

2018 Recap and 2019 Fire Season Outlook

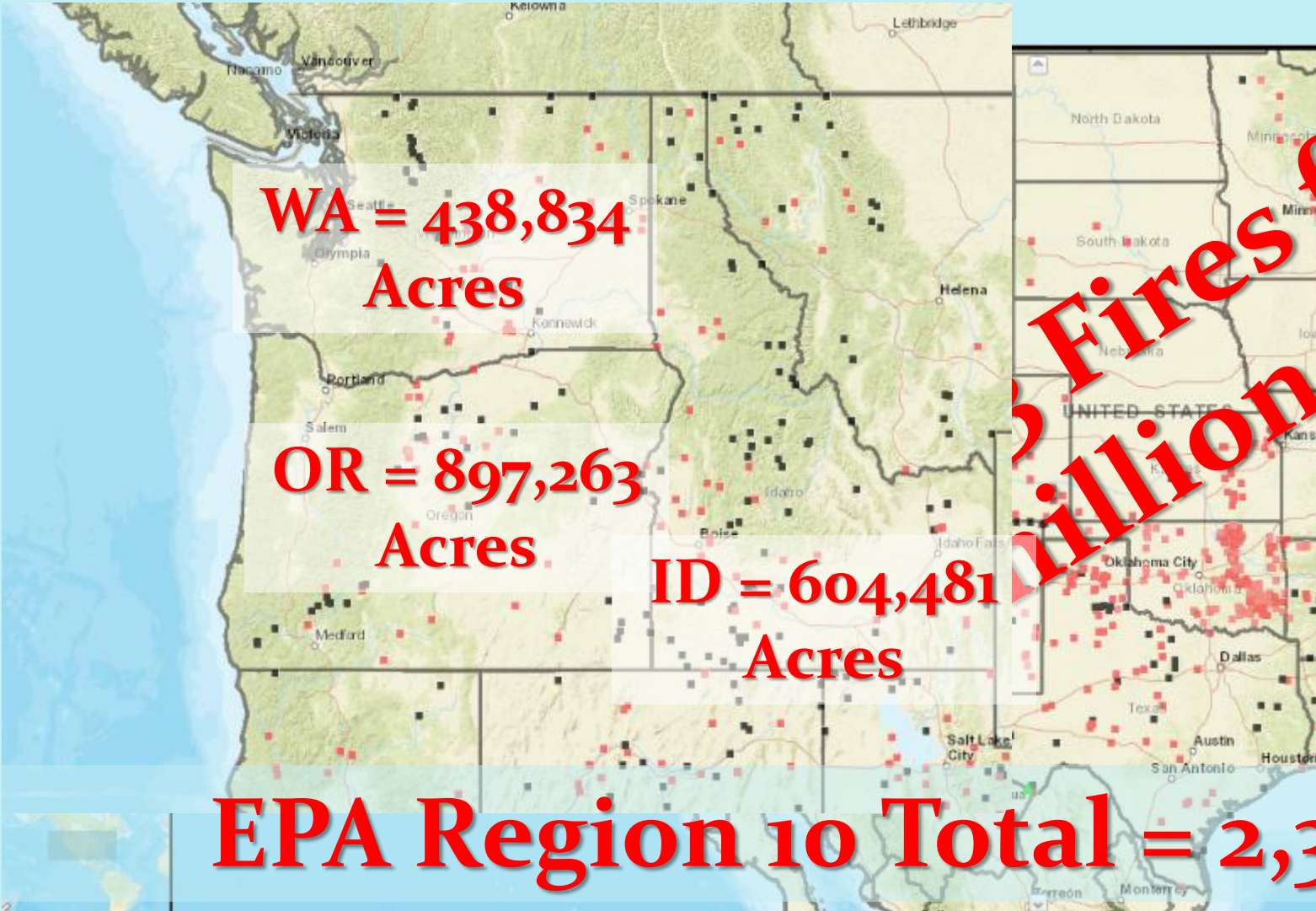
Logan Johnson, Meteorologist in Charge
NOAA - National Weather Service, Seattle



Grand Mound, August 2, 2017 (not Scatter Creek Fire)
Photo by Brad Hall, used with permission



