

# Long-Term Weather Forecast

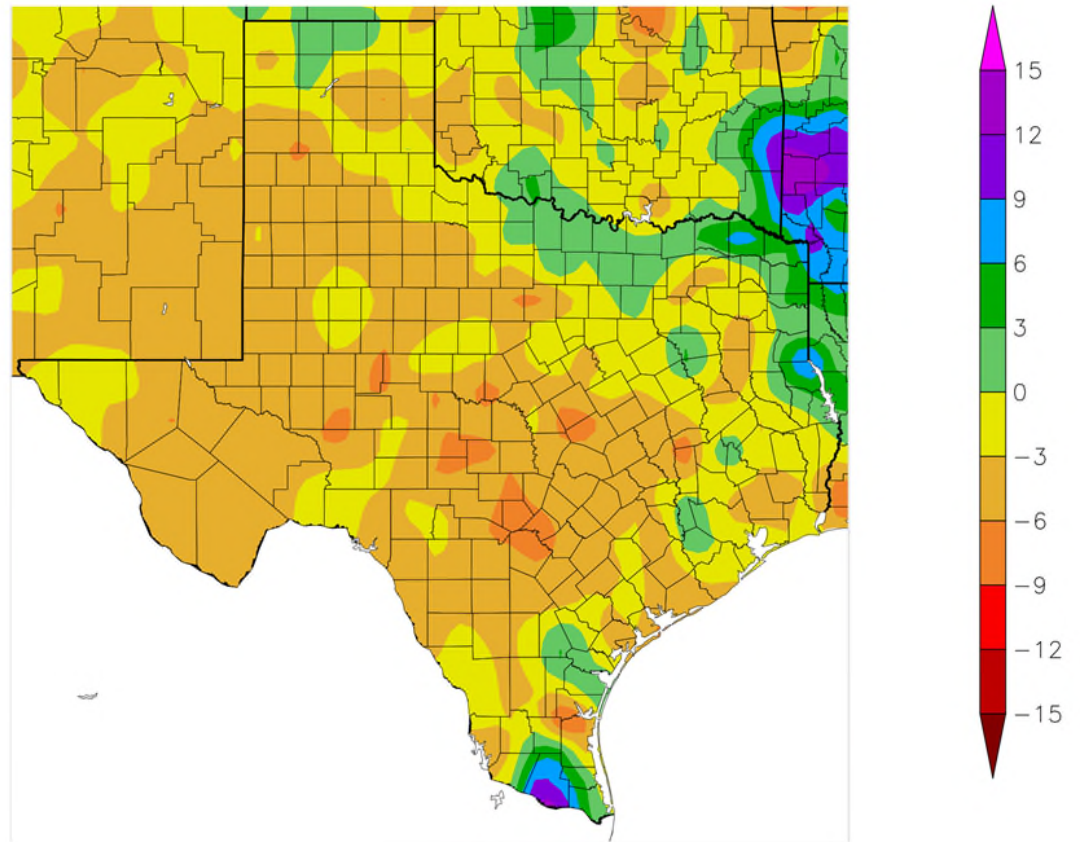
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Water Operations Committee Meeting  
Sept. 23, 2020



