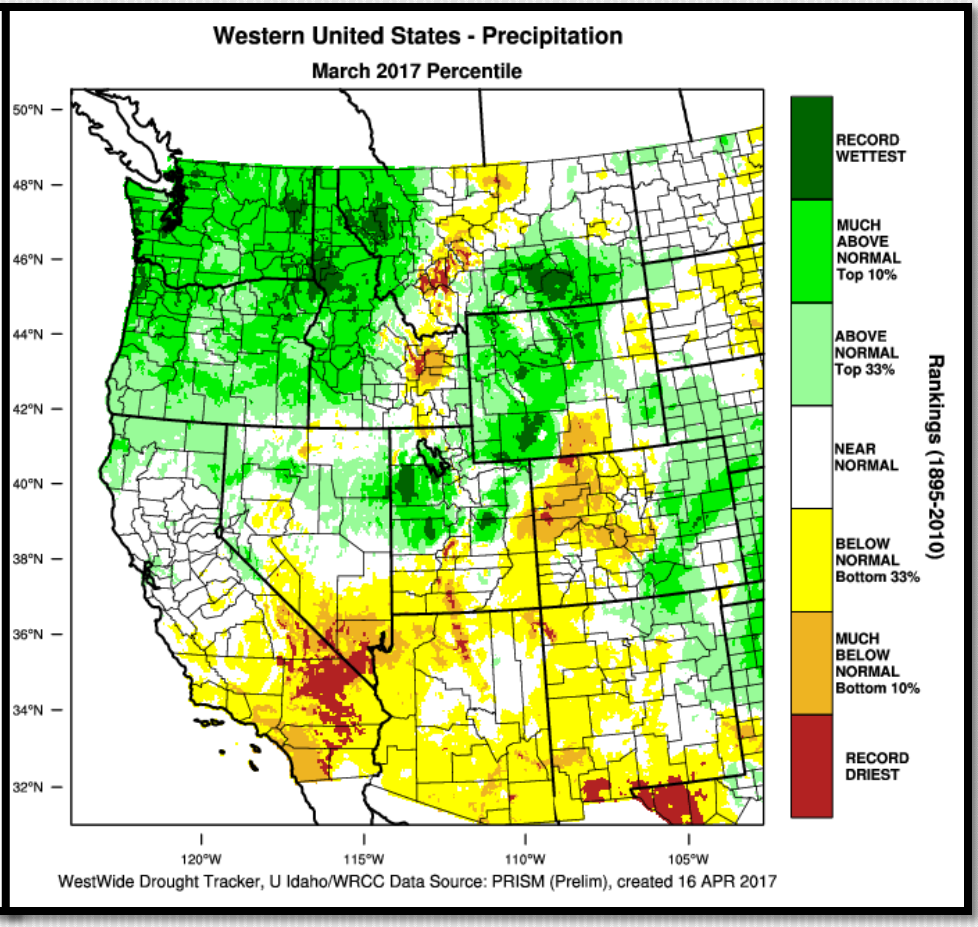
Record Temperatures

	Record High Temperature / Date	Old Record/Year
Klamath Falls	71°/14th	70°/1994
Montague, CA	76°/14th	71°/1994

	Record Low Temperature / Date	Old Record/Year
Montague, CA	18° / 2nd	Ties with 1971

March 2017 *Observed Precipitation*





Precipitation

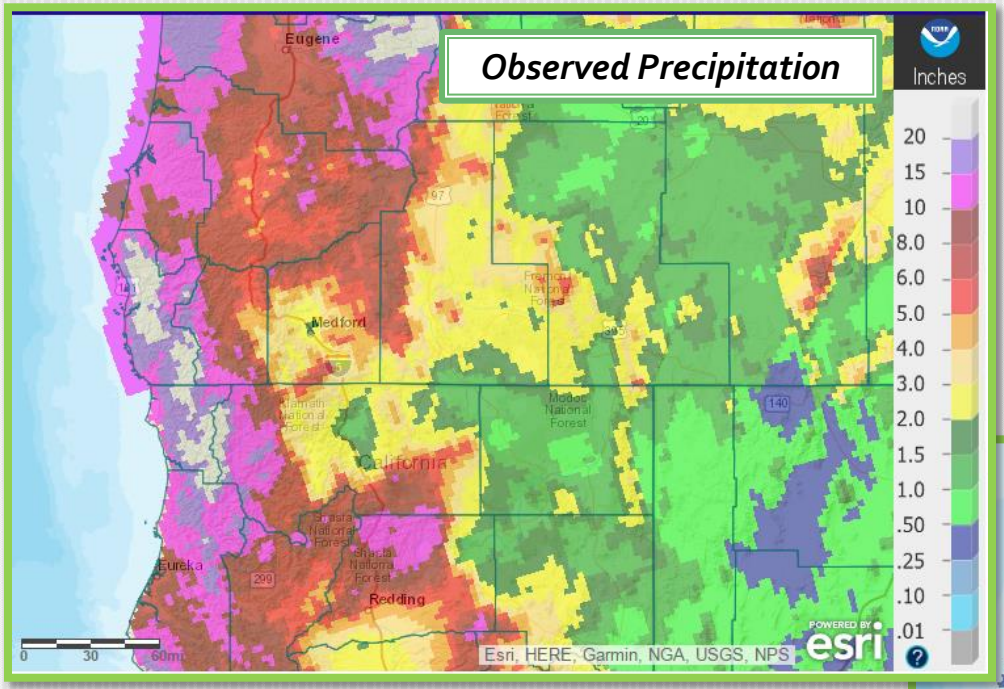
	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	10.14"	+2.31"	2.09"	24th
Roseburg	4.98"	+1.48"	0.61"	24th
Medford	2.04"	+0.33"	0.41"	29th
Klamath Falls	1.87"	+0.60"	0.47"	21st
Montague, CA	1.35"	-0.96"	0.32"	21st
Mt. Shasta City, CA	6.15"	+0.19"	1.51"	21st
Alturas, CA	1.18"	-0.34"	0.21"	21st