2018 Fires




WA = 438,834
Acres

OR = 897,263
Acres

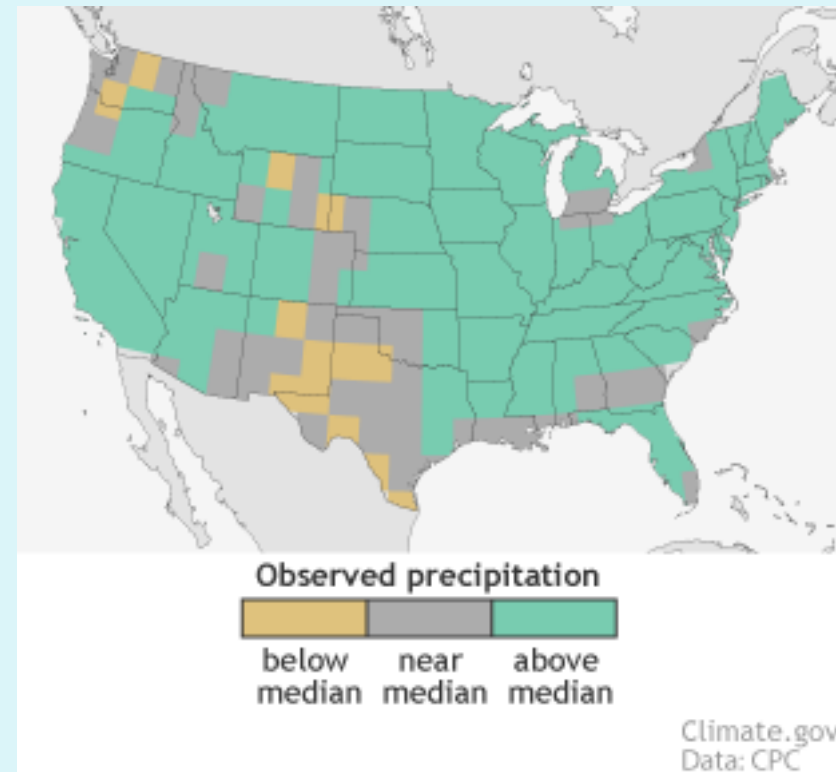
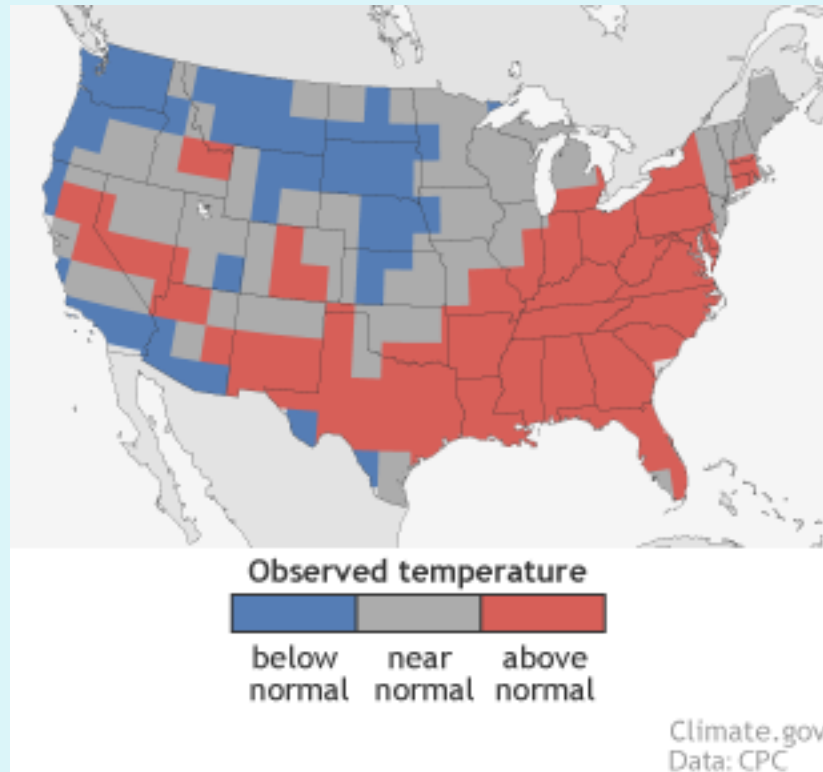
ID = 604,481
Acres

EPA Region 10 Total = 2,351,261 Acres



AK = 410,683
Acres

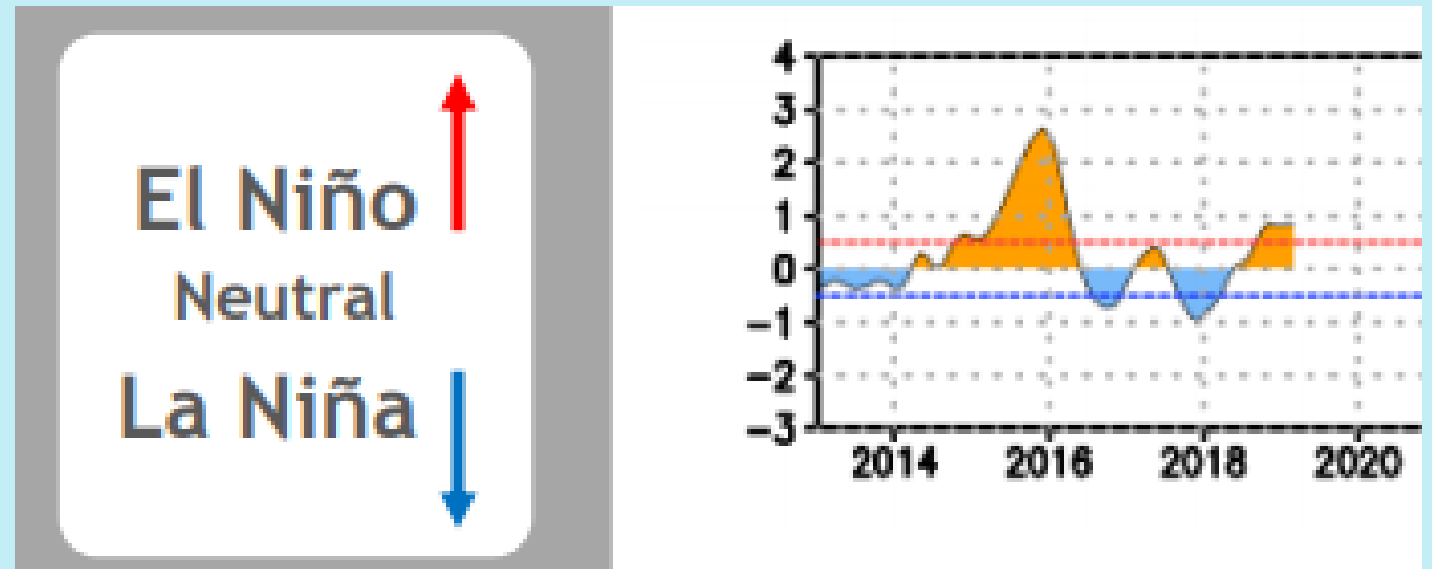
Winter 2018-2019 (Dec-Feb)



