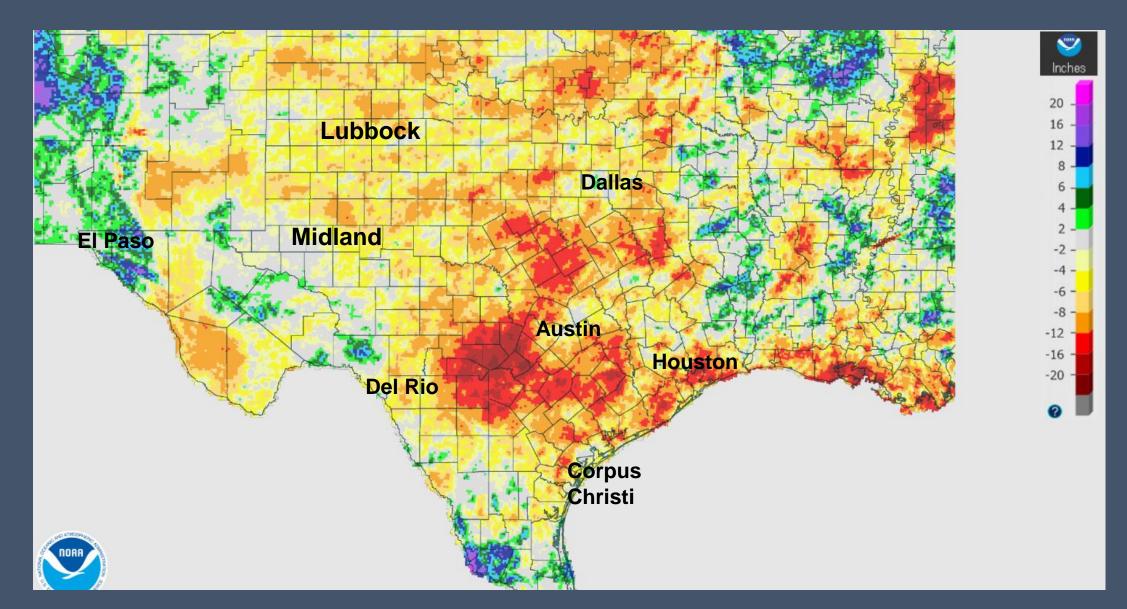
# Spring/Summer Weather Outlook

Water Quality Advisory Committee Meeting

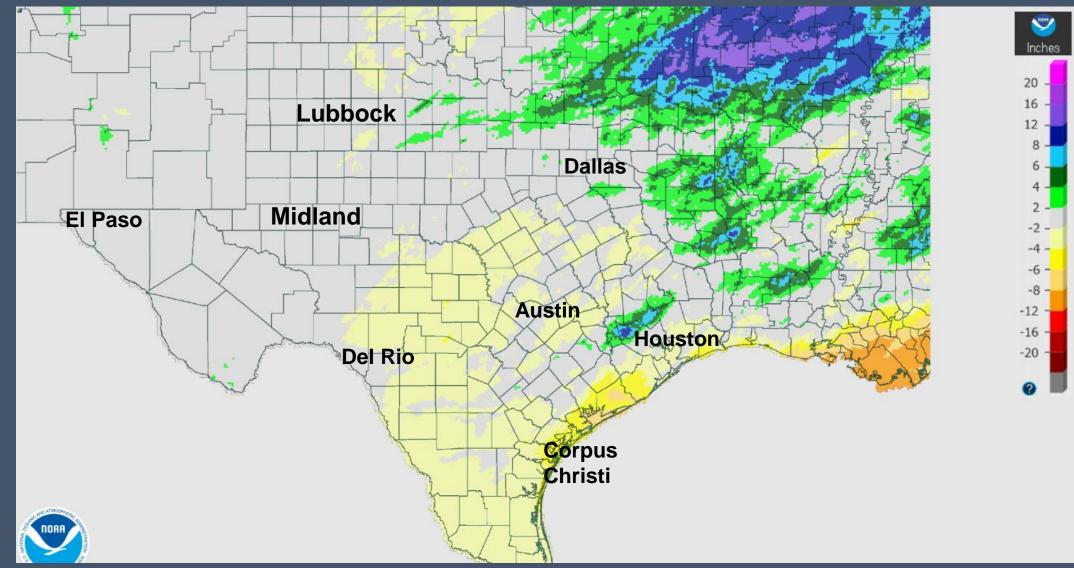
March 30, 2023



# **2022 Rainfall Departure from Normal**



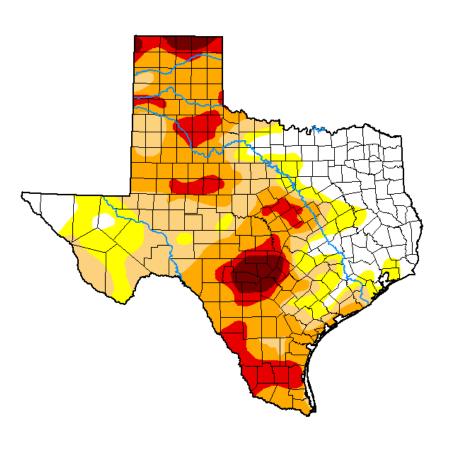
#### **Rainfall Departure from Normal Since January 1**