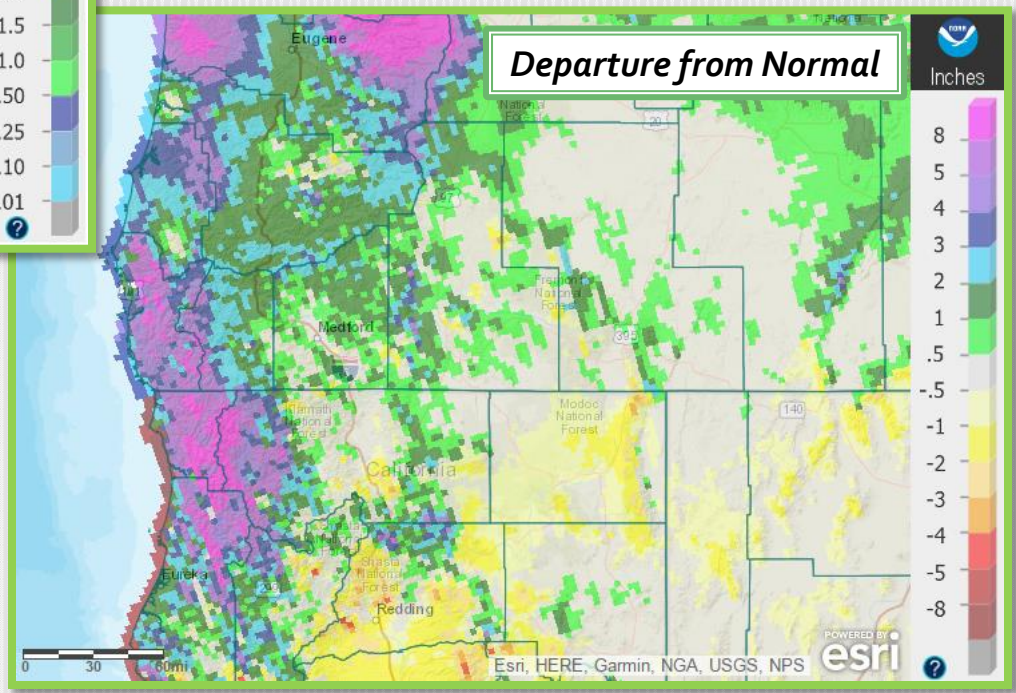
Record Daily Precipitation

	New Record	Date	Old Record	Year
North Bend	2.09"	24th	1.42"	1962
Klamath Falls	0.47"	21st	0.36"	1931
Mt. Shasta City	1.51"	21st	1.37"	1958
Montague	0.32"	21st	0.26"	2009

Water Year-to-Date 10/1 – 3/31	Total	Normal
North Bend	67.94"	51.70"
Roseburg	37.63"	28.19"
Medford	22.74"	13.79"
Klamath Falls	9.84"	9.73"
Montague, CA	13.87"	13.27"
Mt. Shasta City, CA	49.46"	35.46"
Alturas, CA	11.42"	9.13"