While February would make an impact on the average temperatures for the winter over the Pacific NW, it did not have enough of an impact with regards to precipitation, where most of WA and portions of OR and ID remained near or below normal.

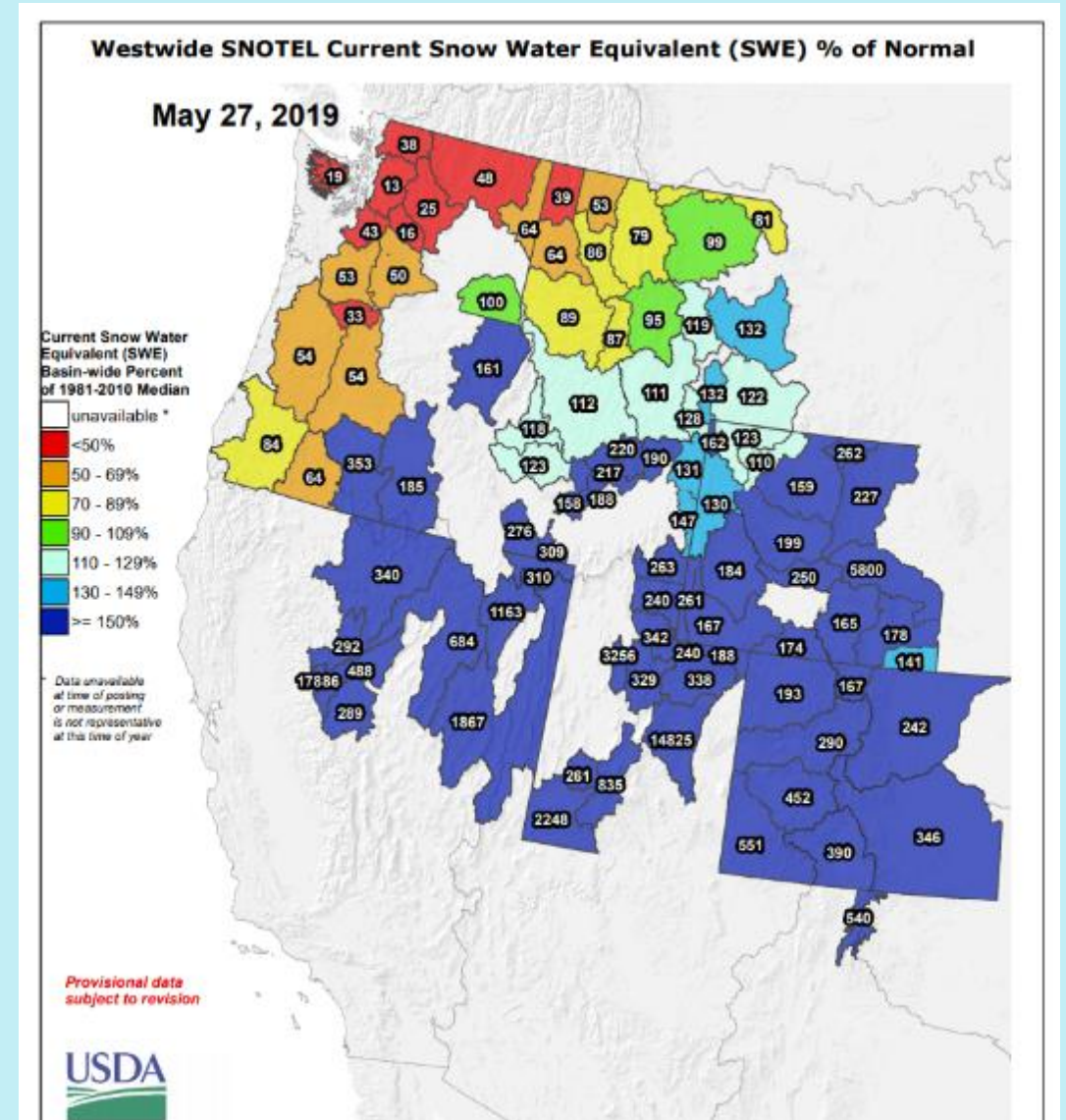
ENSO (El Nino/La Nina)

- 2018 was coming out of a La Nina and was generally neutral for much of the year, including during the Pac NW Fire Season.
- 2019 finds us coming out of neutral conditions and in a weak El Nino in the run up to Fire Season.



