National Weather Service Medford

June 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).

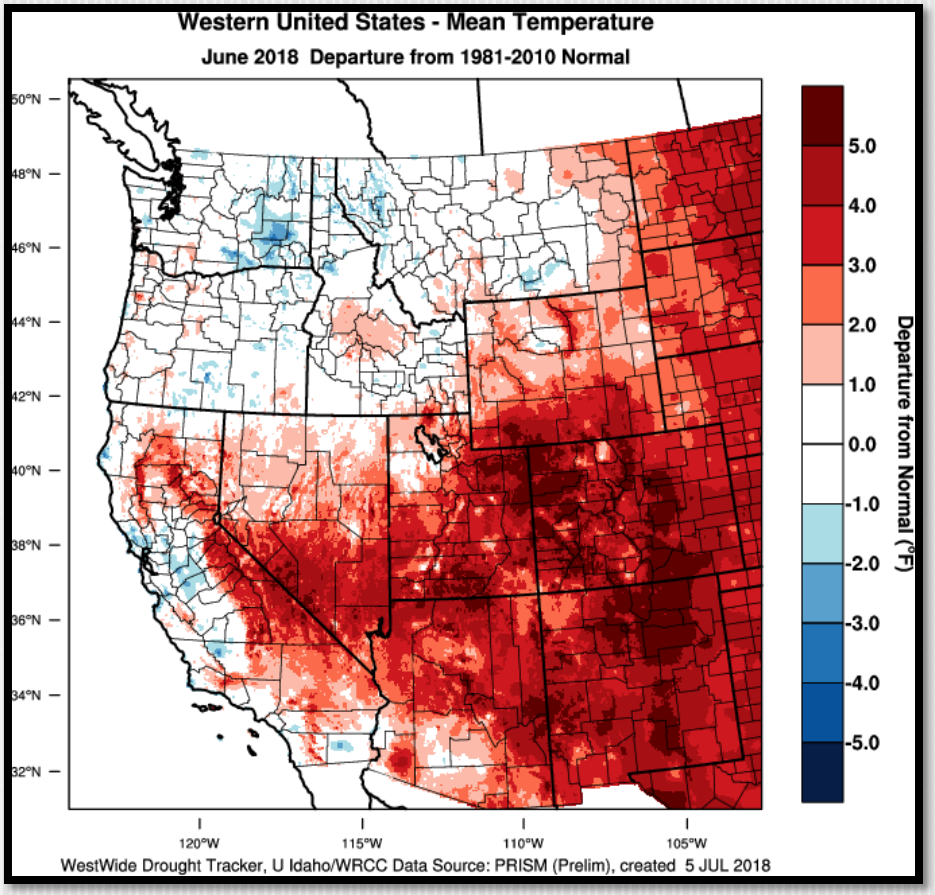
June 2018 Weather Review

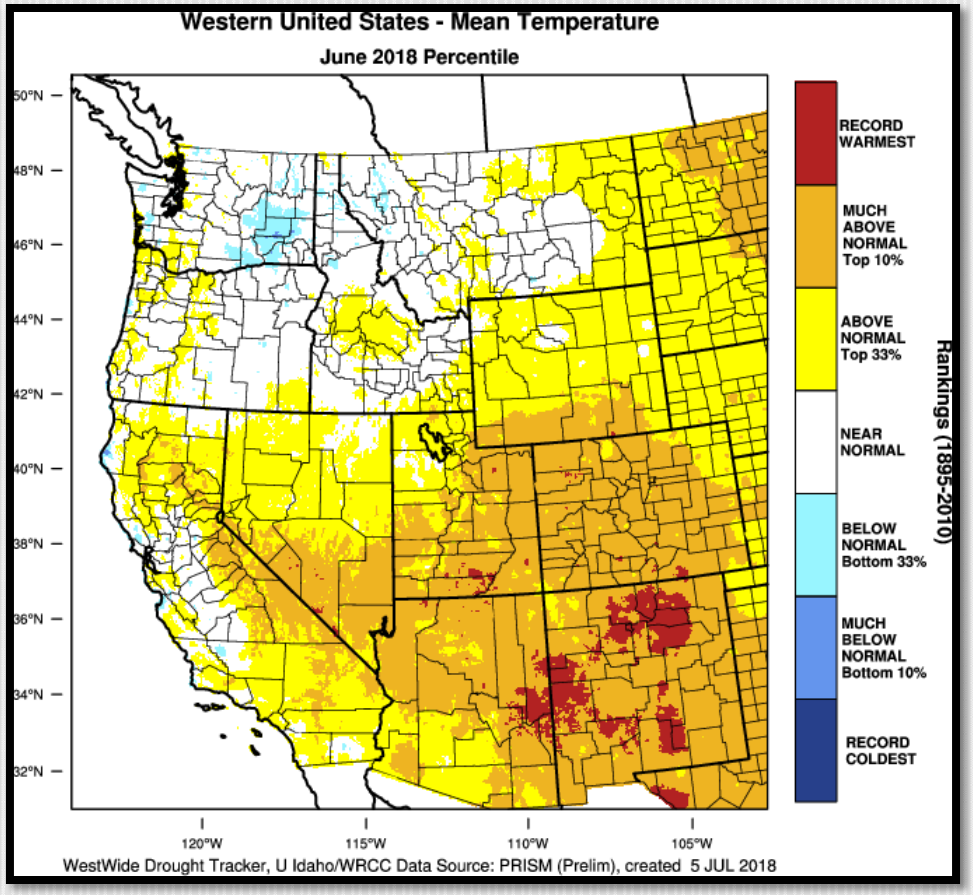
The month of June brought a good mix of spring and summer weather. Like May, the month trended dry and slightly warmer than climatology. The month started off with a short-lived heat wave under a strong ridge, then transitioned to a more progressive pattern that brought afternoon and evening thunderstorms east of the Cascades for several days. Towards the end of the second week of the month, an unusually cold air mass dropped into the region, and brought the bulk of June`s rainfall. A few inches of snow accumulated at higher elevations, including Crater Lake and Mount Ashland, though the snow didn`t stick around long.

An upper level ridge built in behind this system, and several days of warm conditions followed. By the end of the third week of June, a broad upper trough developed over the area. A closed low drifted into the area on June 16th, bringing thunderstorms east of the Cascades and in the Cascade foothills. On June 17th, thunderstorms moved through the Rogue Valley and brought very strong winds, with a recorded gust of 47 mph here at the airport. Although only 0.08 inches of rainfall was recorded at the Medford Airport, reported amounts among spotters in the valley varied with some reporting close to half an inch.

Conditions steadily warmed after this event, and another round of thunderstorms occurred again on the 20th. Quiet weather followed and a steep ridge built over the area on the 24th. This brought the warmest temperatures of the year so far for most locations, including the first 100°F day in Medford. A dry cold front quickly followed, bringing conditions back to climatological normal for the rest of the month.