# **U.S. Drought Monitor**

#### U.S. Drought Monitor

#### Texas



#### March 21, 2023 (Released Thursday, Mar. 23, 2023) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	21.63	78.37	64.18	43.53	14.21	3.15
Last Week 03-14-2023	22.03	77.97	64.71	41.59	14.21	1.84
3 Month s Ago 12-20-2022	27.57	72.43	48.59	25.88	7.13	1.24
Start of Calendar Year 01-03-2023	28.84	71.16	49.90	26.60	7.41	1.60
Start of Water Year 09-27-2022	14.96	85.04	61.36	31.61	8.82	1.06
One Year Ago 03-22-2022	4.28	95.72	88.24	71.31	40.38	6.20

#### Intensity:



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:

Curtis Riganti National Drought Mitigation Center



droughtmonitor.unl.edu

#### **Typical Wintertime La Niña Pattern**

# WINTERTIME LA NIÑA PATTERN

variable Polar Jet Stream

blocking

high pressure

Н

wetter

drier

colder

wette

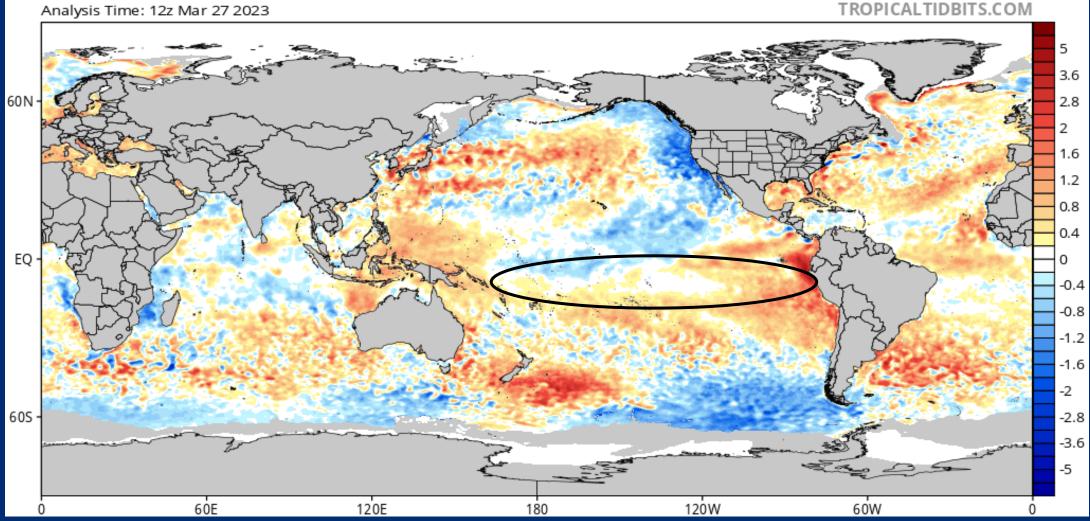
warmer

#### **Typical Wintertime La Niña Pattern**

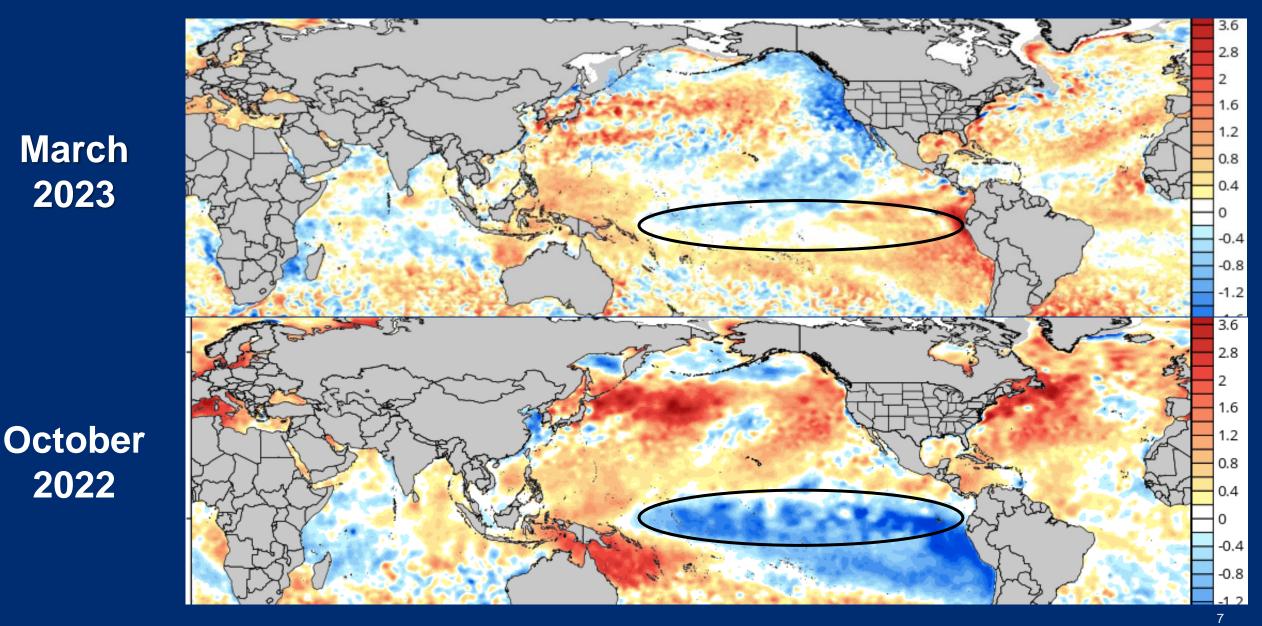
#### WINTERTIME LA NIÑA PATTERN variable colder wetter blocking high pressur warmer 435

#### March 2023: A Neutral Pacific is in Place

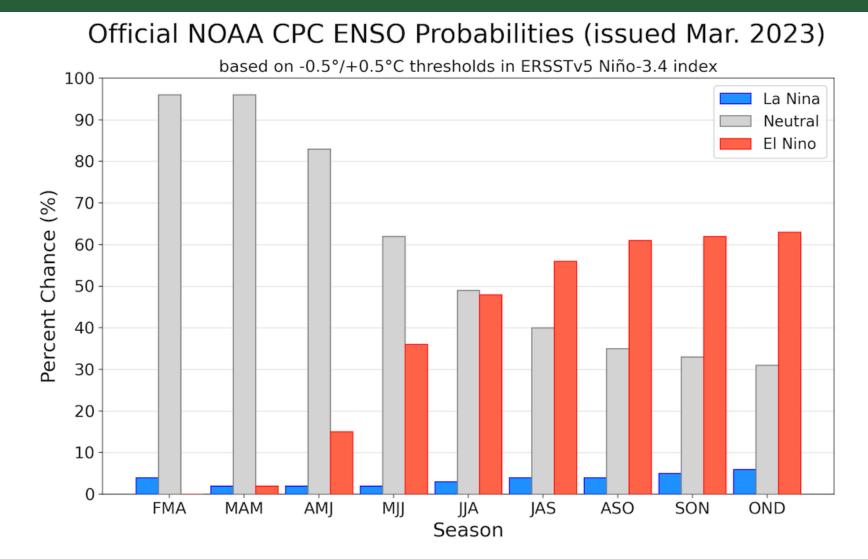
CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology) Analysis Time: 12z Mar 27 2023