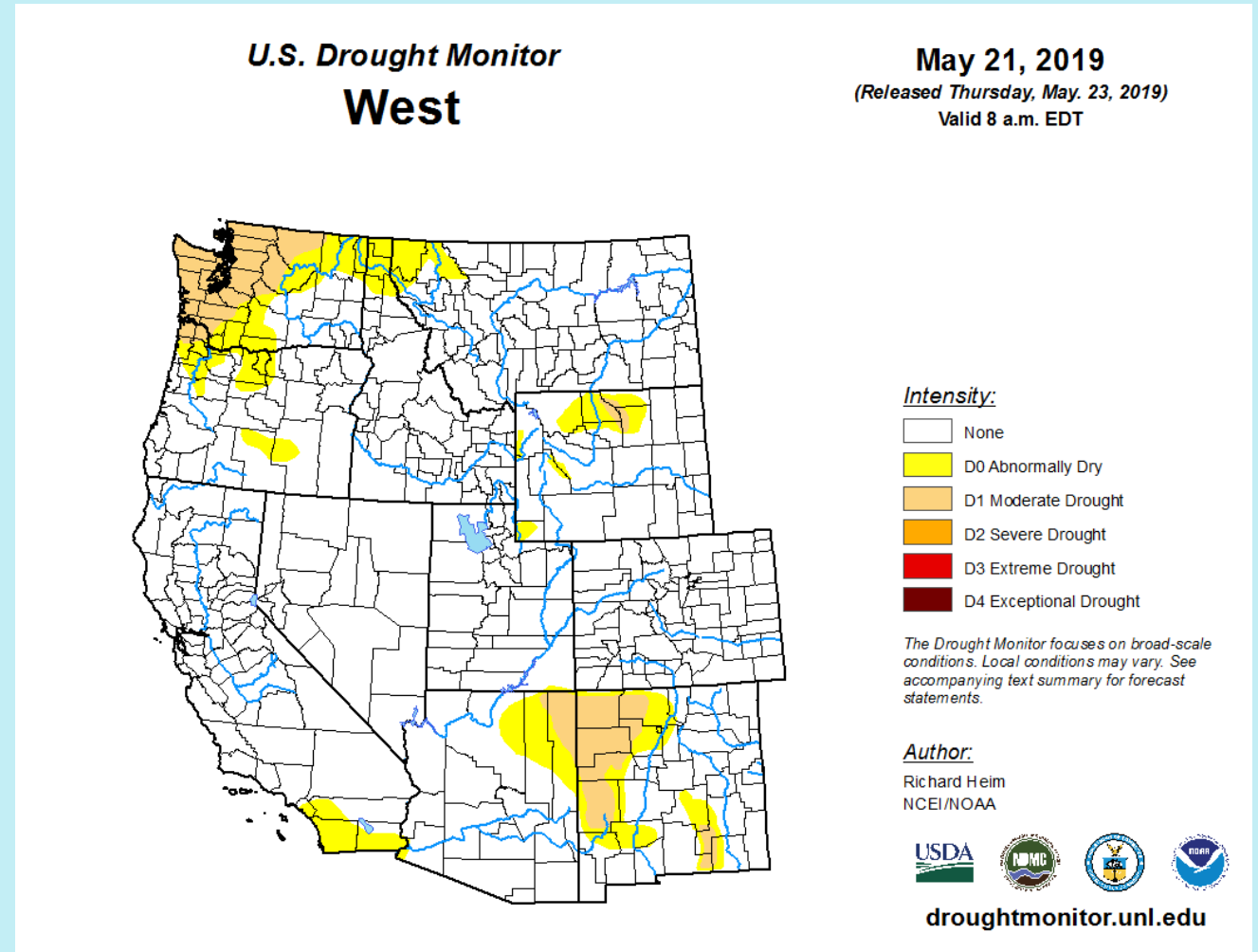
The Road to Fire Season 2019

- While it doesn't have the strongest correlation to Fire Season activity, current snow/water equivalent values are well below normal in parts of the Pac NW.
- Nearly all of WA, western OR and northern ID are less than 2/3 of normal, with most of WA less than half!