March Precipitation

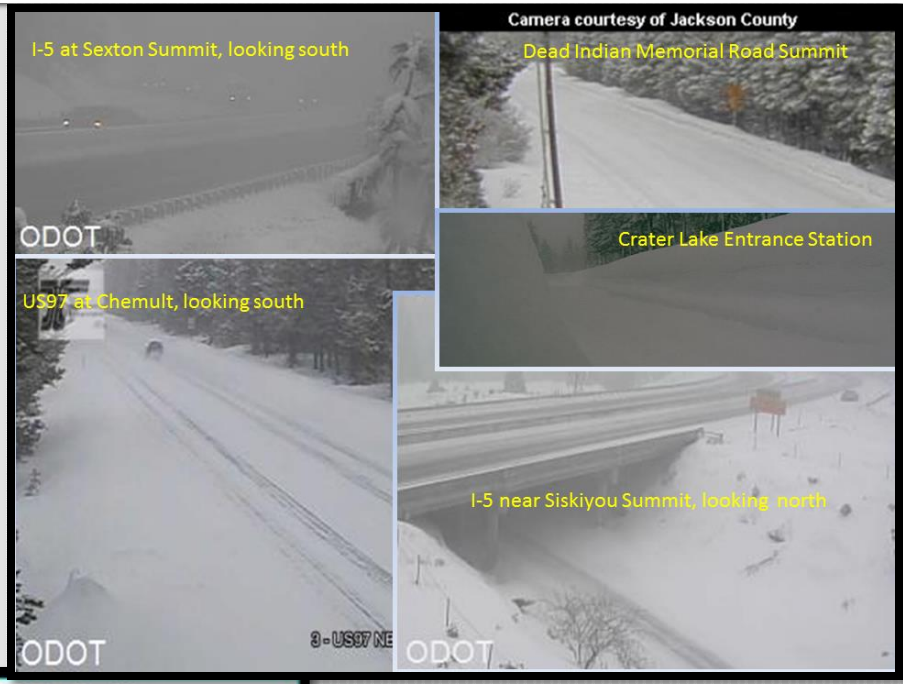




March Significant Weather

Another round of Low Elevation Snow & Significant Accumulations in the Mountains

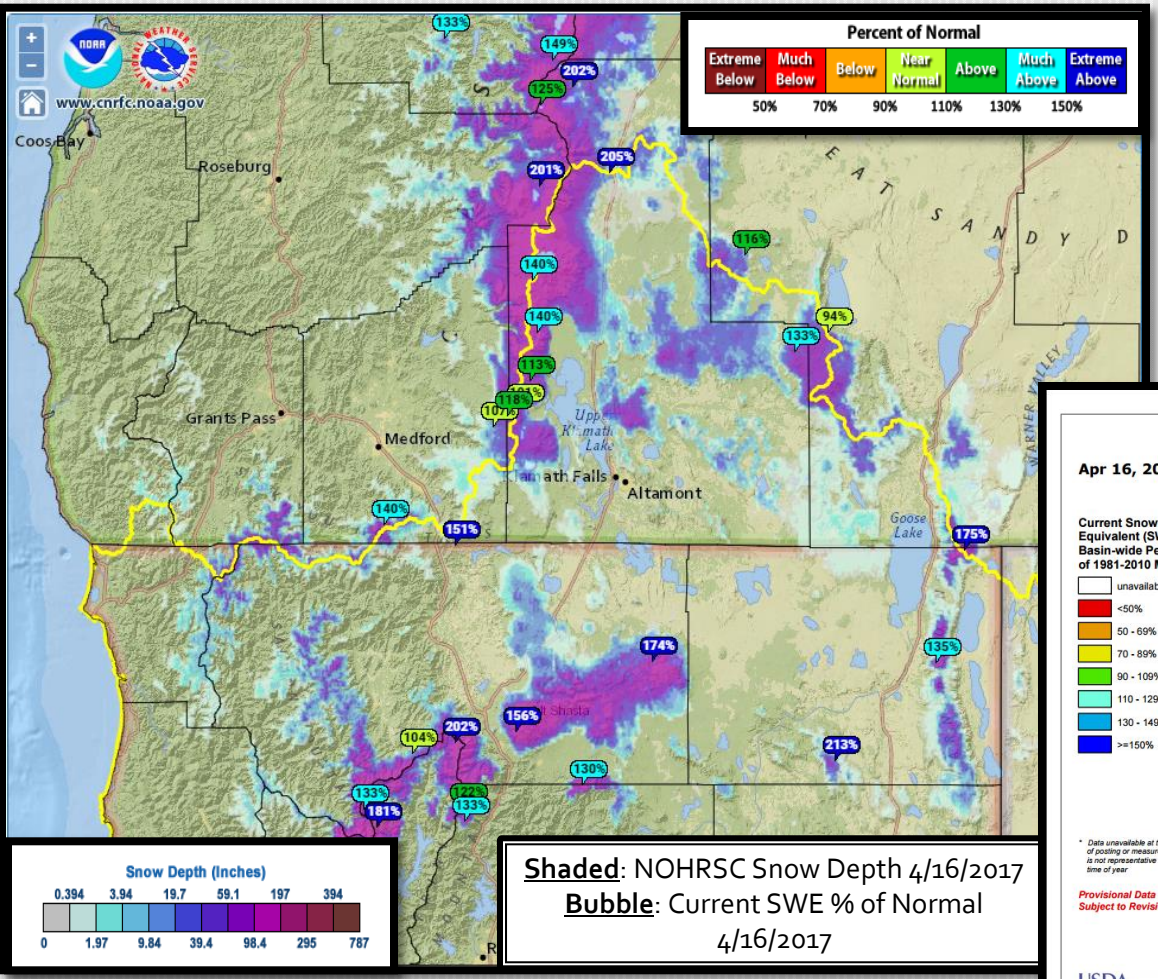
The beginning of March brought yet another round of low elevation snow. Back to back cold fronts moving through the area lowered snow levels all the way down to the beaches on the morning of the 5th. Snow accumulations were short lived thanks to the March sun angle and relatively warm ground temperatures. However, some showers were heavy enough to lower snow levels down to valley floors on both the 5th and 6th. Snow levels hovered around 2,000 feet during this time frame and the mountains saw significant accumulations. Crater Lake reported 3.5 feet of new snow fall between the 4th and 8th!



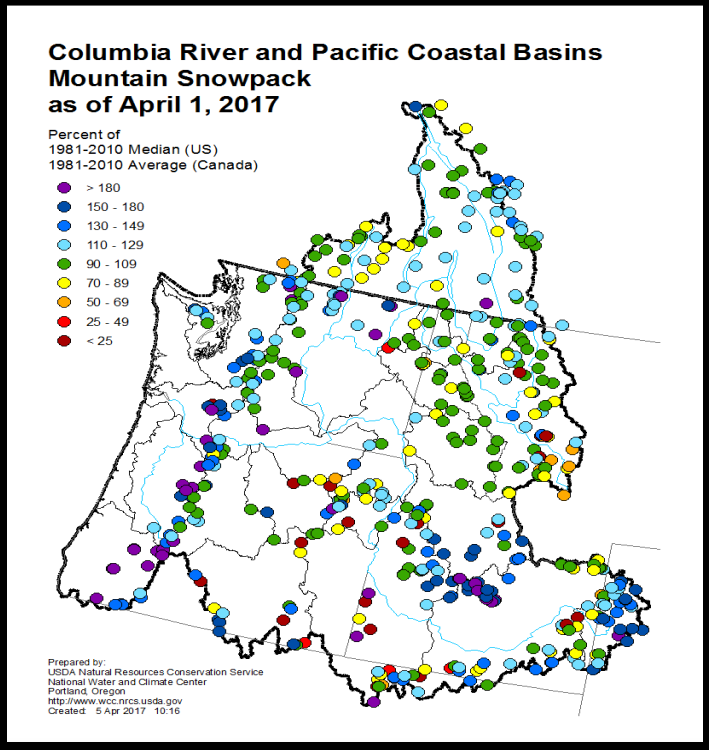
Above: Difficult travel conditions across area passes on March 6th.