June 2018 *Observed Temperatures*





Average Temperatures

	Average (°F)	Departure from Normal	Average Max (°F)	Departure from Normal	Average Min (°F)	Departure from Normal
North Bend	57.9	***+1.8°***	64.9	***+3.2°***	50.9	***+0.4°***
Roseburg	65.7	***+1.8°***	79.5	***+3.5°***	51.9	***+0.1°***
Medford	67.7	***+0.9°***	83.4	***+1.8°***	51.9	***-0.1°***
Klamath Falls	59.4	***+1.2°***	77.8	***+3.8°***	40.9	***-1.4°***
Montague, CA	65.5	***+1.7°***	84.0	***+3.7°***	46.9	***-0.4°***
Mt. Shasta City, CA	64.0	***+2.5°***	81.0	***+3.9°***	47.0	***+1.1°***
Alturas, CA	60.5	***+1.1°***	79.9	***+2.2°***	41.0	***0.0°***

Monthly Max & Min Temperatures

	Max (°F)	Date(s)	Min (°F)	Date(s)
North Bend	69°	12th & 17th	43°	1st
Roseburg	95°	19th & 24th	43°	1st
Medford	100°	24th	43°	10th
Klamath Falls	90°	24th	26°	10th
Montague, CA	99°	24th	31°	10th
Mt. Shasta City, CA	95°	24th	32°	10th
Alturas, CA	92°	24th	30°	10th

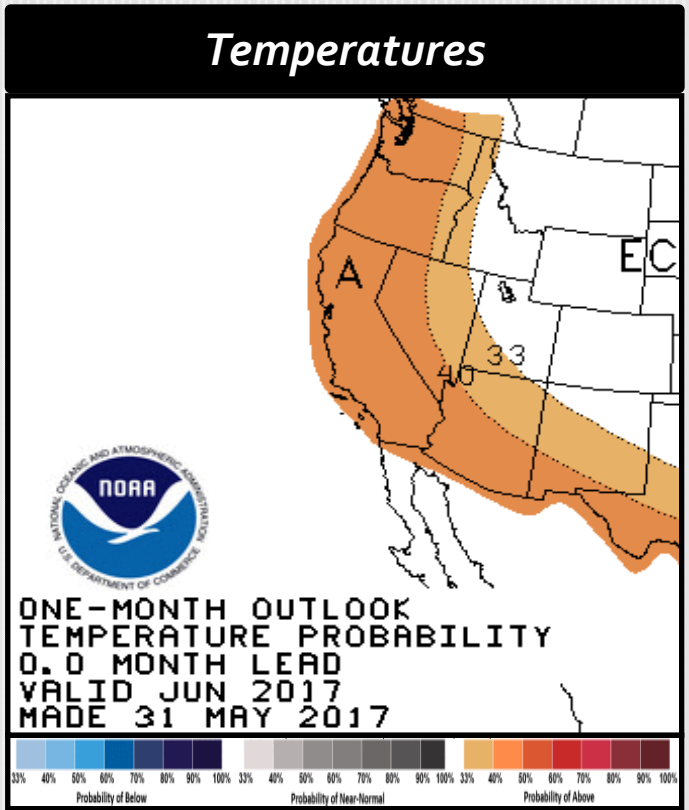
	Record High / Date	Old Record/Year
Roseburg	95° / 19th	93° / 1946

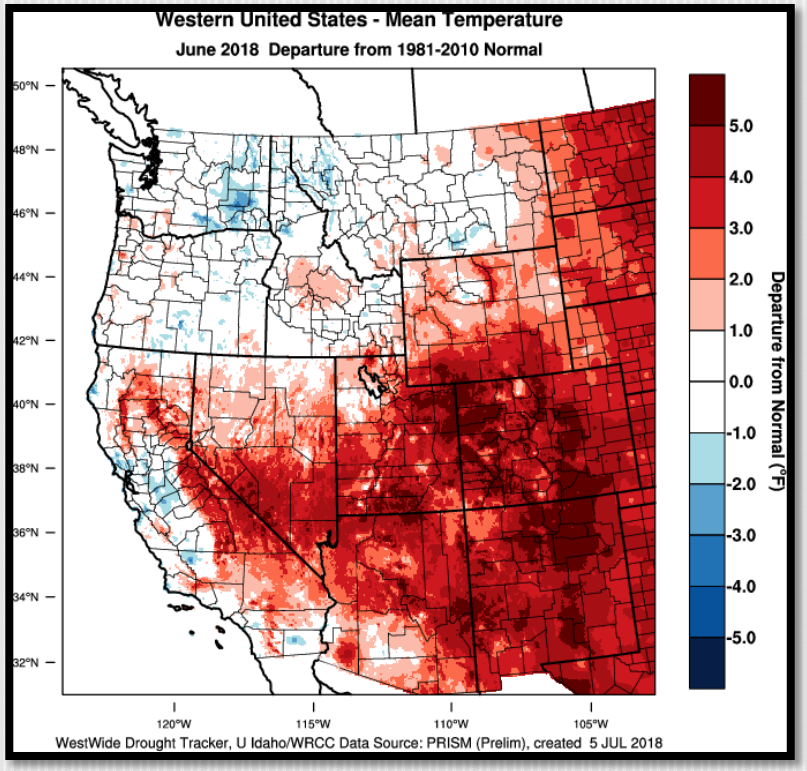
Record Temperatures

	Record Low/ Date	Old Record/Year
Montague	31° / 10th	32° / 1984
Klamath Falls	26° / 10th	29° / 1988

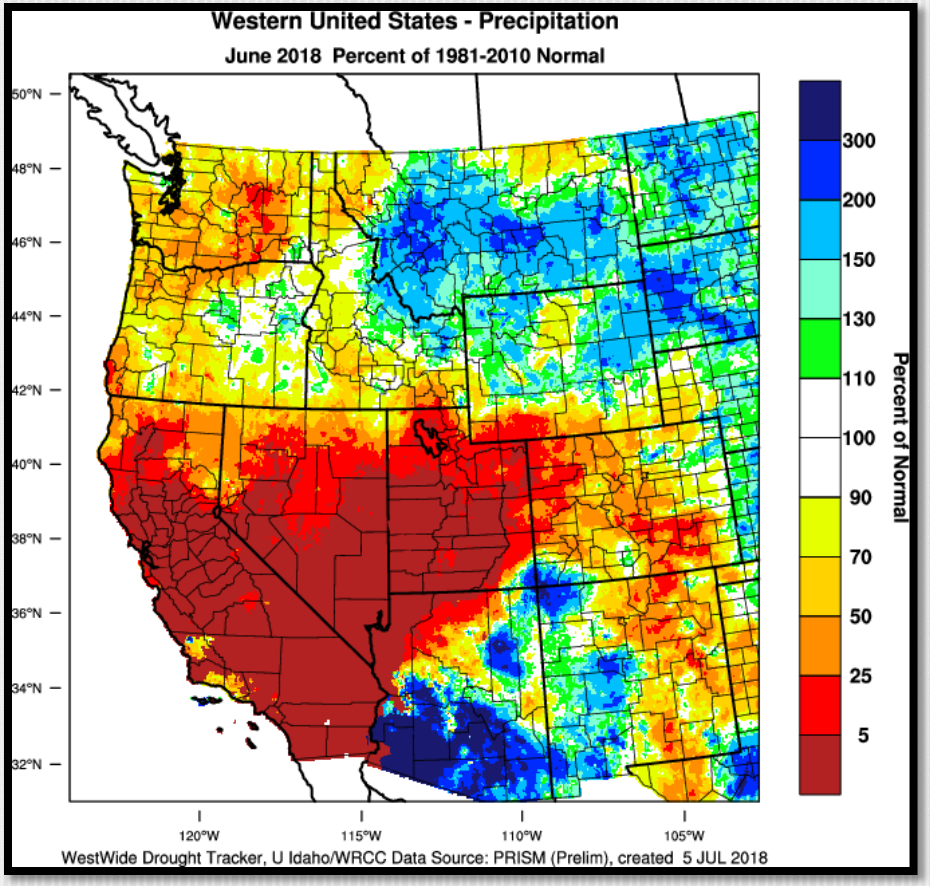
A Look Back at the June 2018 Temperature Outlook