# June-August: Rainfall Departure From Normal

Departure from Normal Precipitation (in)  
6/1/2020 – 8/31/2020

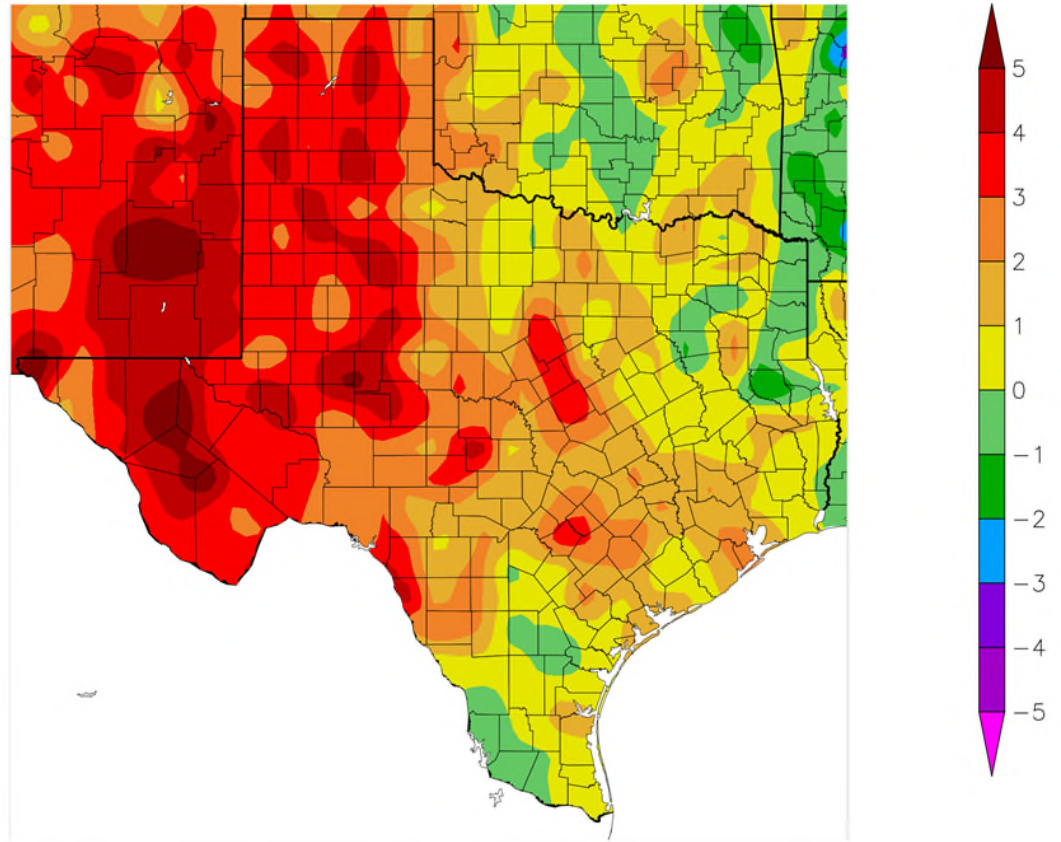


Generated 9/6/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

# June-August: Temperature Departure From Normal

Departure from Normal Temperature (F)  
6/1/2020 – 8/31/2020



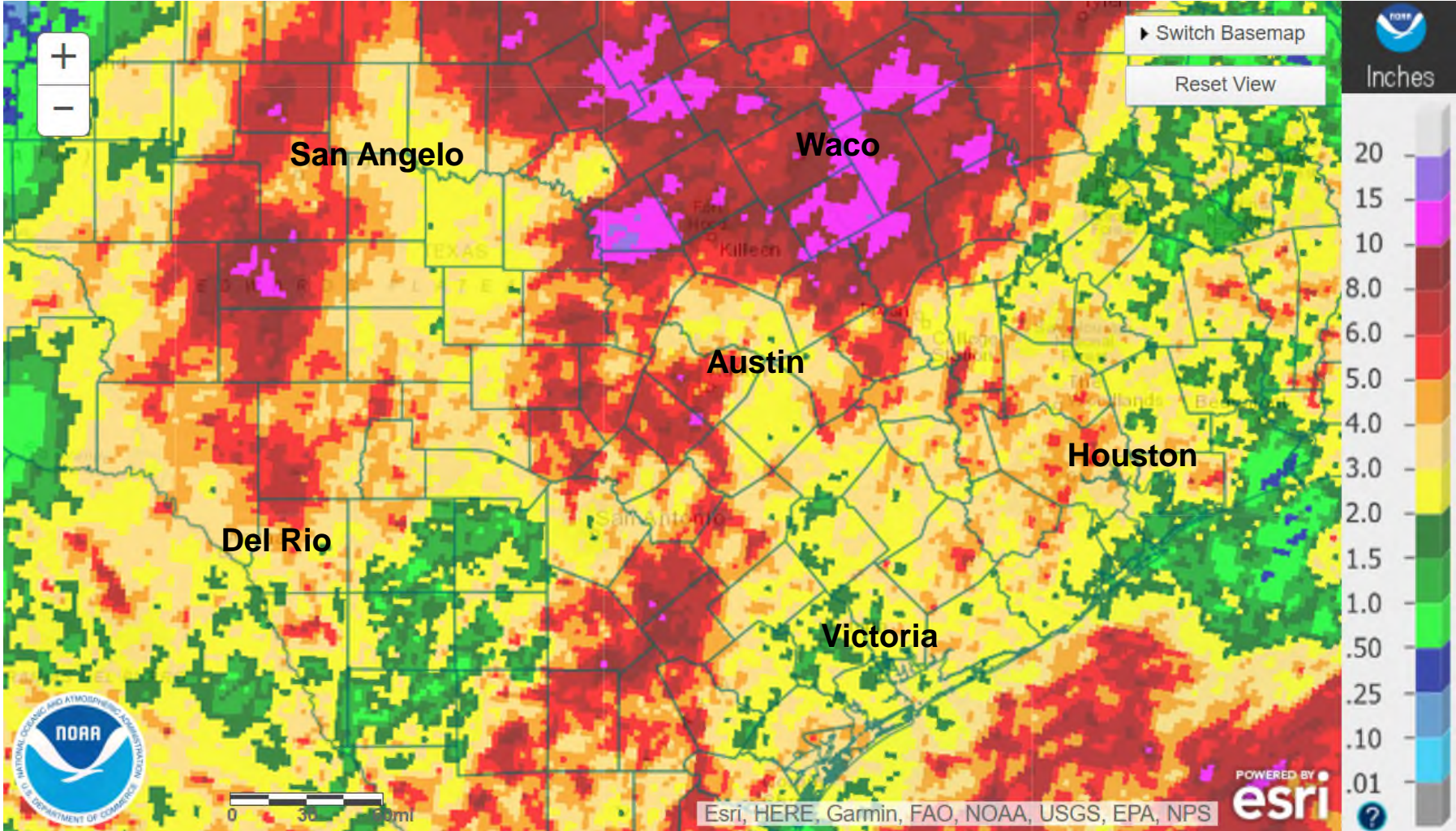
Generated 9/6/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