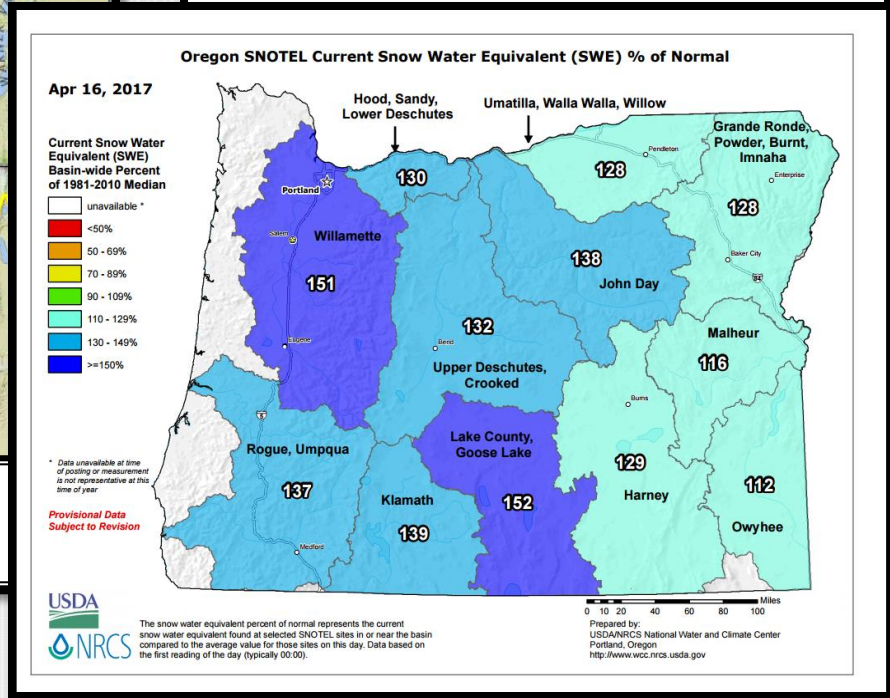
Left: Snow accumulations down to the beaches on March 5th.

Snowpack Status



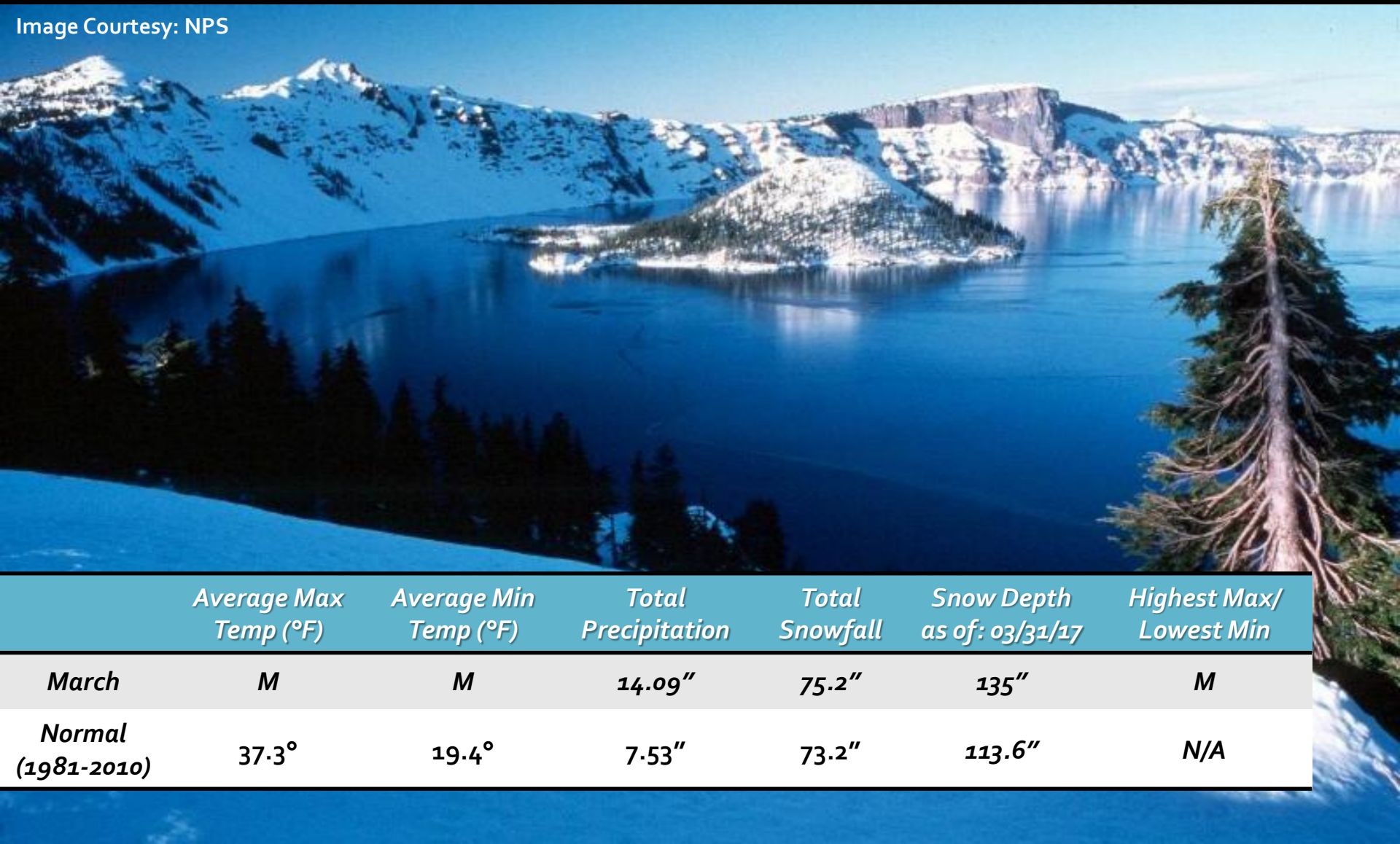
Shaded: NOHRSC Snow Depth 4/16/2017
Bubble: Current SWE % of Normal 4/16/2017





Crater Lake

Image Courtesy: NPS



	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 03/31/17	Highest Max/ Lowest Min
March	M	M	14.09"	75.2"	135"	M
Normal (1981-2010)	37.3°	19.4°	7.53"	73.2"	113.6"	N/A

Drought Outlook: April

Drought persists

Drought remains but improves

Drought removal likely

Drought development likely

Valid for April 2017
Released March 31, 2017

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

Looking Ahead: Normals for April (1981-2010)

Temperatures:

Along the coast, lows are typically in 40s with highs in the upper 50s to lower 60s. Valleys west of the Cascades usually experiences average lows in the mid 30s to mid 40s and highs 55 to 65 degrees . Lows in the upper teens to mid 20s occur across the higher, more typically snow packed mountains, with lows in the 20s to lower 30s for the valleys of east of the Cascades. Highs in the higher terrain are typically in the upper 30s to mid 40s, while across the valleys east of the Cascades, highs are typically in the upper 40s to upper 50s.