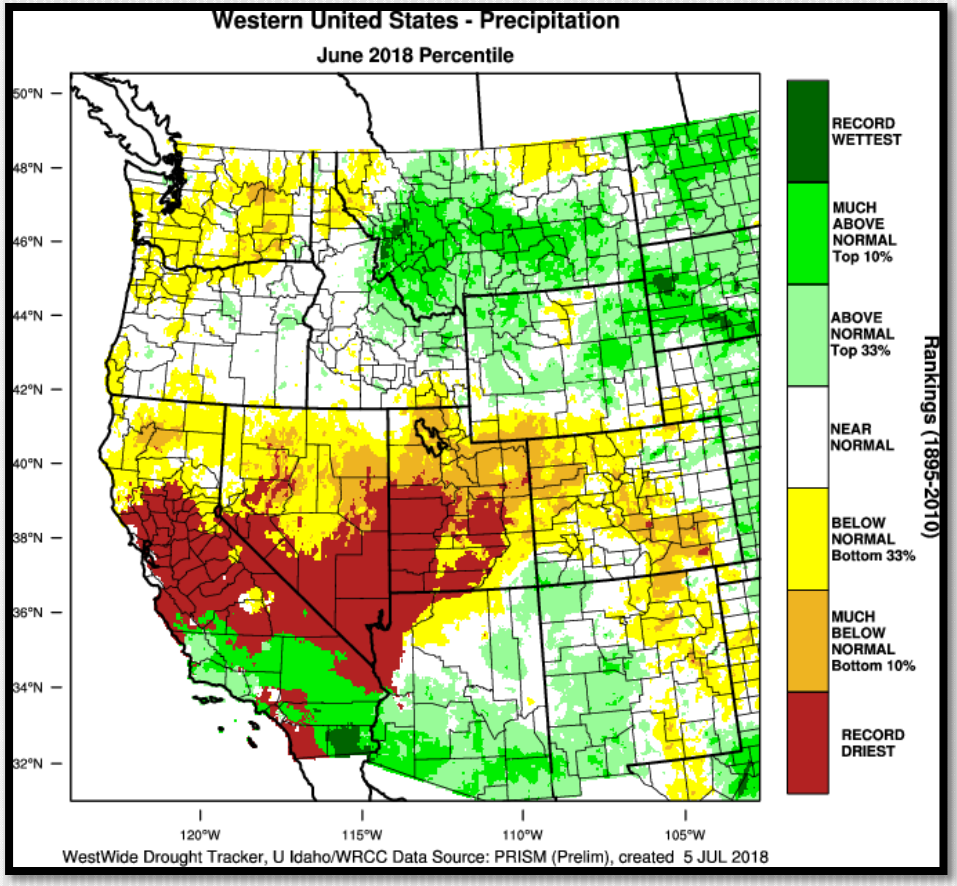
- ***Was the forecast anomaly correct?*** CPC's slightly increased probability for above normal temperatures proved to be a better forecast than did our the localized forecast for temperatures of 3-7 degrees above normal. While we did experience a brief surge in temperatures, as was indicated in the outlook, the troughing that was indicated in the localized outlook for the end of the month proved to be a more dominant feature, leading to a very dry air mass with mild days and cooler than normal nights.