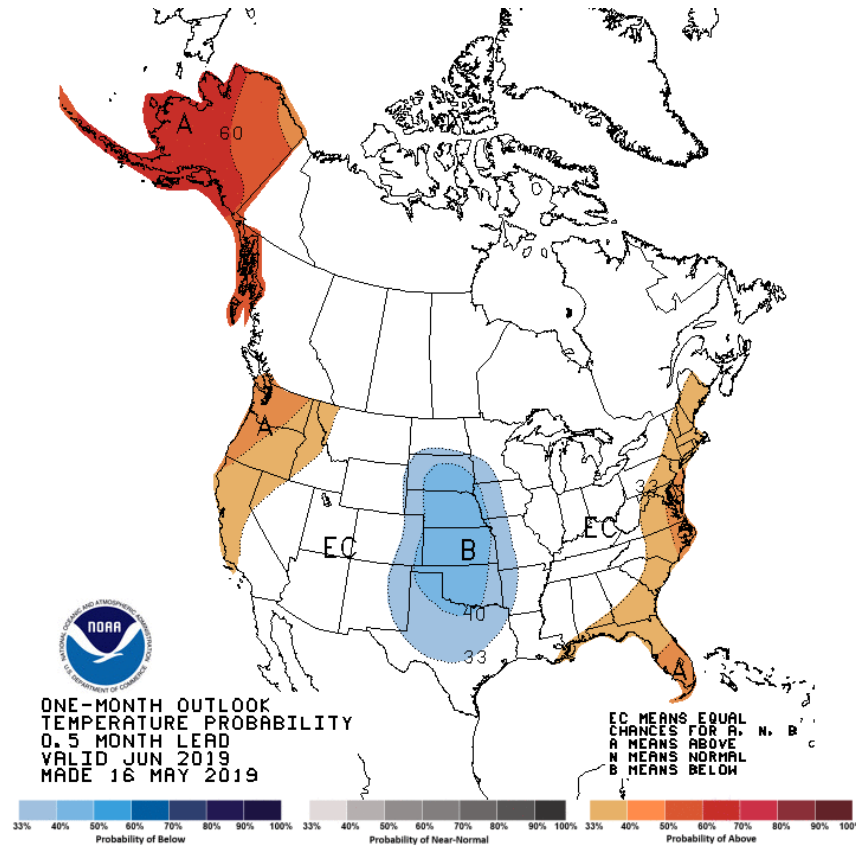
The Road to Fire Season 2019

- A stronger indicator of how active a fire season will be, the presence of drought, paints an increasingly disconcerting picture over WA, while OR and ID are faring better.
- Most of WA finds itself in either Moderate Drought or Abnormally Dry conditions.