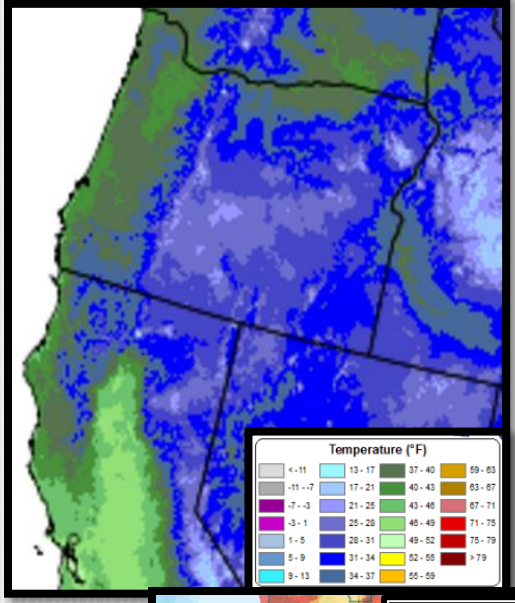
Precipitation:

Curry County usually gets 6 to 15 inches of water. South and southwest flow favored areas of west of the Cascades, the Mount Shasta area, and the Cascades and Siskiyous typically get 4 to 8 inches. The remainder of the West Side has a wide range in normals, from as low as 0.50 to 4 inches. East of the Cascades, the drier portions of Lake County can expect 0.50" to an inch, while the remainder of the East Side gets 1 to 4 inches of water, with up to around 5 inches in the some of the mountains.

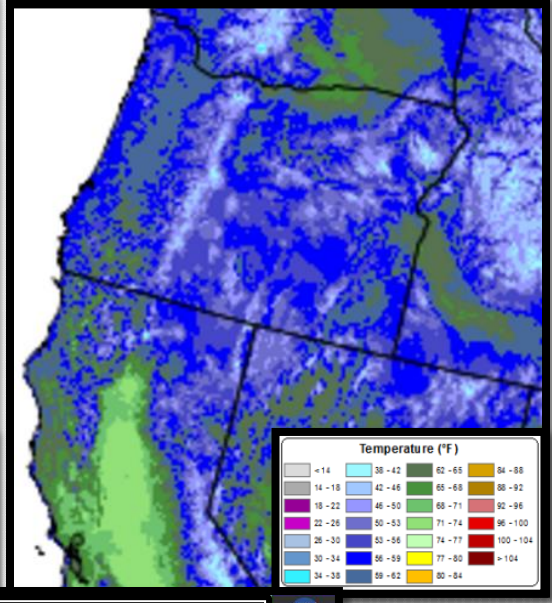
Snow:

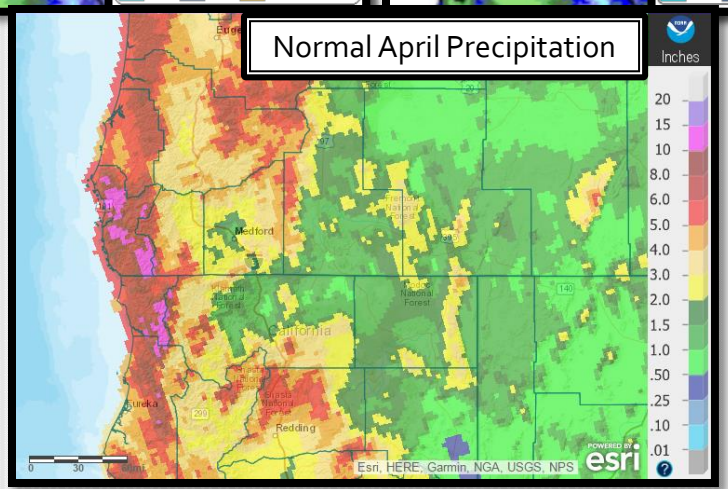
With peak snow water equivalent normally having occurred in mid-March we expect the snowpack to begin melting off in April. However, in some years the snowpack peaks in April. Also, we do often get snow in April that slows the melting process. The snowpack typically melts off much faster on southerly slopes than northerly slopes due to exposure and related temperatures.