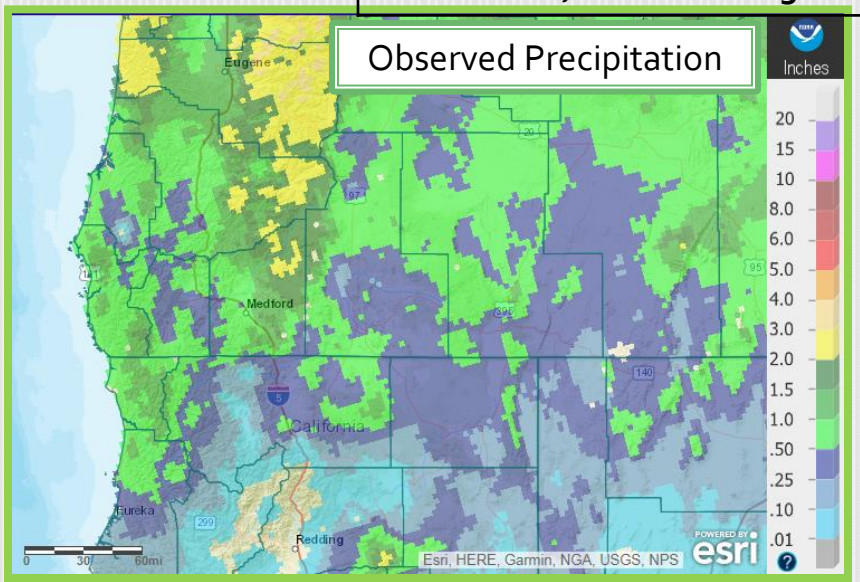
June 2018 *Observed Precipitation*

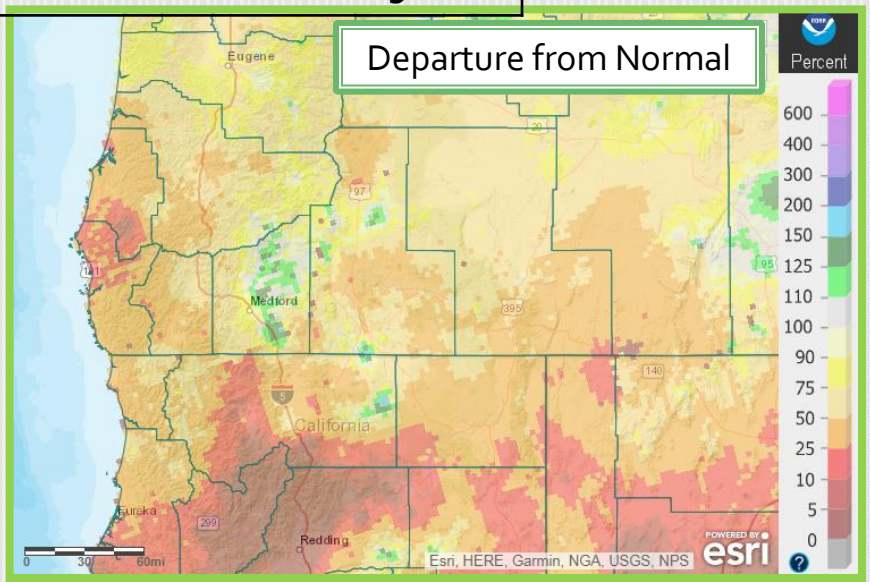




June Precipitation

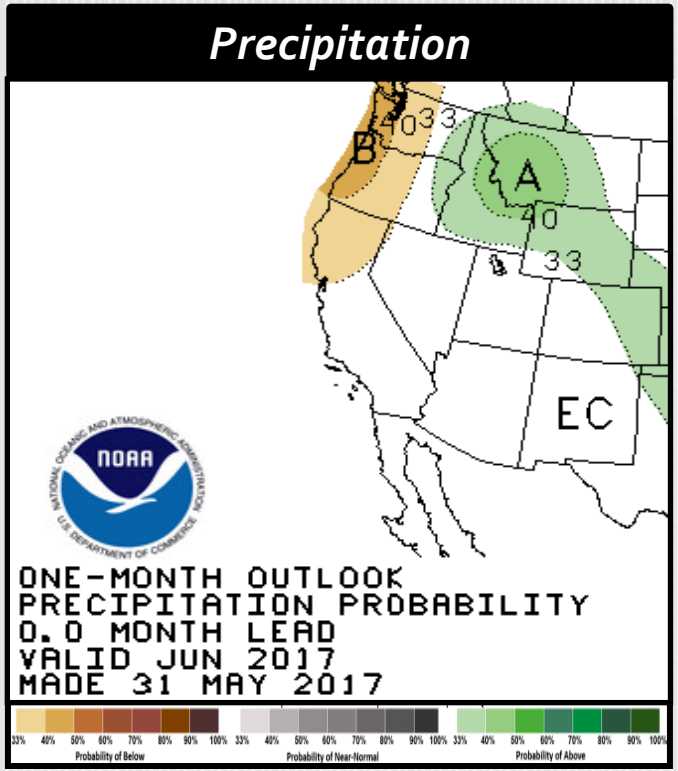
	Total	Departure from Normal	Greatest 24-hr Total	Date(s)
North Bend	0.24"	-1.71"	0.08"	8th
Roseburg	0.62"	-0.51"	0.37"	9th
Medford	0.48"	-0.14"	0.29"	9th
Klamath Falls	0.39"	-0.65"	0.15"	9th
Montague, CA	0.30"	-0.41"	0.13"	20th
Mt. Shasta City, CA	0.02"	-1.18"	0.02"	9th
Alturas, CA	0.32"	-0.58"	0.20"	9th

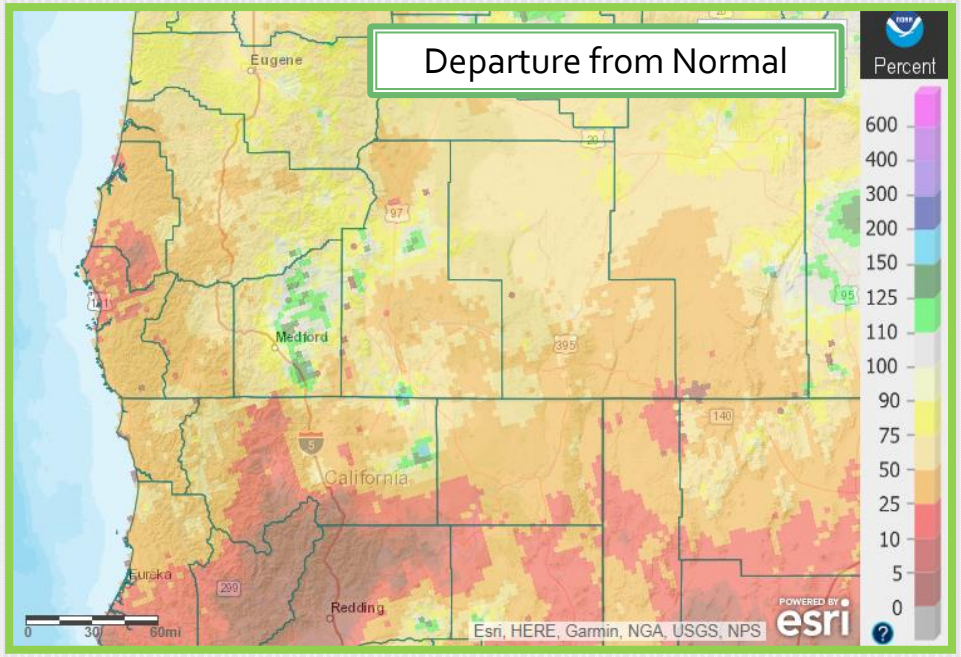




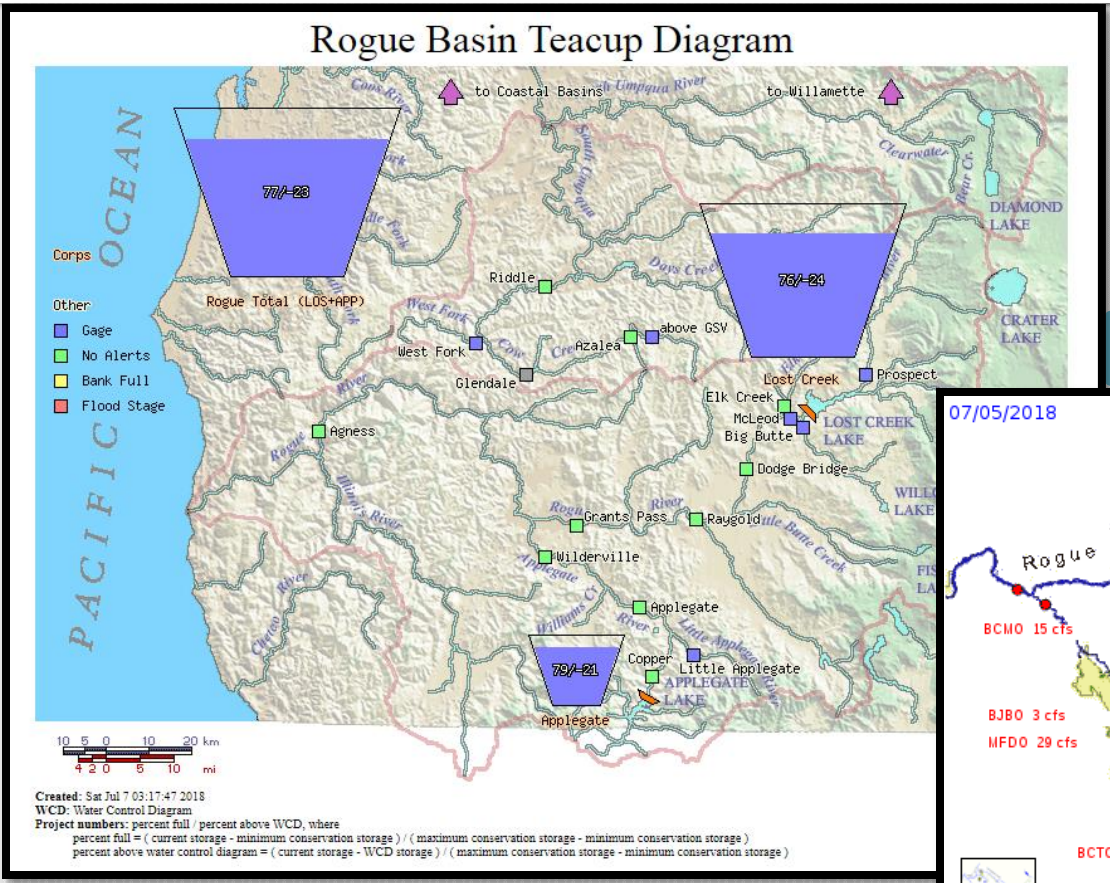
A Look Back at the June 2018 Precipitation Outlook

- ***Was the forecast anomaly correct?*** Both CPC's outlook and our localized outlook expecting below normal precipitation was generally correct. While we had some thunderstorms around June 20th, they were minimal, and we ended the month below normal for precipitation in nearly all areas. However, a healthy late season rain storm early in June did cause a small area west of the Cascades, including Ashland, to be near to slightly above normal for the month for precipitation.