# Summer 2020 Climate Statistics

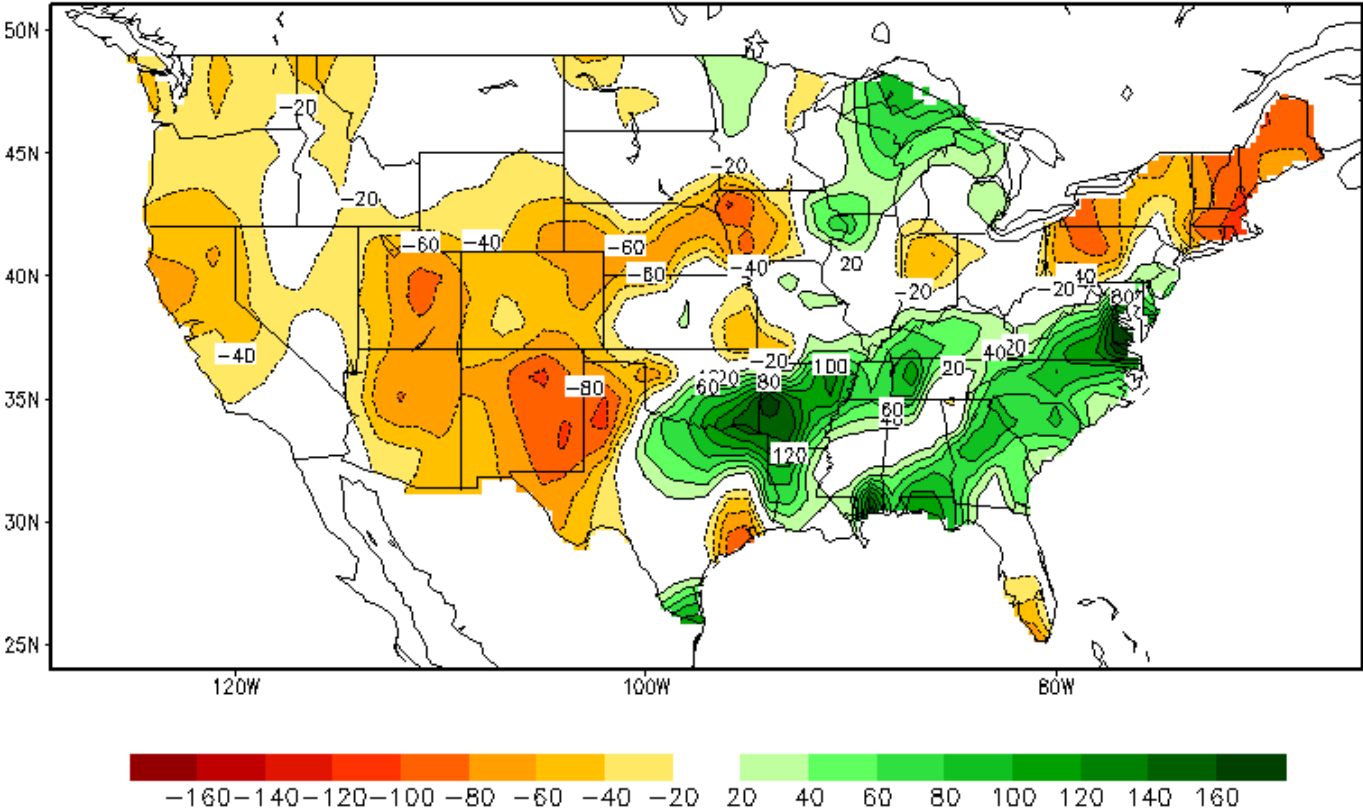
- **For Texas:**
  - This was the sixth-hottest summer on record
  - This was the 20<sup>th</sup>-driest summer on record
- **At Austin Camp Mabry:**
  - This was the fourth-hottest summer on record, behind 2011, 2009 and 2018
  - This was the 33<sup>rd</sup>-driest summer on record
- **Austin recorded 49 triple-digit temperatures**

# Rainfall Since Sept. 1



# Current Soil Moisture Anomaly

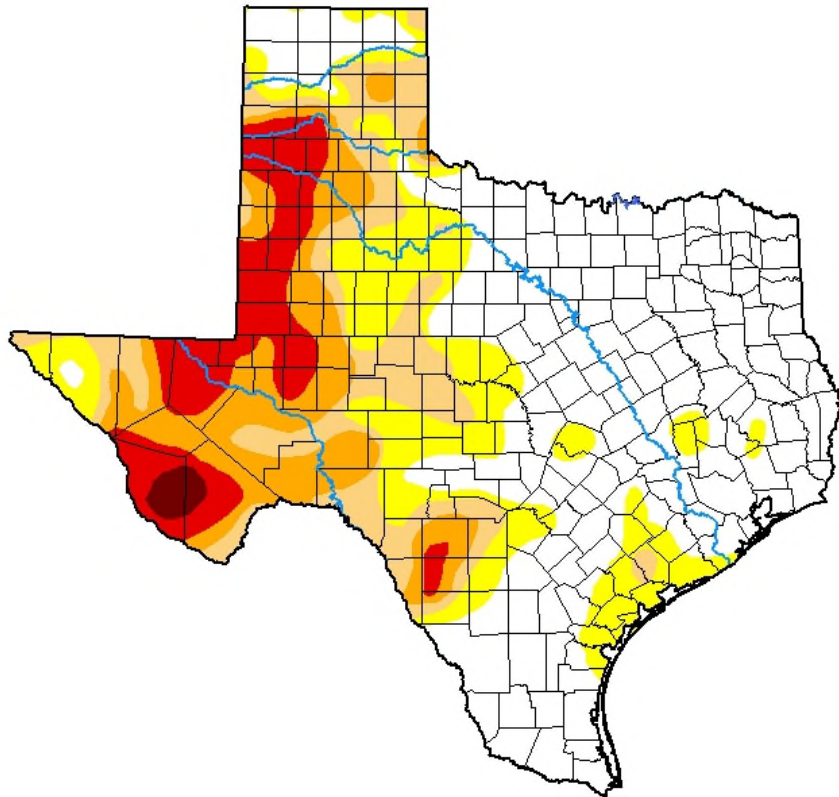
Calculated Soil Moisture Anomaly (mm)  
SEP 20, 2020