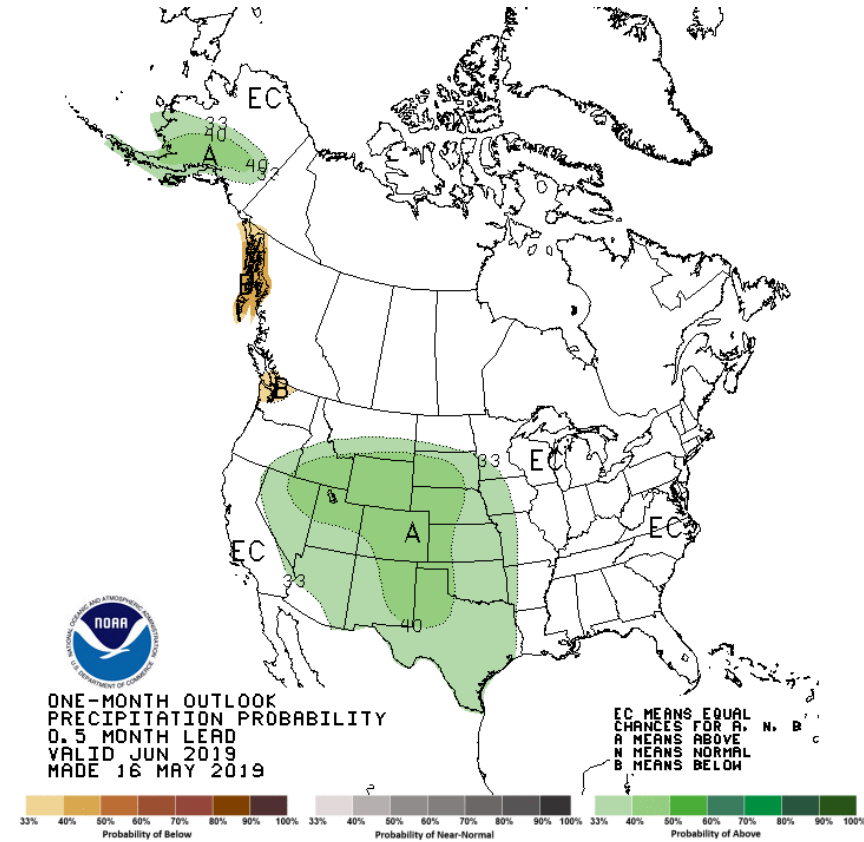


Temperature and Precipitation Outlook June 2019

Temperature



Precipitation

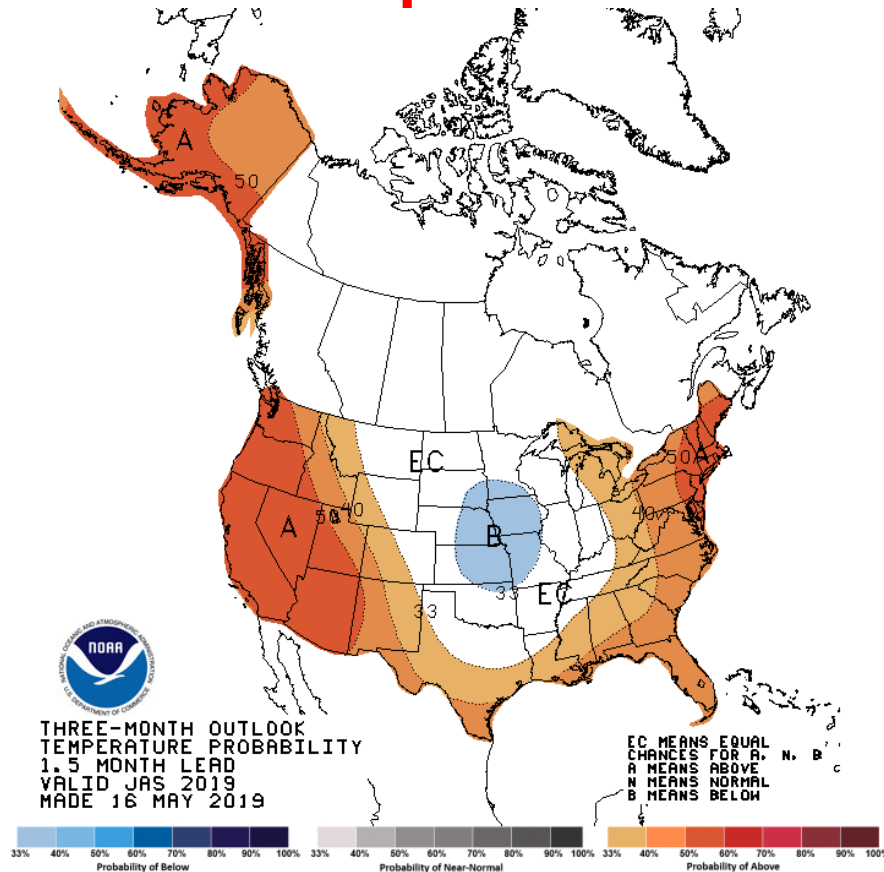


May was a bit of a sandwich, with a warm and dry beginning and end but a cool and wet bit in the middle. June looks warm and dry for WA, OR and the ID panhandle, warm but near normal for precip in AK.