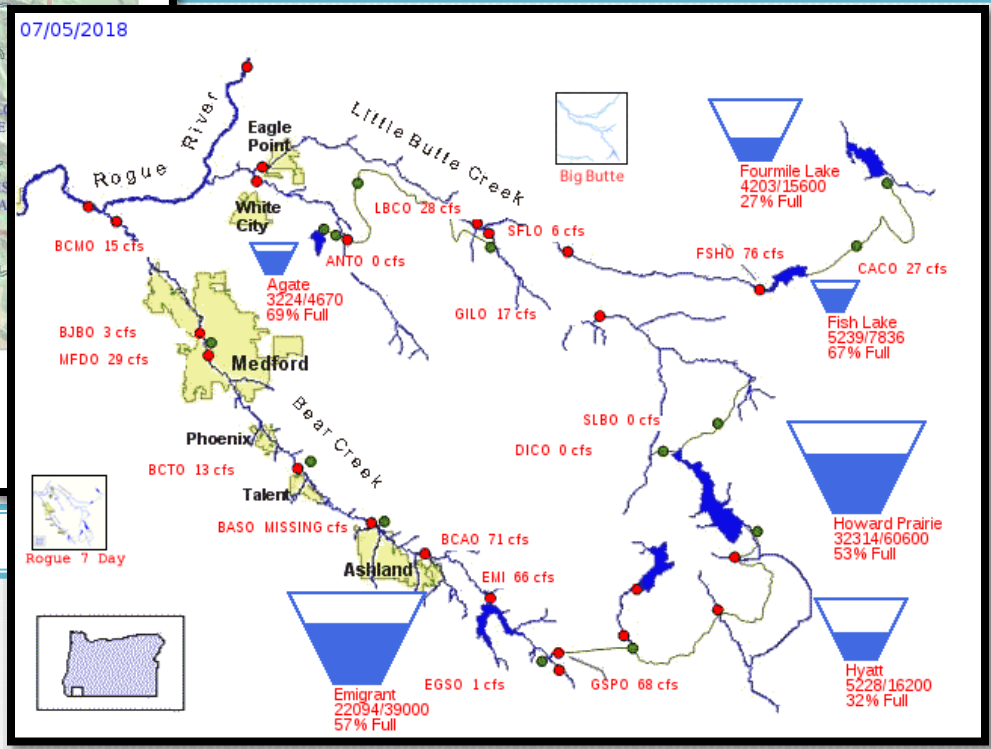


Reservoir Status

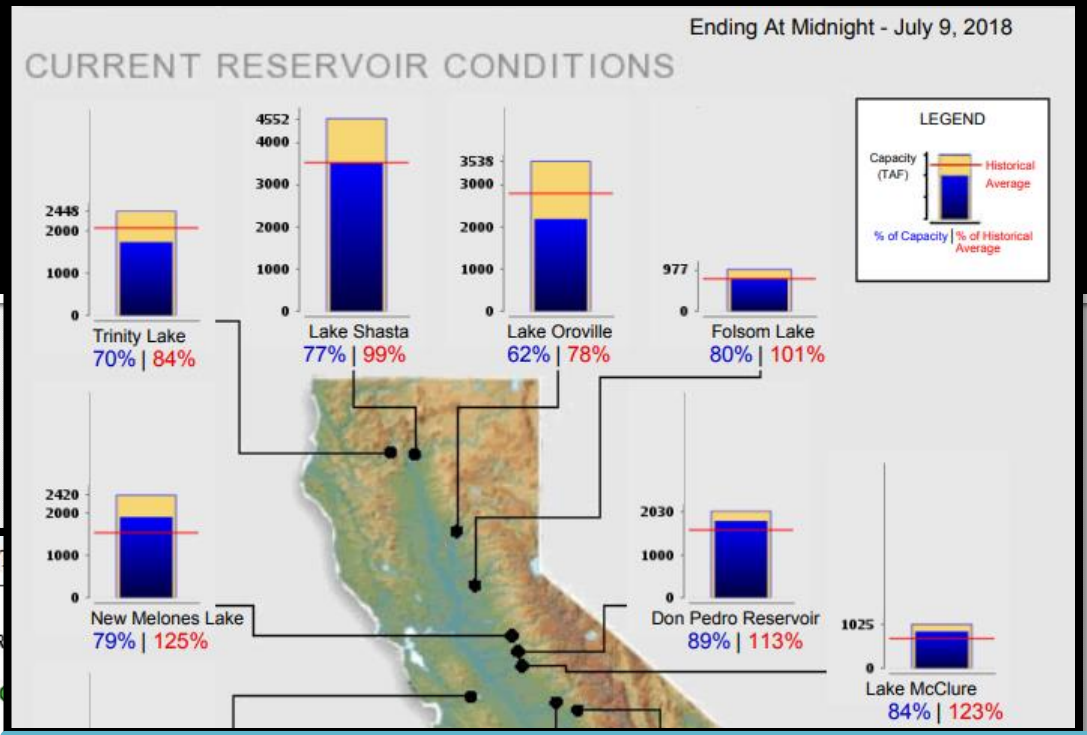


Data above courtesy of US Army Corps of Engineers

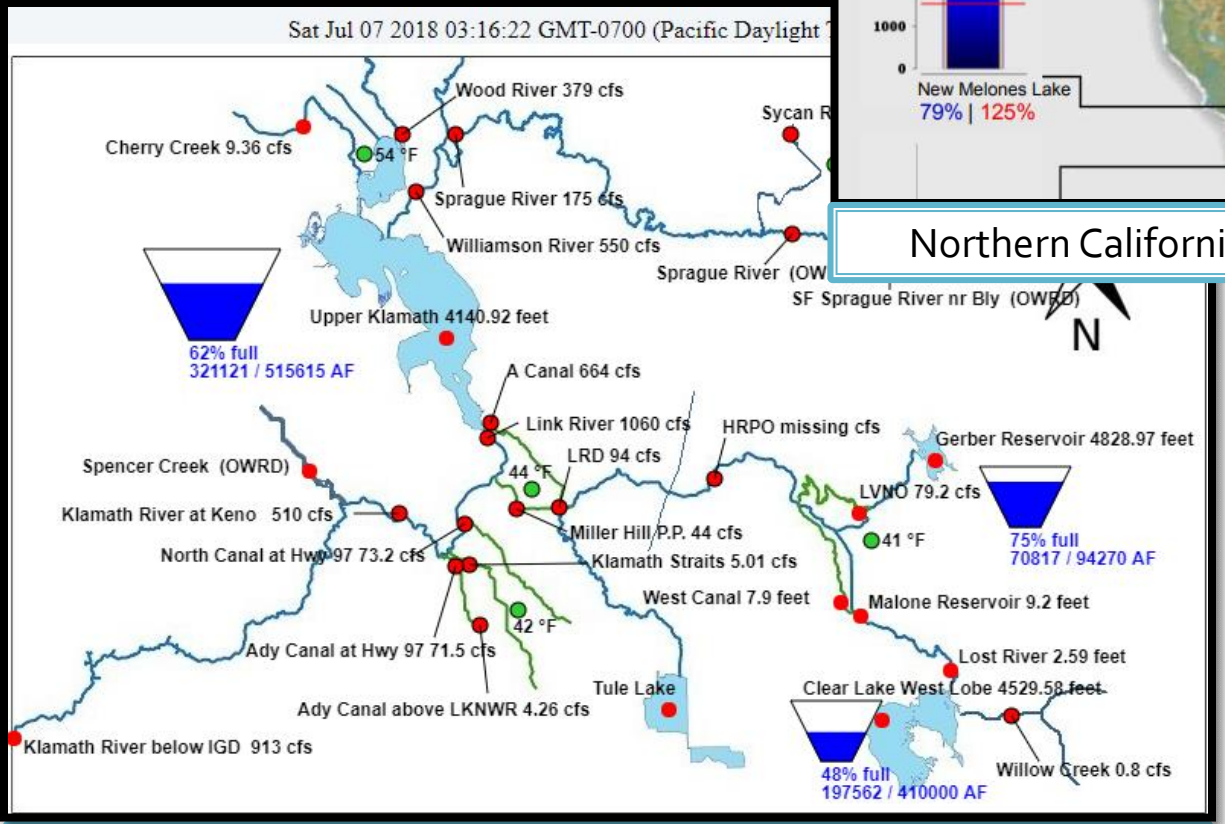
Data below courtesy of Bureau of Reclamation