**U.S. Drought Monitor**  
**Texas**

**September 15, 2020**  
(Released Thursday, Sep. 17, 2020)  
Valid 8 a.m. EDT

# Limited Drought Across Basin



***Intensity:***

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>*

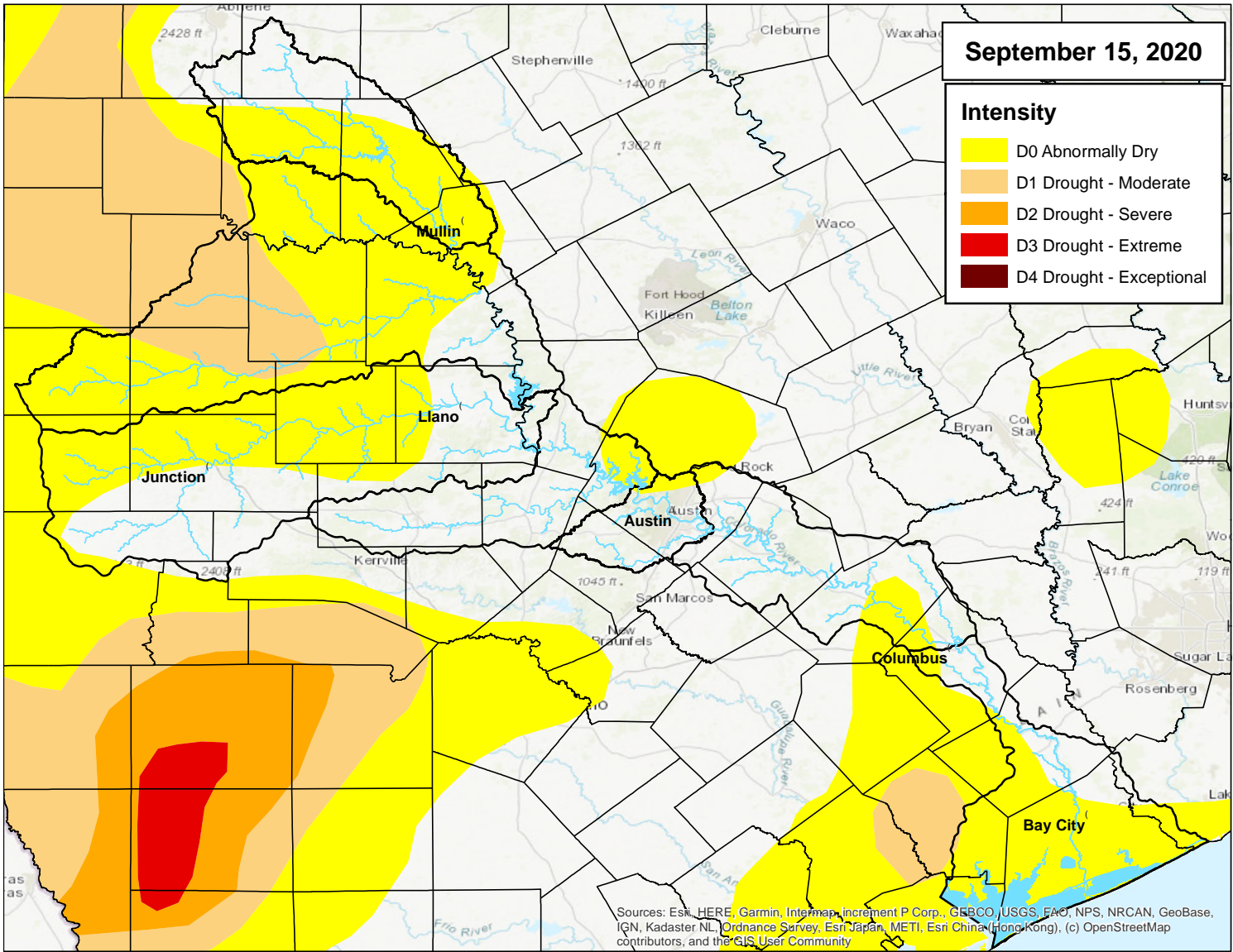
***Author:***

Brad Rippey  
U.S. Department of Agriculture



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# Limited Drought Across Basin



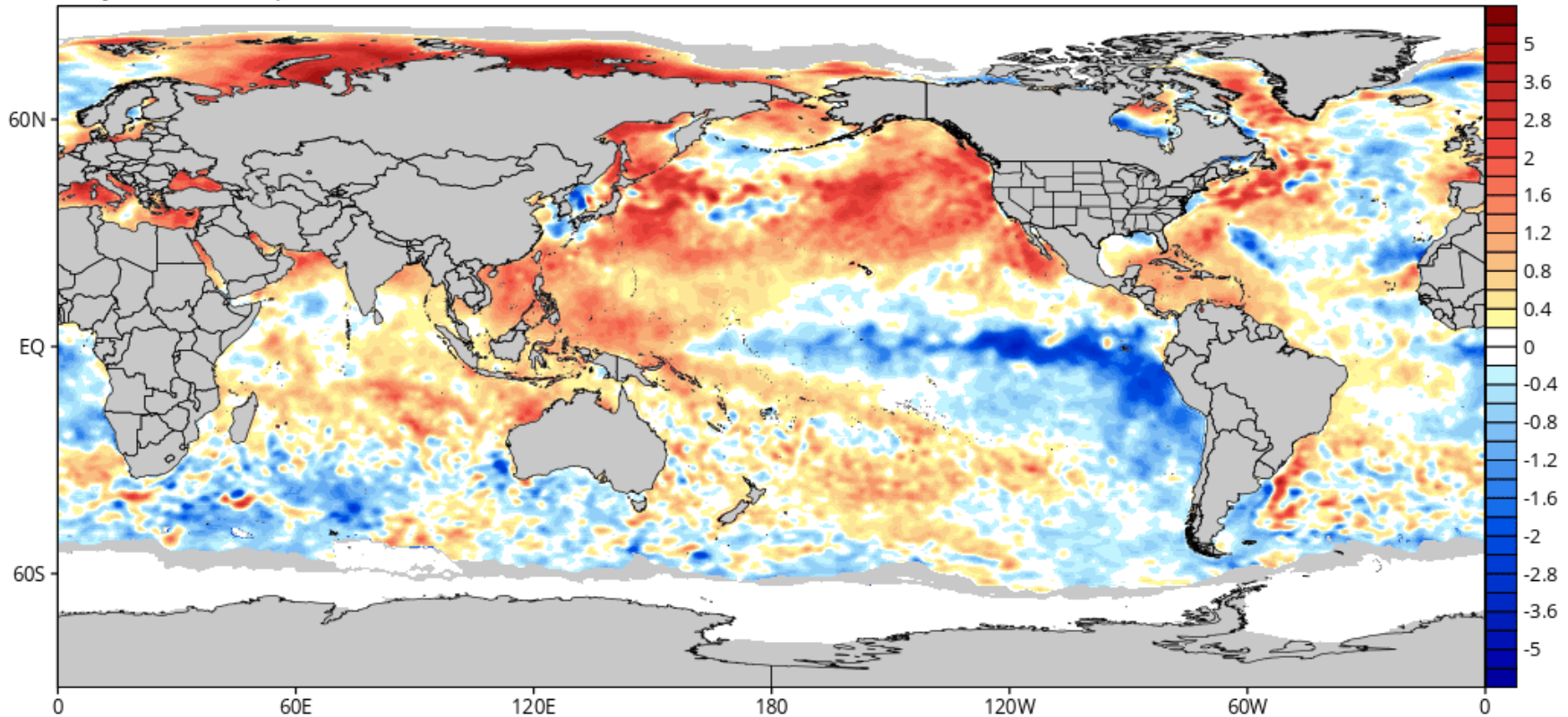


# September 2020 – Pacific Trending to La Niña

CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)