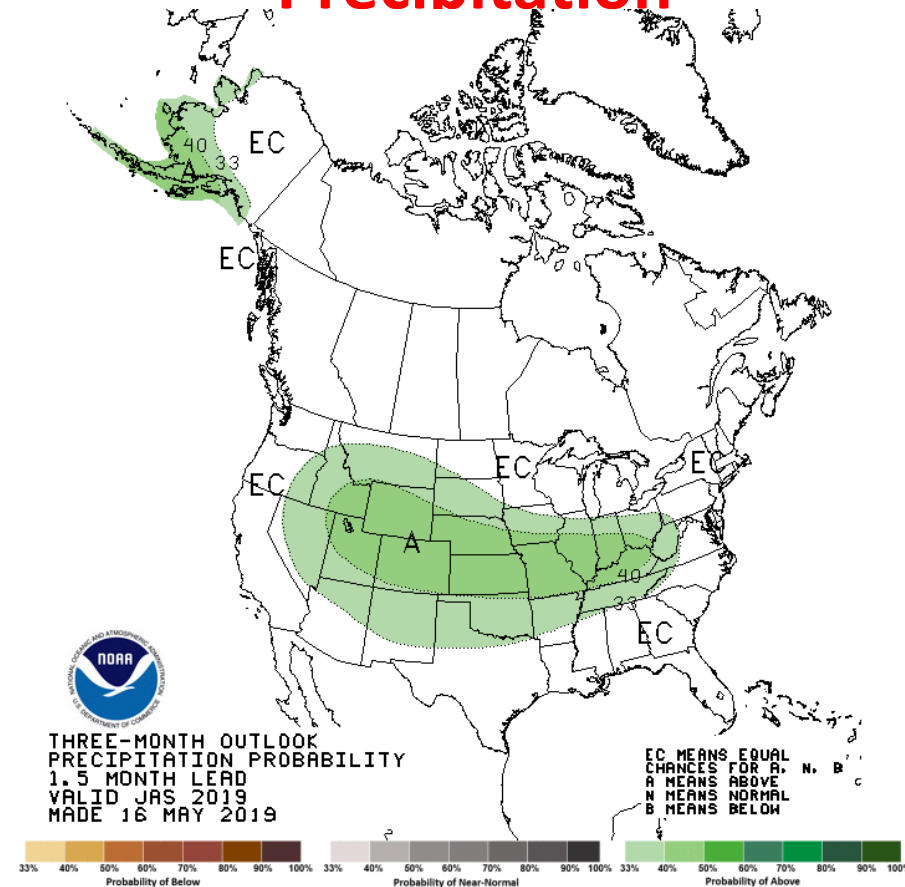
Temperature and Precipitation Outlook

July-Aug-Sep 2019

Temperature



Precipitation

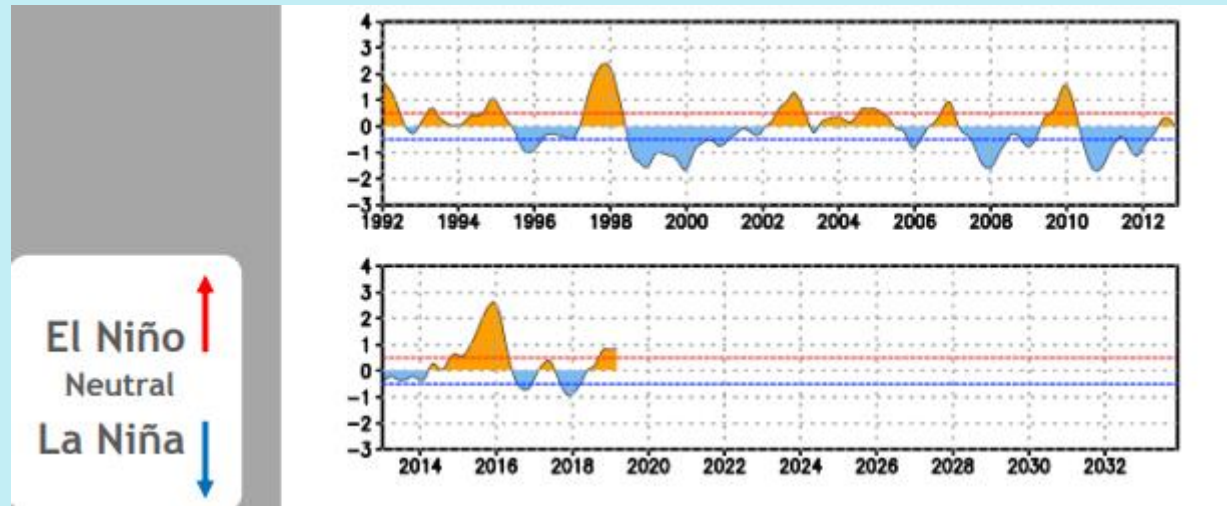


For Washington and Oregon, pattern suggests:

- *Plenty of hot weather, low humidity, stronger north and west wind, dry fuels*
- *Near normal precipitation may mean an increased number of lightning starts*

The “*New Normal*”

- If we look at the past 10 years (2008-2018), 5 of them are in the top 10 for acres burned (WA + OR):
 - **2018 – 1,336,096 (4th)**
 - **2017 – 1,142,442 (5th)**
 - **2015 – 1,823,473 (1st)**
 - **2014 – 1,383,514 (3rd)**
 - **2012 – 1,520,374 (2nd)**
- These years ran the entire range of the El Nino/La Nina cycle.
- Instead of relying on analog years, it might be a good practice to head into each season thinking that it will be an active one unless there are strong indicators otherwise!



Bottom Line for 2019 PNW Fire Season

- **Season Starting Time –**
 - *Early start* entire Pac NW due to warm, dry spring
- **Overall Fire Activity –**
 - *Above normal* due to warm, dry summer
 - Near normal precipitation may allow for more moisture during the season, but also an increased number of lightning starts.
- **Season Ending Time –**
 - No indicators yet to show either an early or late finish