Reservoir Status

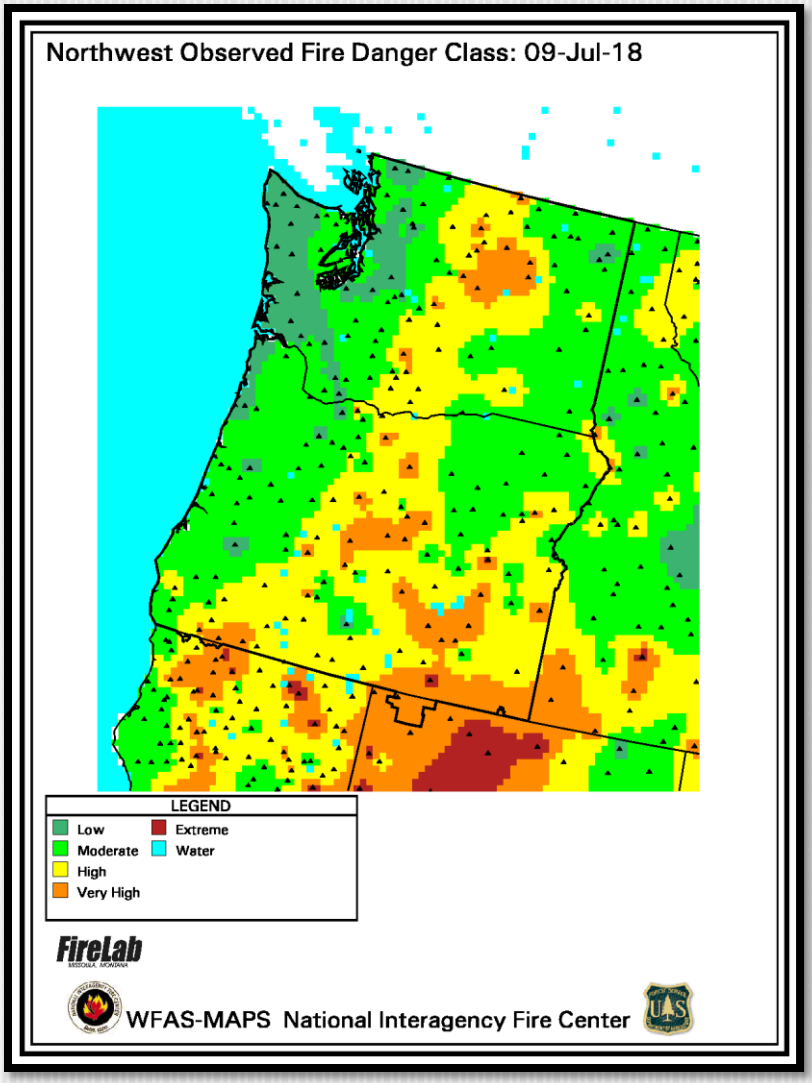


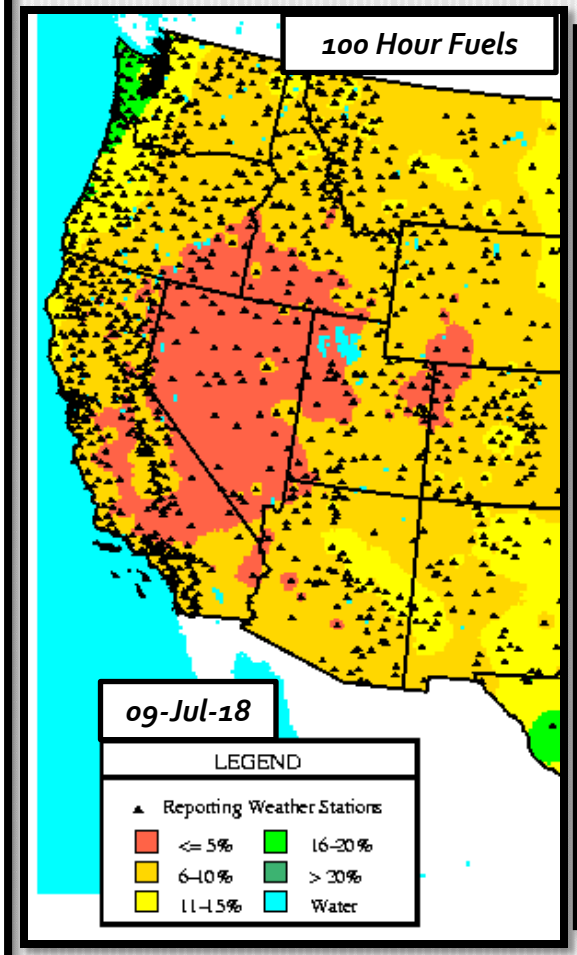
Northern California. [California Data Exchange Center]

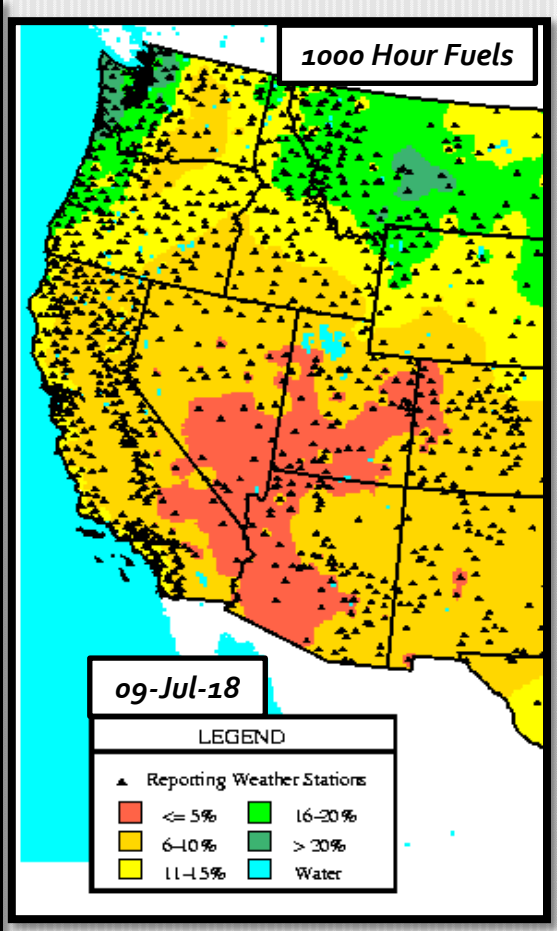


Klamath River Basin. Data courtesy of [Bureau of Reclamation]

Fuel & Fire Potential Status as of July 9th , 2018







Crater Lake

	Average Max Temp (°F)	Average Min Temp (°F)	Total Precipitation	Total Snowfall	Snow Depth as of: 6/30/18	Highest Max/ Lowest Min
June	*59.4°*	*34.5°*	*2.17″*	*3.4″*	*0″*	*77° on 25th / 24° on 10th*
Normal (1981-2010)	*57.9°*	*33.2°*	*2.28″*	*4.1″*	*7″*	*N/A*