Average Minimum Temperatures



Average Maximum Temperatures

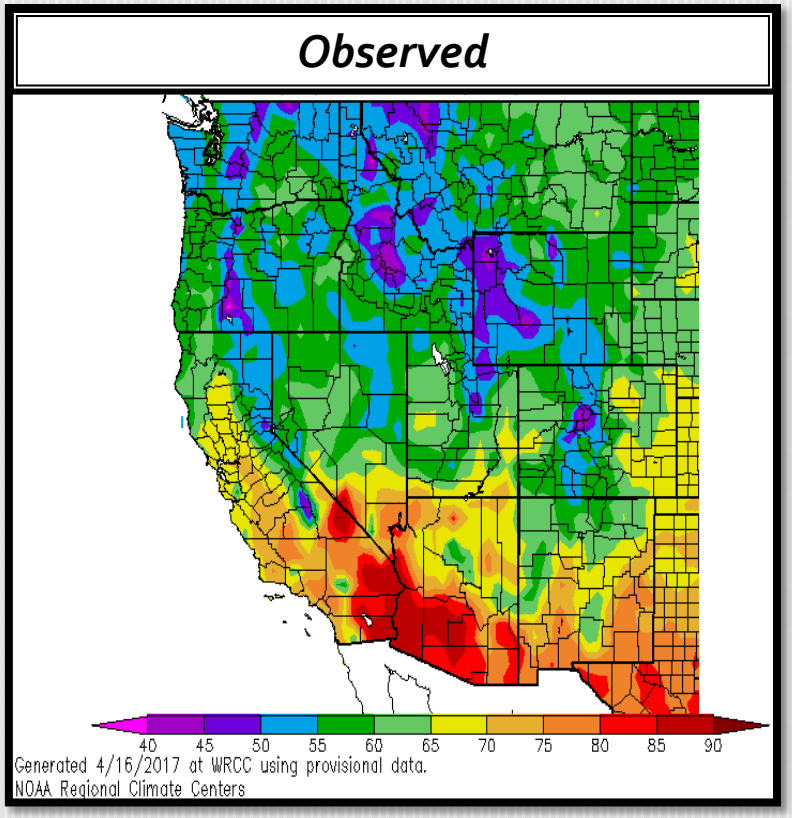




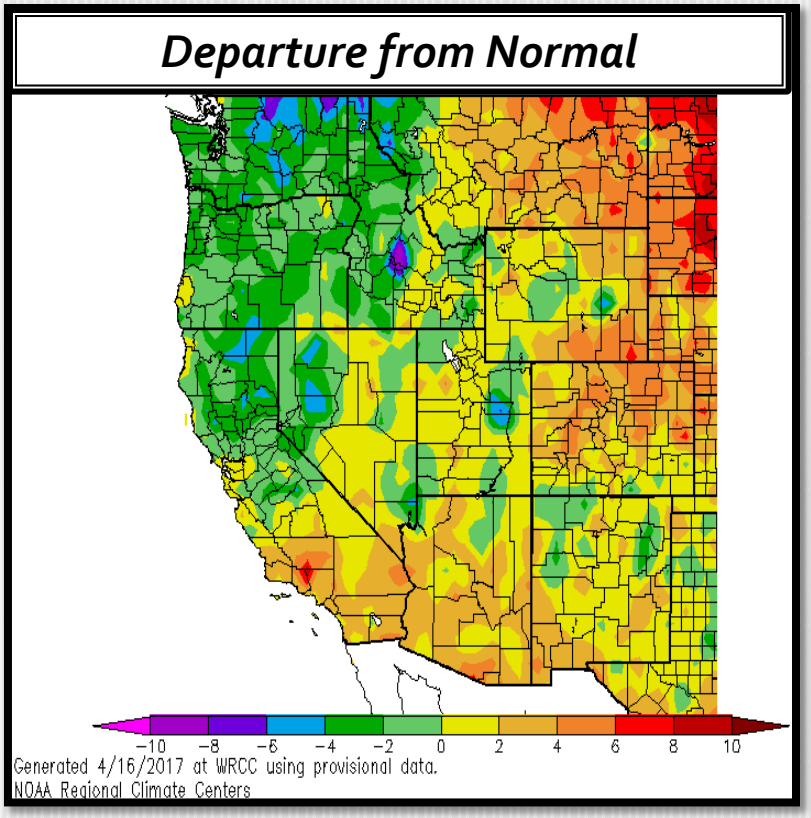
A Look at April to Date (4/15/2017)