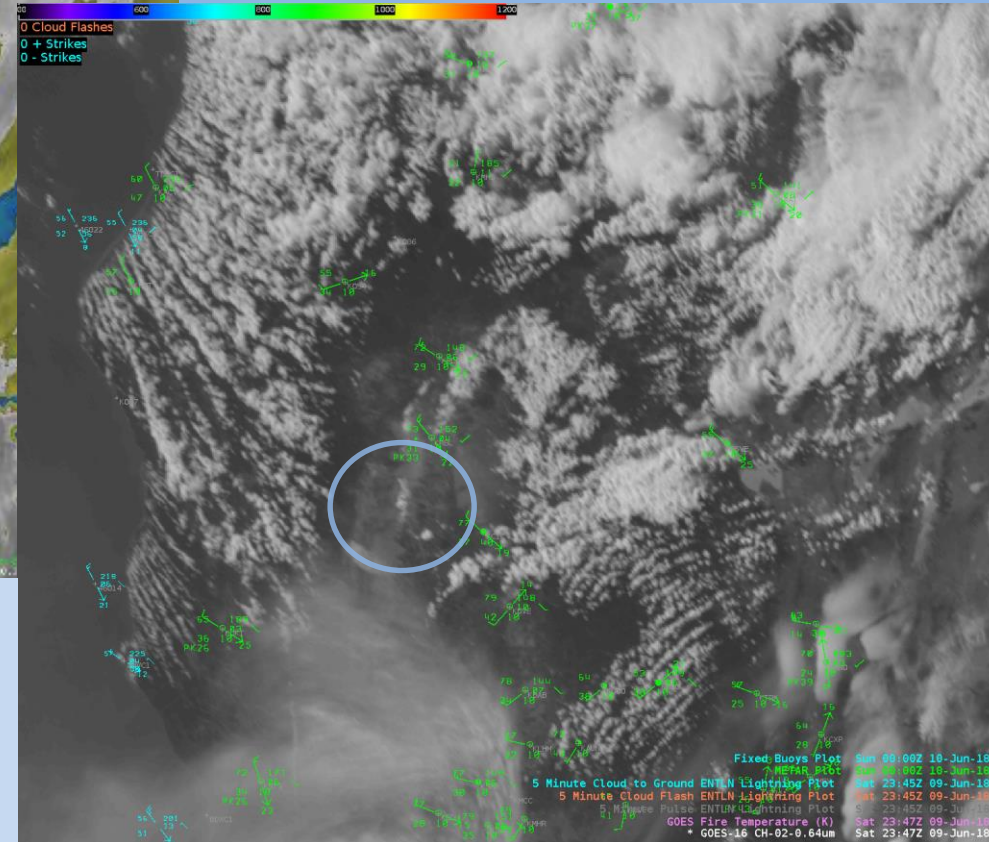
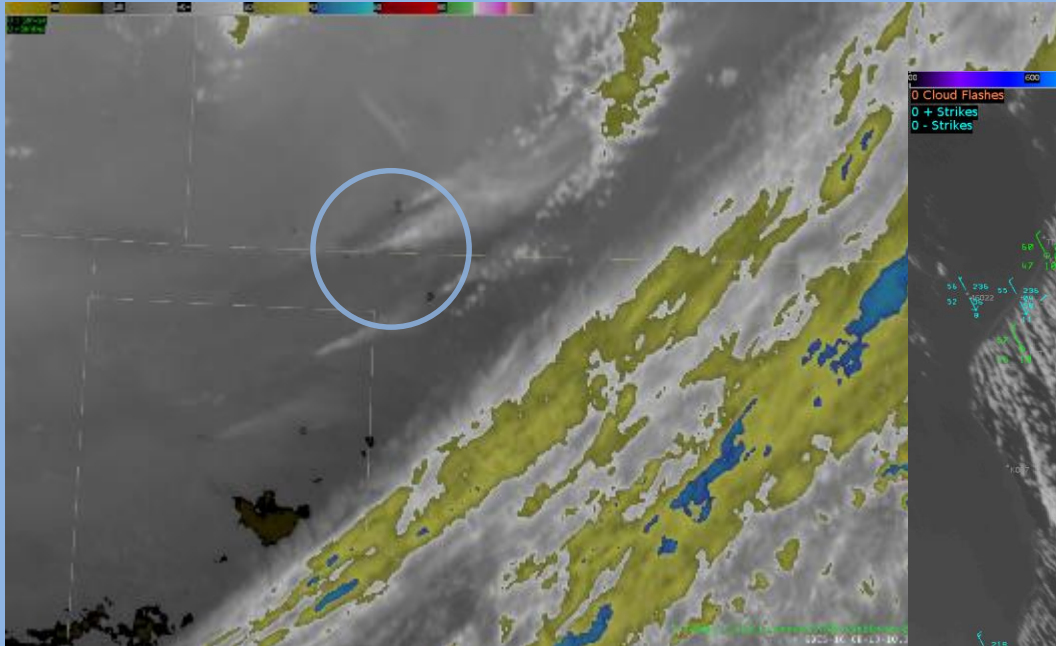


- NOAA Launched GOES 17 on March 1, 2018
- GOES 17 **became operational** Feb 12, 2019





Hot Spot Detection via GOES



- GOES can “spot” fire as small as 15 acres
- We can contact our fire partners know when we spot a new fire
- GOES is now sometimes the **first means of wildfire detection**



We may report a fire to you



- What we can give you:
 - Lat/Lon to nearest tenth of a degree
 - Time of first detection
- Expected Circumstances:
 - Will be uncommon (1-3 times per season)
 - Fire will already be large, i.e. 15+ acres
 - Thick regional smoke and remoteness will give satellite the biggest advantage over human detection or 911 calls



Forecast Builder



- Testing phase this summer
 - Days 4-7
 - Forecaster will populate certain weather elements directly from NBM (National Blend Model)
 - (T, Td, RH, Sky, PoP, QPF, Snow/Freezing levels)
 - Then adjust accordingly
- Goes 'Live' this fall
- Why?
 - Forecaster emphasis on days 1-3
 - Increased focus on making sure messaging matches forecast and vice-versa.



Social Media



- **Twitter** is NWS's go-to social media platform of choice, but we do have Facebook
- **@NWSSeattle** has 76,000+ Twitter followers, helping to spread important messages!
 - Topics include:
 - Current Weather – Including all watch/warning issuances
 - Forecast Weather – Including upcoming weather events of concern
 - Past Weather, Climate Factoids, Pics, Astronomical Facts
- Monitoring is a standard duty of forecasters on shift!
 - Hashtags we look for include:
 - #wawx
 - #WaWildfire
 - #fire (within 300 miles of Seattle)



QUESTIONS???

Feel free to contact us!

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