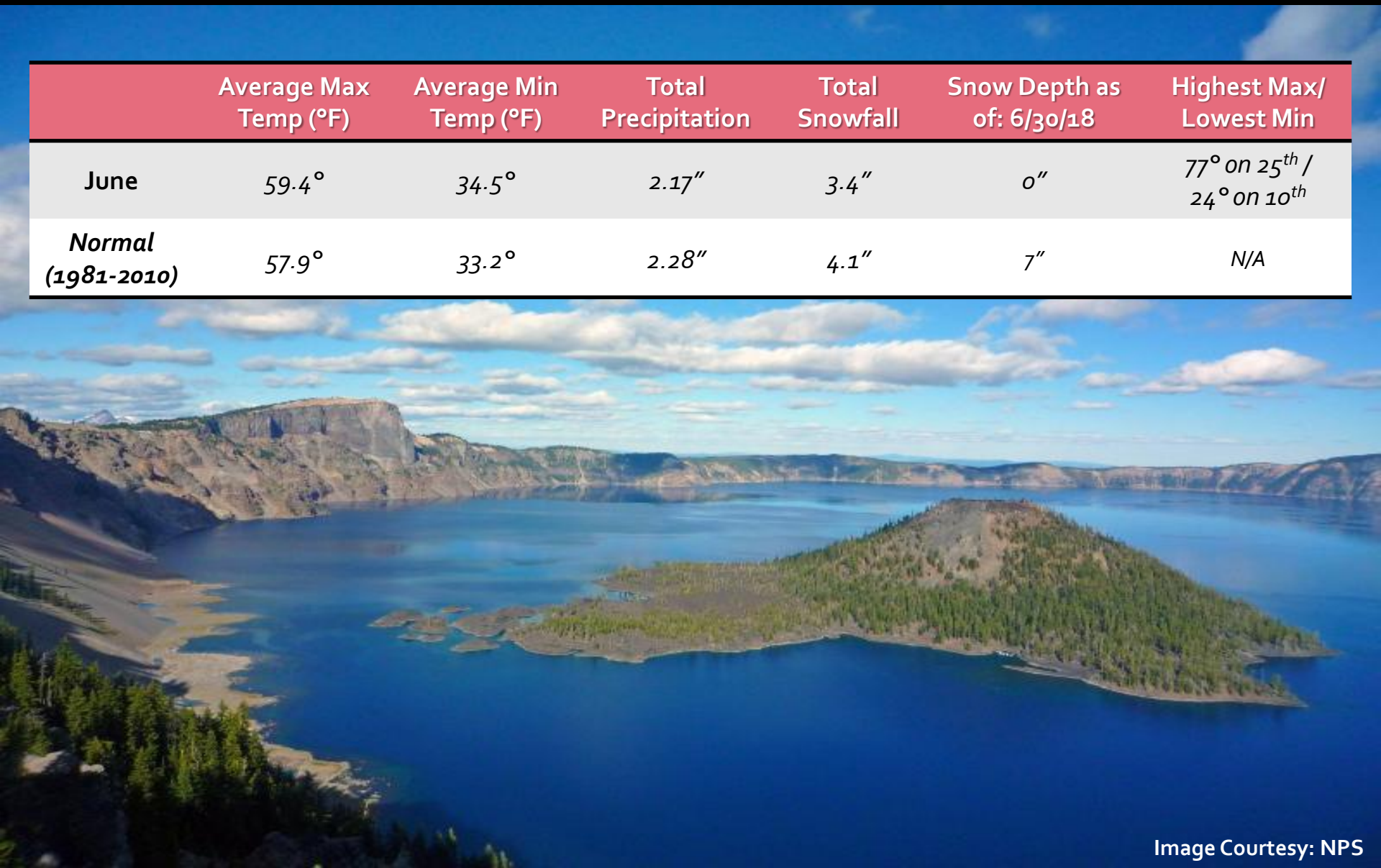
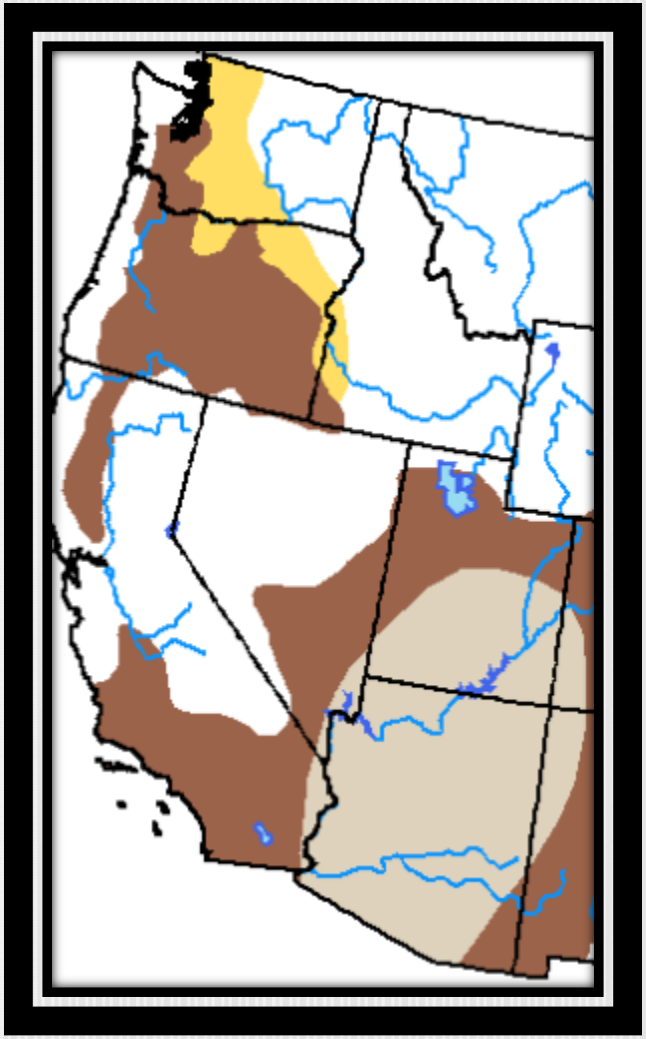


Image Courtesy: NPS

Drought Outlook: July



Drought persists

Drought remains but improves

Drought removal likely

Drought development likely

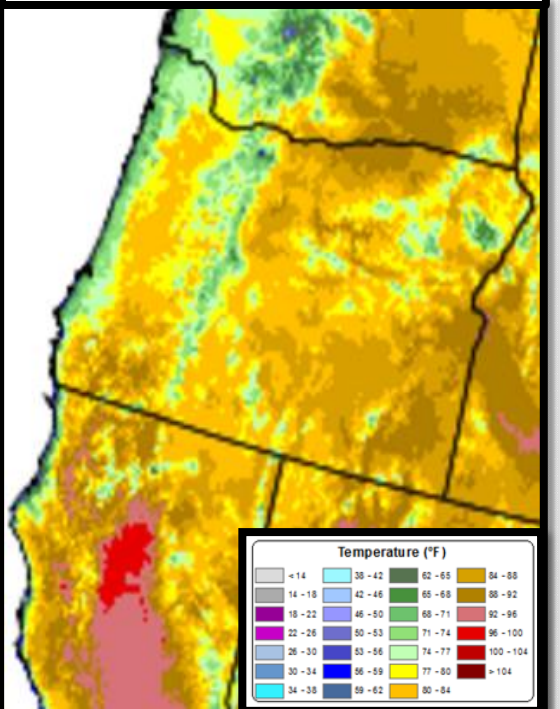
Valid for July 2018
Released June 30, 2018