Analysis Time: 12z Sep 21 2020

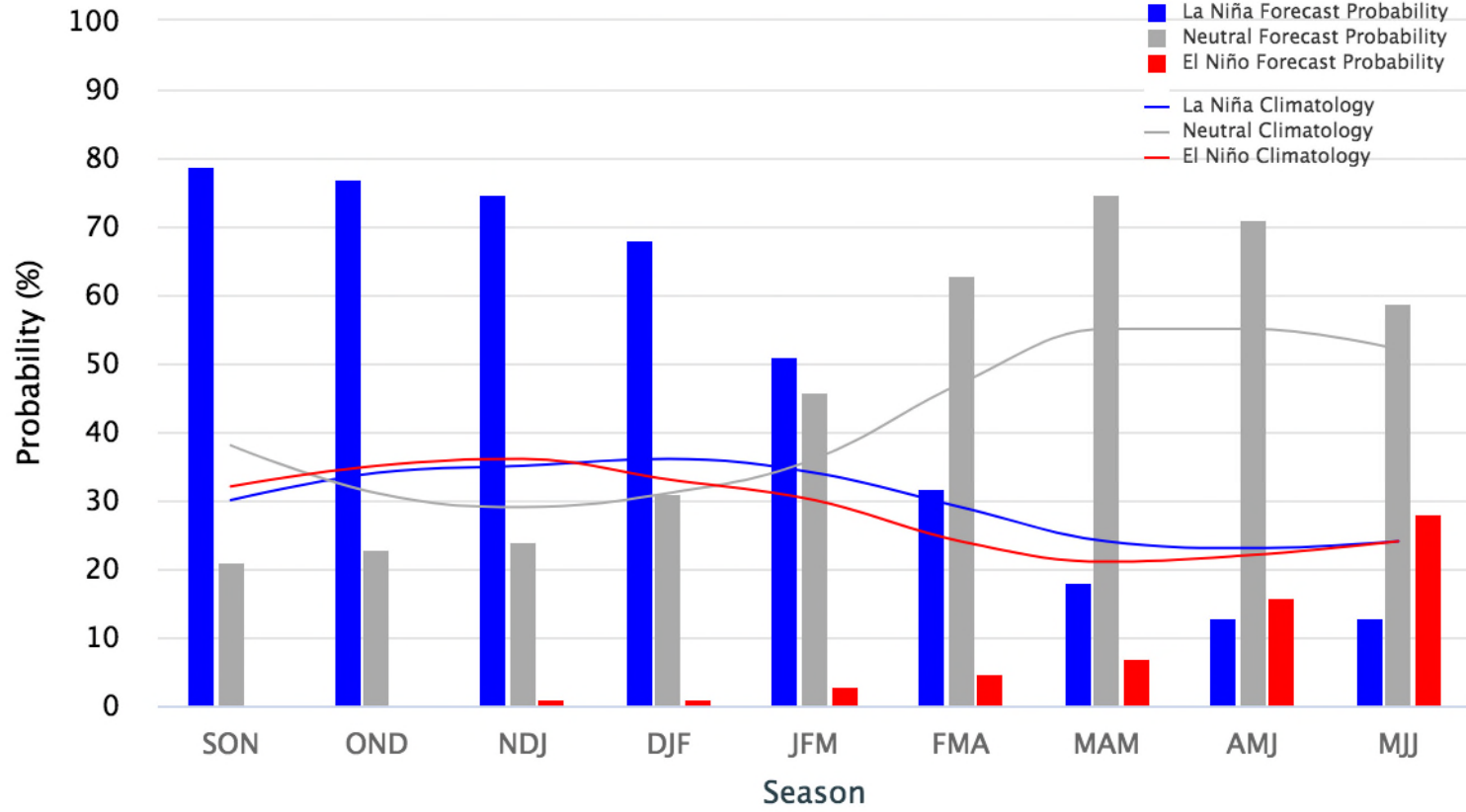
TROPICALTIDBITS.COM



# A Weak to Moderate La Niña Forecast Fall Through Winter

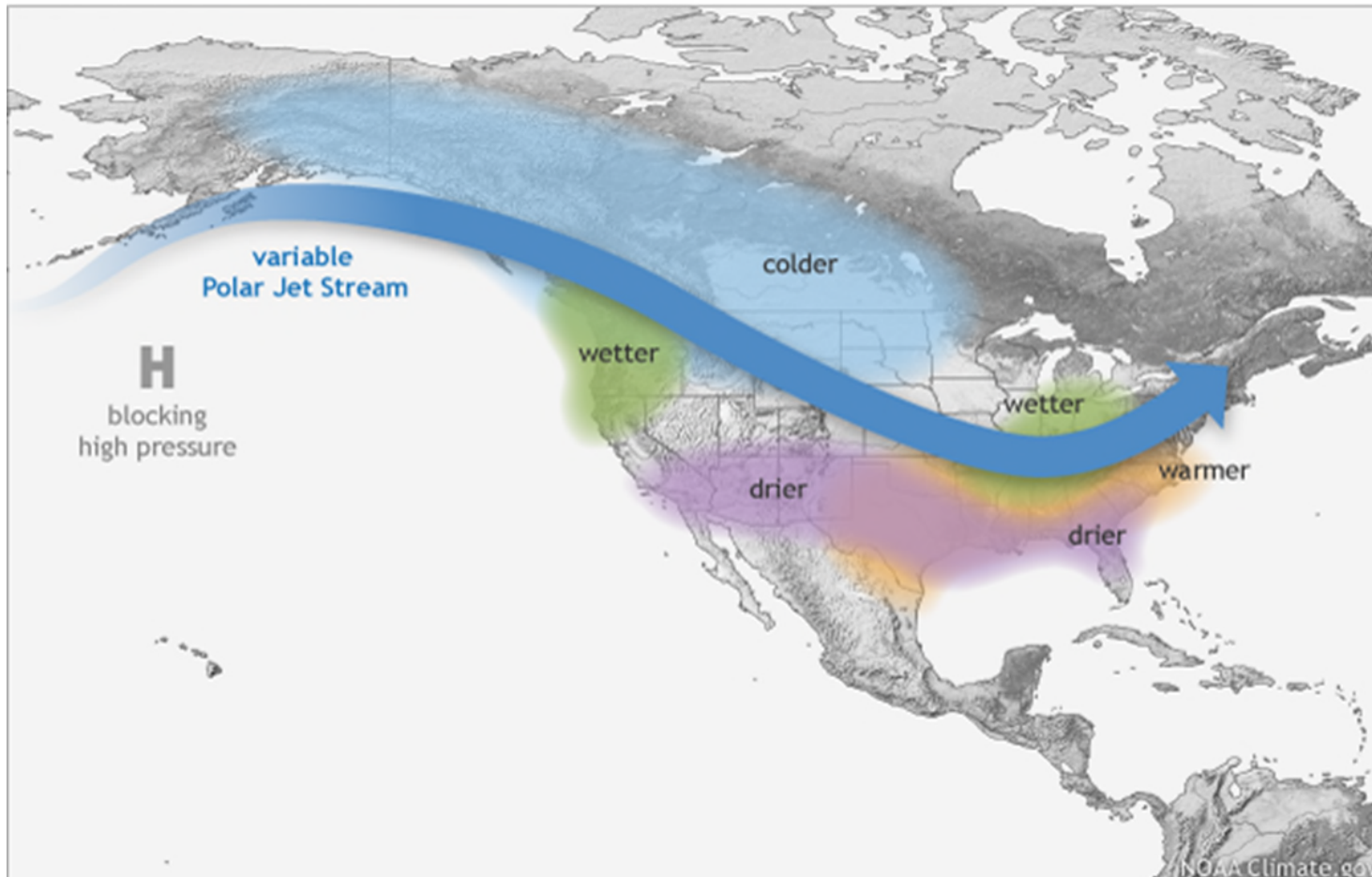
Mid-September 2020 IRI/CPC Model-Based Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly  
Neutral ENSO:  $-0.5\text{ }^{\circ}\text{C}$  to  $0.5\text{ }^{\circ}\text{C}$