Maximum Temperatures

Observed



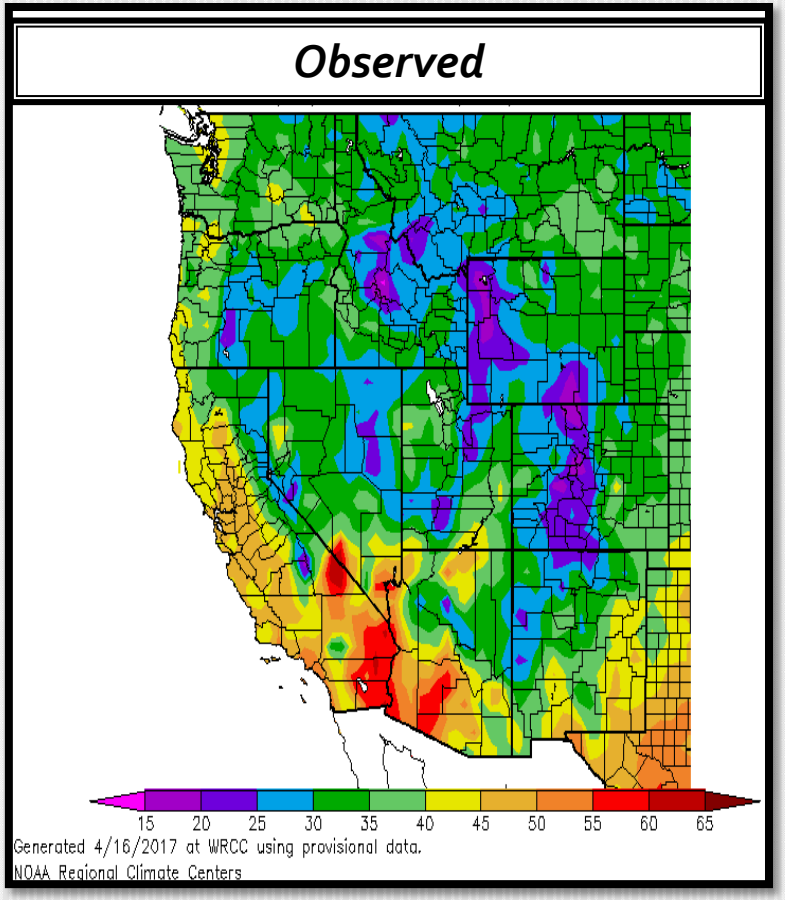
Departure from Normal



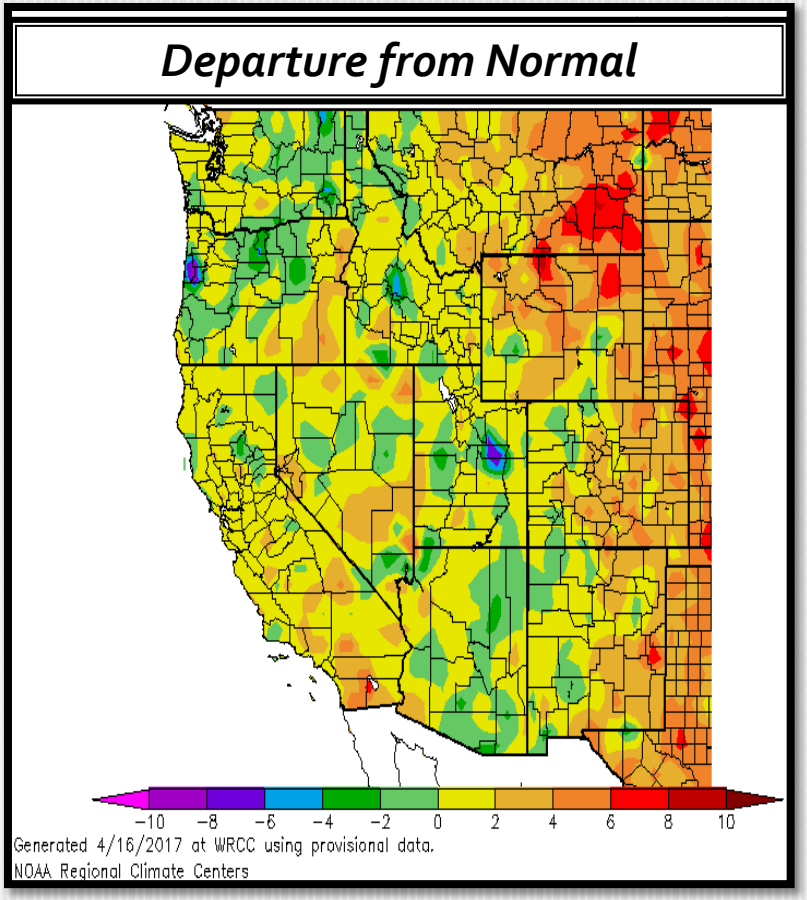
A Look at April to Date (4/15/2017)