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

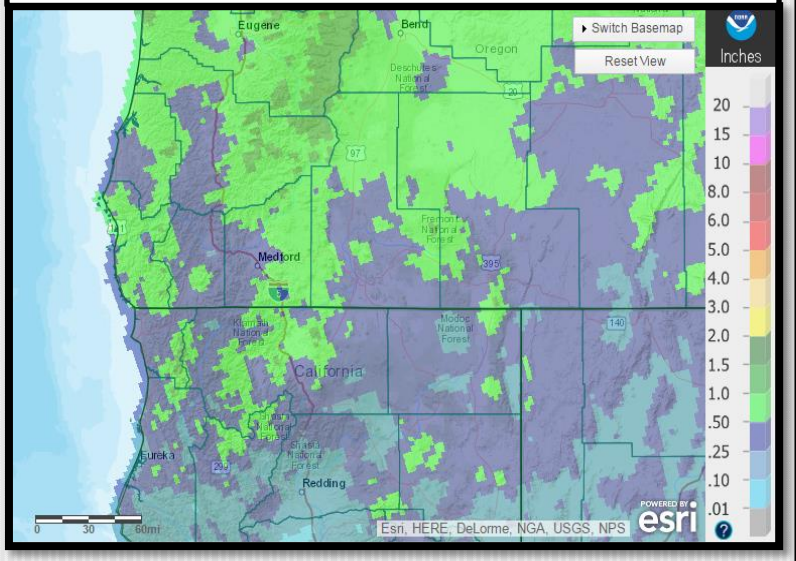
Looking Ahead: Normals for July (1981-2010)

Typically, July, along with August, is one of the two driest and warmest dry season months. High temperatures are very warm to occasionally hot, low temperatures are cool to occasionally warm, and precipitation is minimal, yet locally intense, usually coming in the form of monsoonal showers and thunderstorms. Nearly all of the forecast area receives, on average, an inch or less of precipitation in July. Valley high temperatures are usually in the 80s to lower 90s. Nights are usually cool, with average minimum temperatures in the 40s for valleys east of the Cascades, and 50s in valleys west of the Cascades.

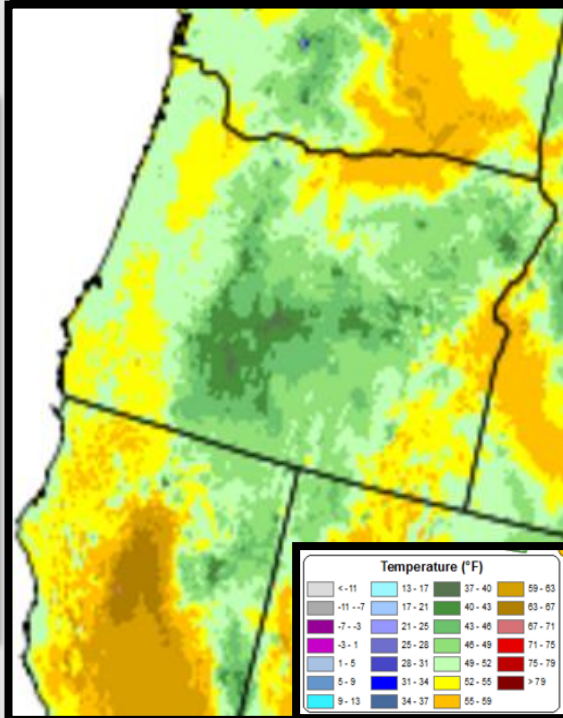
July Avg Maximum Temperatures



July Average Precipitation

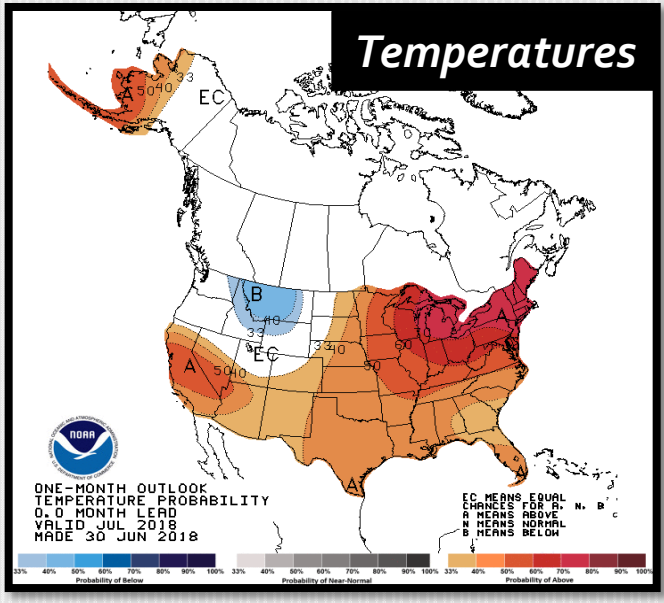


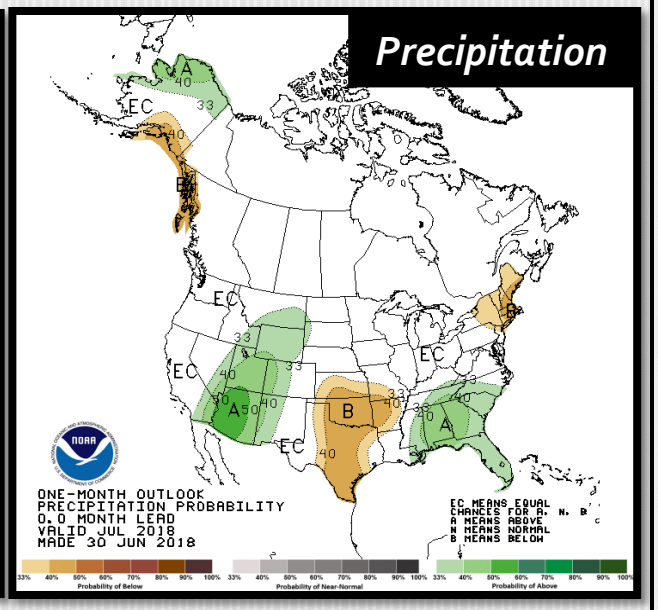
July Avg Minimum Temperatures



Outlook for July 2018

The official CPC July outlook predicts equal chances (33% each) of above, near, and below normal temperatures. There is a slight tilt in the official forecast toward above normal temperatures in our NorCal areas. Conversely, the CFSv2, CanSIPS, NMME, and the GEFS all indicate above normal heights for nearly all of the month and, consequently, above normal temperatures. The four corners high is expected to be the dominant feature over the forecast area, though the North Pacific High is also expected to be strong and sometimes dominant, meaning periods of north and east winds should be expected. We, therefore, expect that temperatures will be above normal for the month, likely on the order of 3-6 degrees. CPC is forecasting equal chances of above, near, and below normal precipitation. However, with the Four Corners high being dominant, we expect periods of anomalous southeast flow to result in an increased probability of above normal precipitation east of the Cascades. This could extend to the Cascades west, but equal chances appears to be the best forecast there.





Expected Impact, July 2018:

Fuels are already drier than normal across the forecast area, and large fires have already started. Anomalous SE flow is expected to result in near to above normal amounts of lightning from the Cascades eastward, some of which has a chance of reaching the west side. With the preceding fuel conditions and near to above normal lightning expected, we expect fire activity to be above normal. This may be mitigated east of the Cascades by the end of the month. Also, lower than normal water supplies will become an impact in some smaller drainages that depend on mid-elevation snowpack.

*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 June 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 June 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*