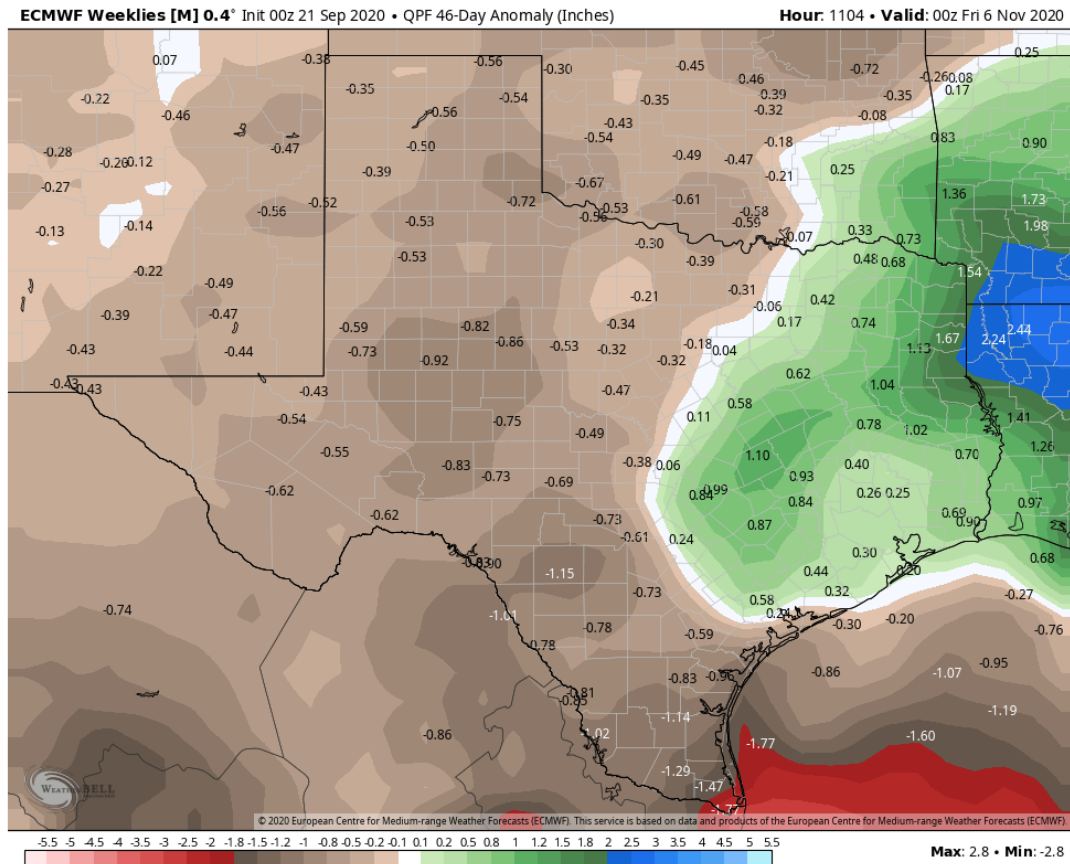


# Typical Impacts From La Niña

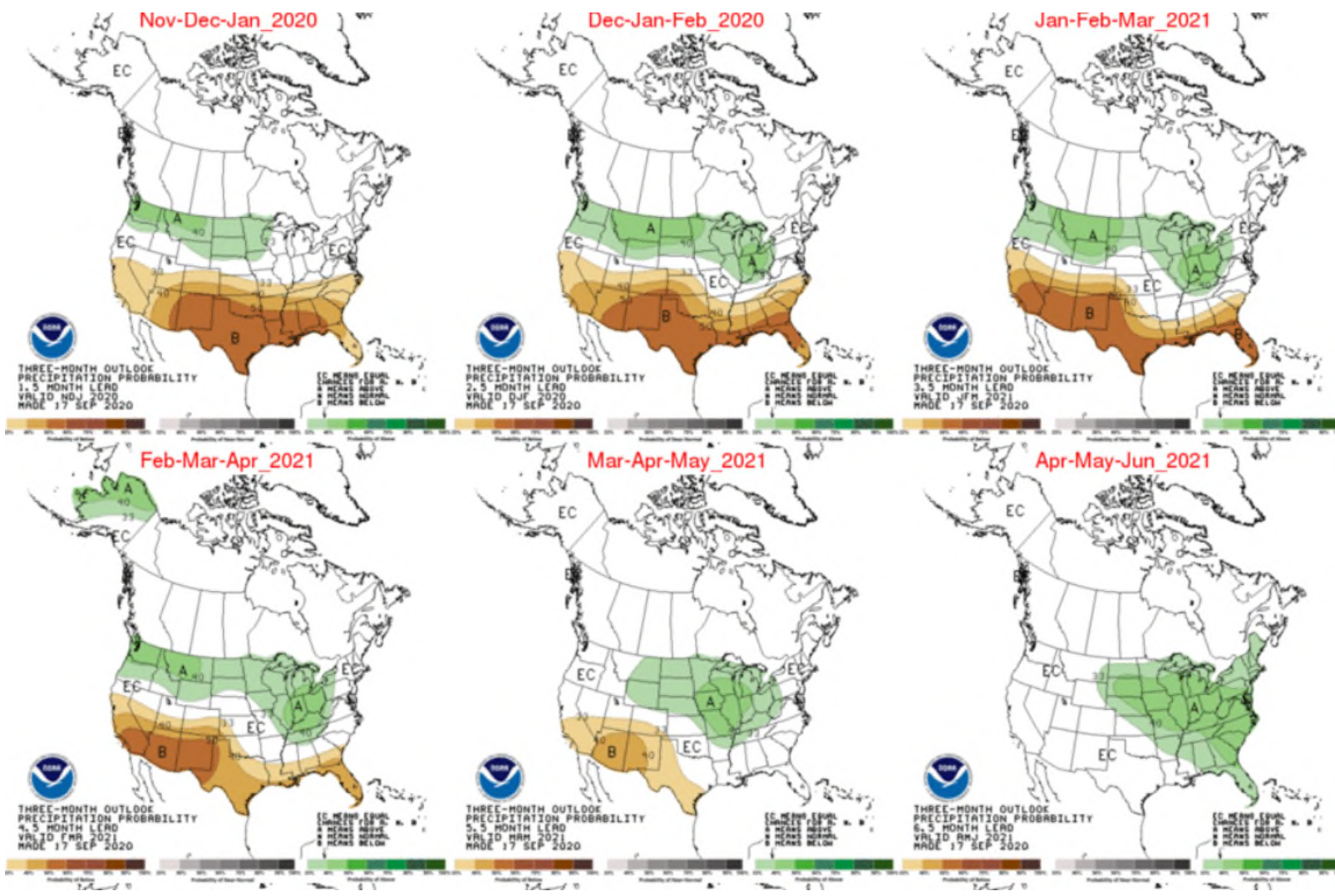
WINTERTIME LA NIÑA PATTERN



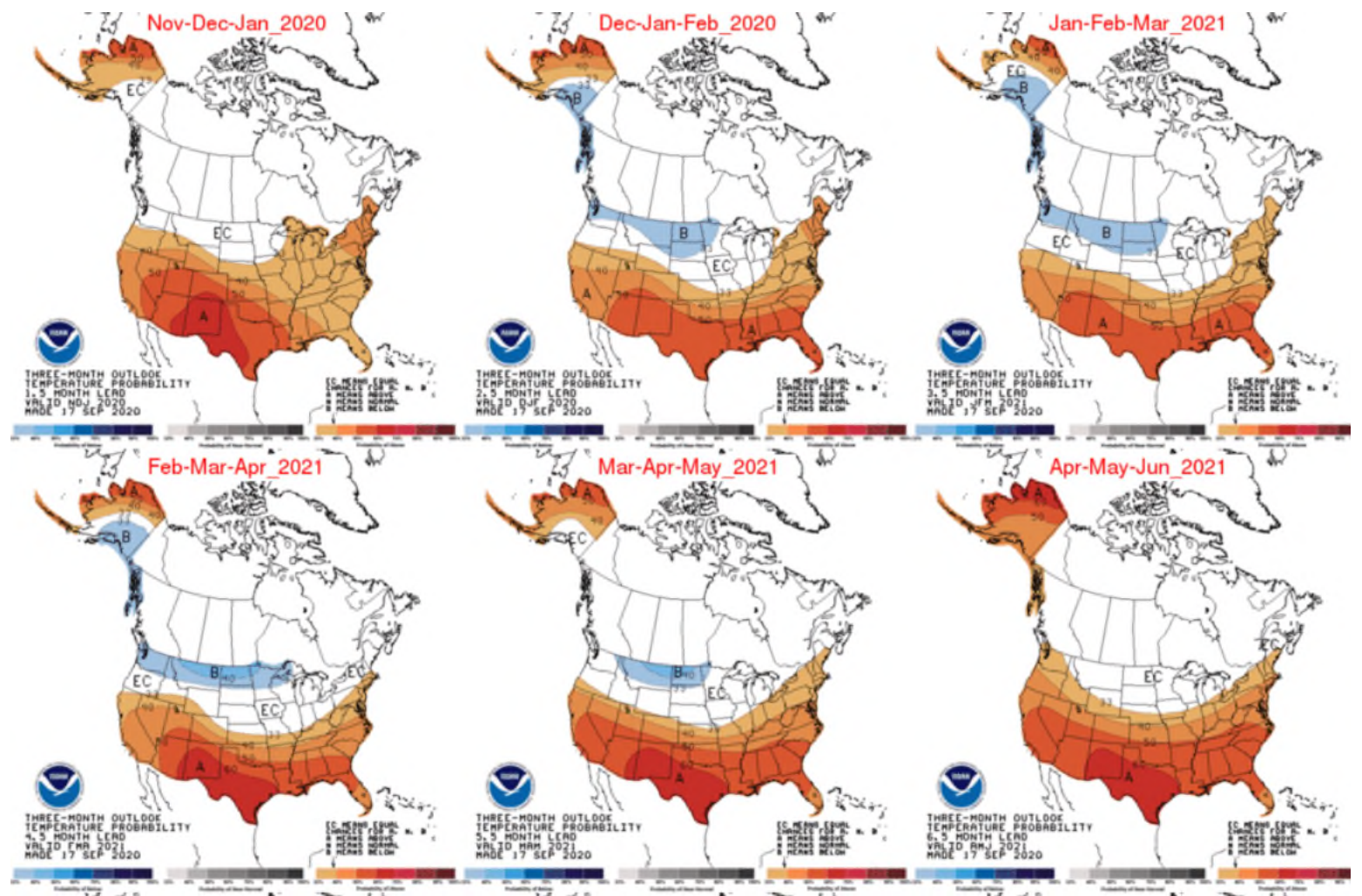
# European Model, Rainfall Departure From Normal Through Nov. 5



# National Weather Service Rainfall Outlook



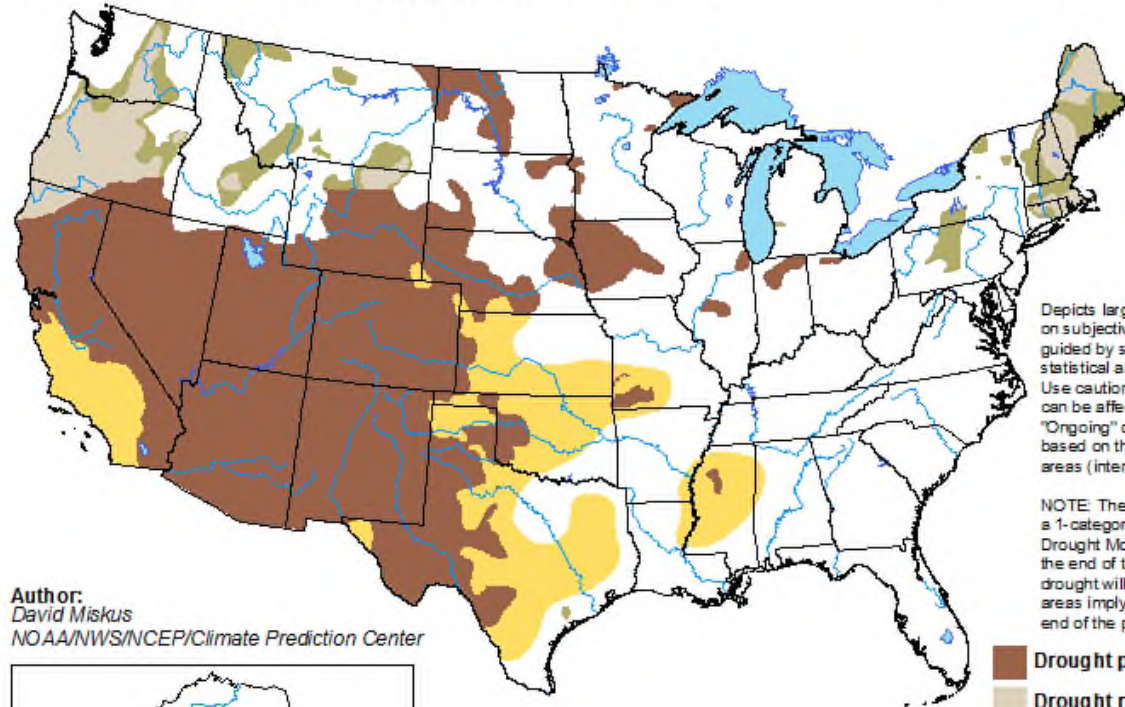
# National Weather Service Temperature Outlook



# Drought Development Predicted Over the Next Three Months

## U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

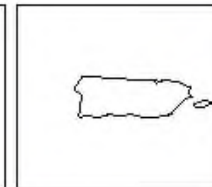
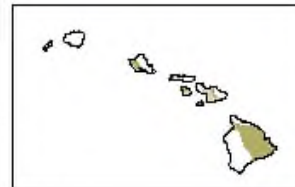
Valid for September 17 - December 31, 2020  
Released September 17



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:  
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NOAA/NWS/NCEP/Climate Prediction Center



- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely



<http://go.usa.gov/3eZ73>

# **Outlook for Fall and Winter**

- **Near-normal to slightly below-normal rainfall expected September through October**
- **A mild to moderate La Niña is forecast to develop and persist through the upcoming winter**
- **La Niña causes a drier pattern across Texas and helps kick off droughts**
- **Rainfall trending below normal beginning in November, continuing through February**
- **Milder-than-normal temperatures this winter**