Minimum Temperatures

Observed



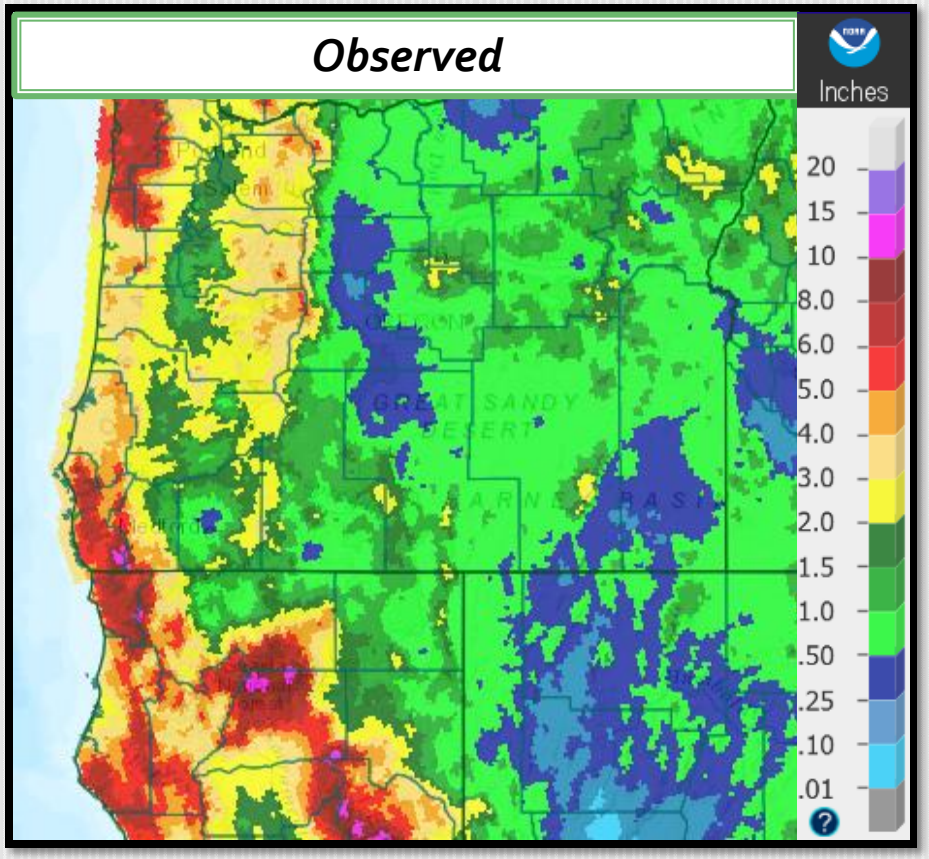
Departure from Normal



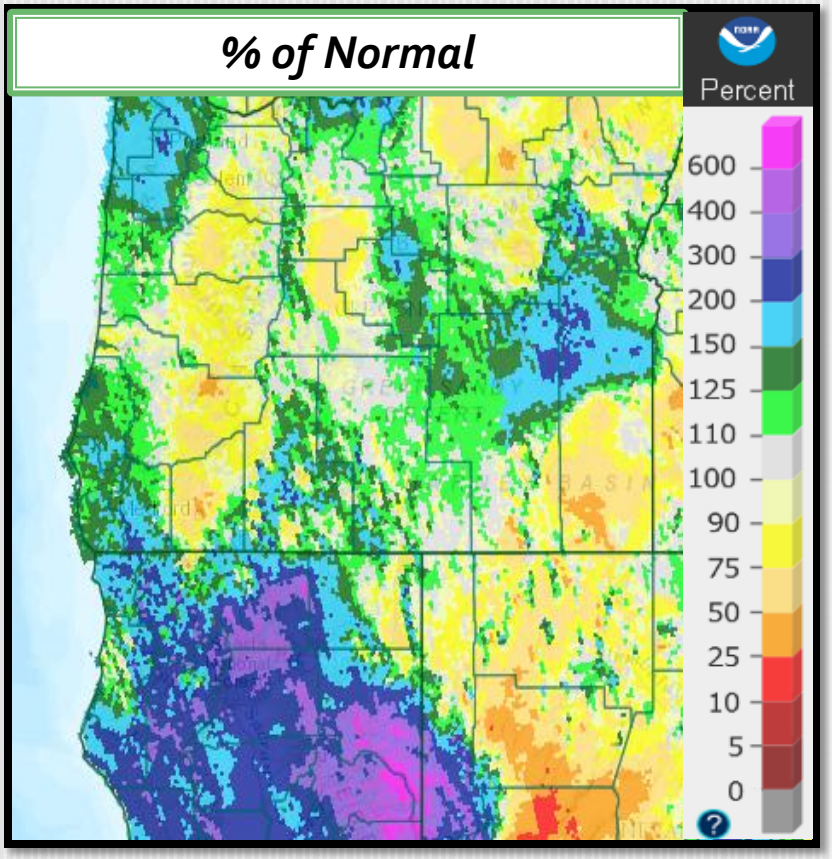
A Look at April to Date (4/15/2017)

April 1st – 15th Precipitation

Observed



% of Normal

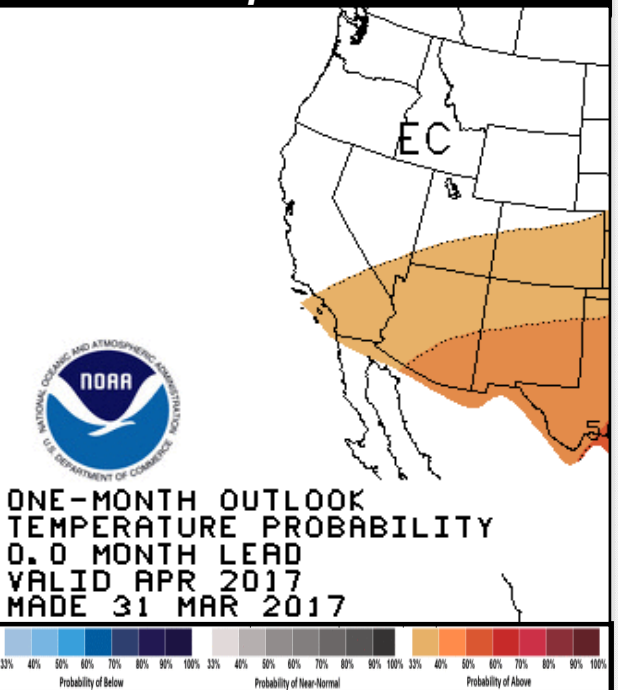


April 2017 Outlook

For the first half of April, unsettled, fairly active weather has led to average minimum temperatures mostly within 2° F of normal and average maximum temperatures mostly cooler than normal- by as much as 6° F in the Mount Shasta and Tule Lake Basin areas. Precipitation has been well above normal for most of Siskiyou County, most of the coastal counties and near the coastal mountain ranges, and some of the East Side. Much of Jackson County, Eastern Douglas County, and parts of Eastern Modoc County are below normal.

The official CPC forecast, which was issued at the end of March, indicated equal chances for below, near, and above normal temperatures, and increases probabilities for above normal precipitation west of Modoc and Lake Counties. This official forecast looks on track, as the rest of the month looks as if it will trend warmer, but remain wetter than normal. By month's end, temperatures are likely to end up close to normal across the forecast area, while precipitation is likely to end up above normal for most of the area.

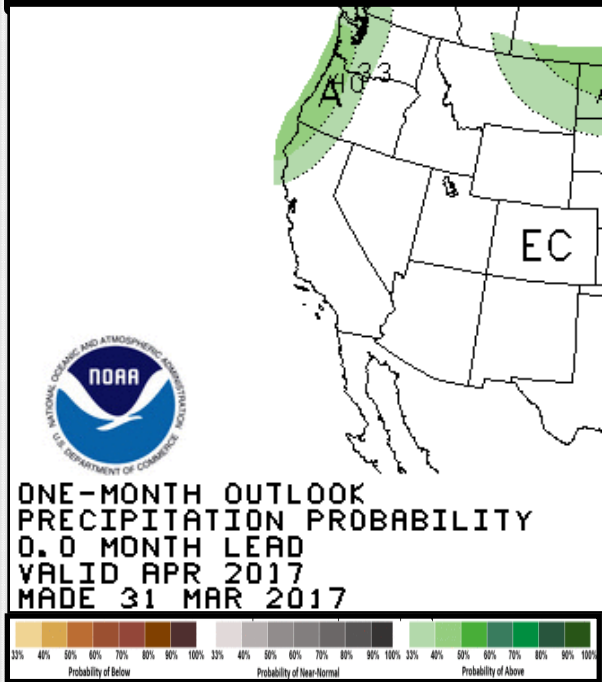
Temperatures



Expected Impact, April 2017:

In wake of our very wet Wet Season, to date, with temperatures at to below normal, snowpack, stream flows, and reservoir levels are generally at to above normal across the area. With a wetter than normal April and near normal temperatures expected, it is anticipated that snowpack, streamflows, and reservoir levels will remain at to above normal. While the growing season has begun, we still expect some frost and freezing conditions generally east of the coastal ranges to temper green-up. Also, with high soil moisture and plenty of snow and water still around, the chances of a prolonged warm period this month are low. We also do not expect flooding to be a concern- as that is rare in April and we don't see any sustained periods of storm activity. Some thunderstorms are possible in a typical April and gusty winds and small hail are possible, though graupel and brief heavy rain are more likely.

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*