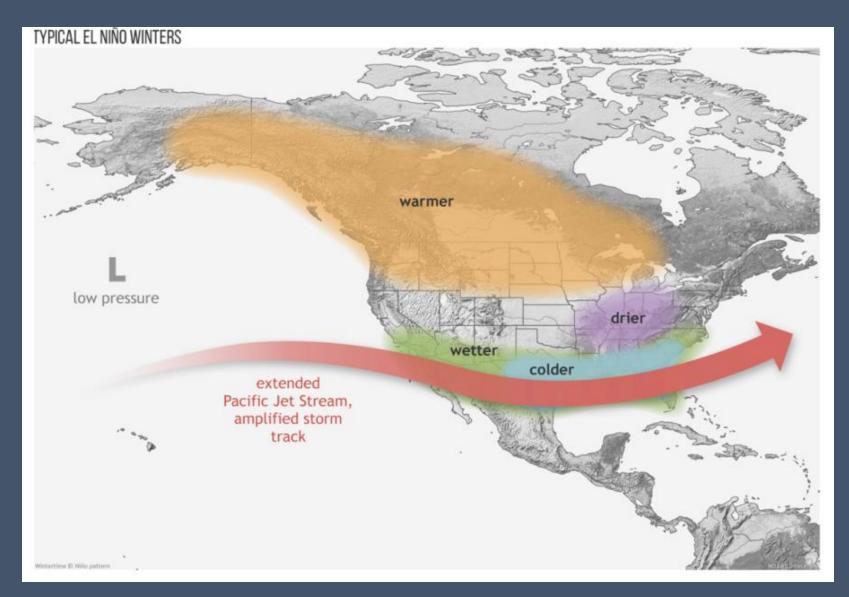
#### **Pacific Waters are Warming**



# **A Neutral Pacific this Spring; Headed to El Niño by Fall?**



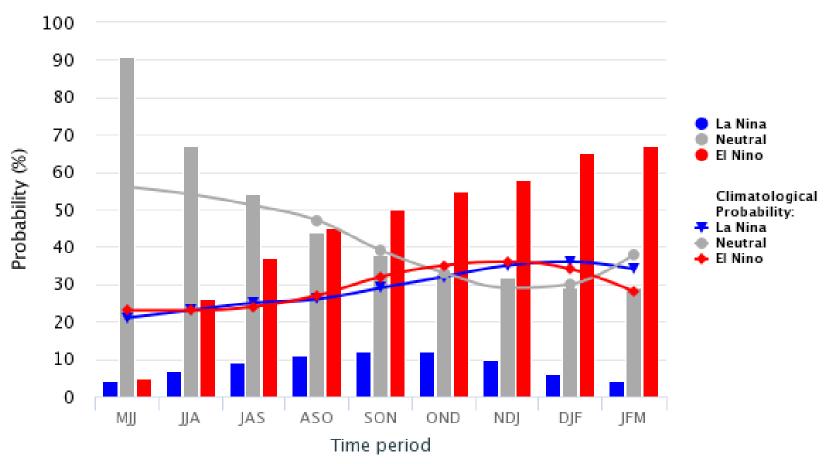
### **Typical Fall/Wintertime El Niño Pattern**



#### El Niño Forecast from Spring 2018

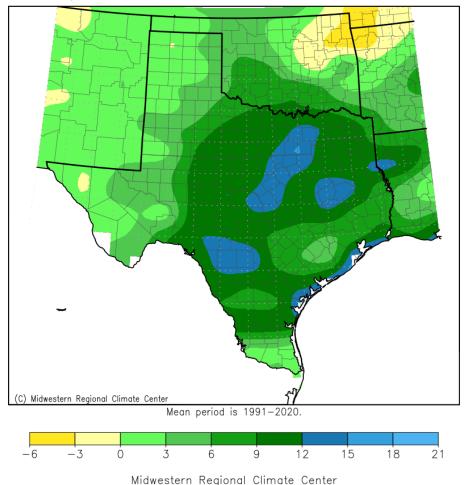
Mid-May IRI/CPC Model-Based Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly Neutral ENSO: -0.5 °C to 0.5 °C

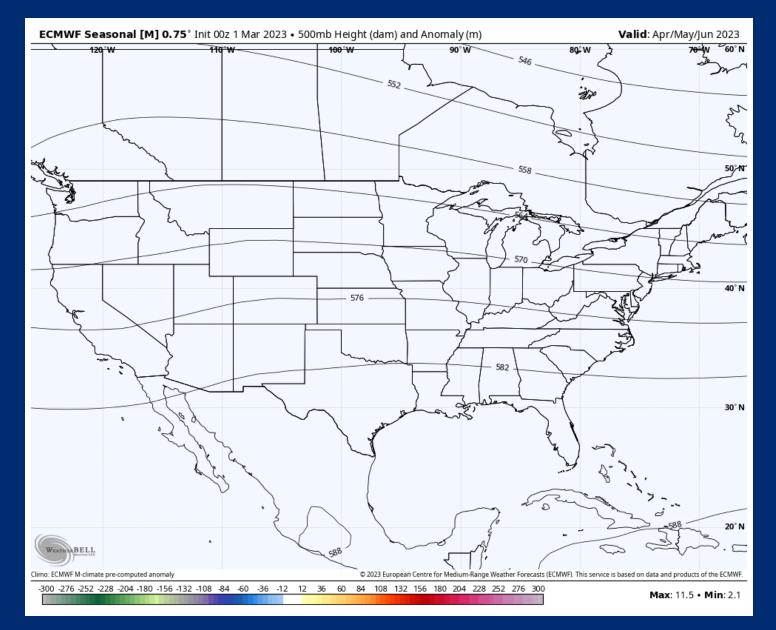


#### Departure from Normal Rainfall September through November 2018

Accumulated Precipitation (in): Departure from Mean September 1, 2018 to November 30, 2018

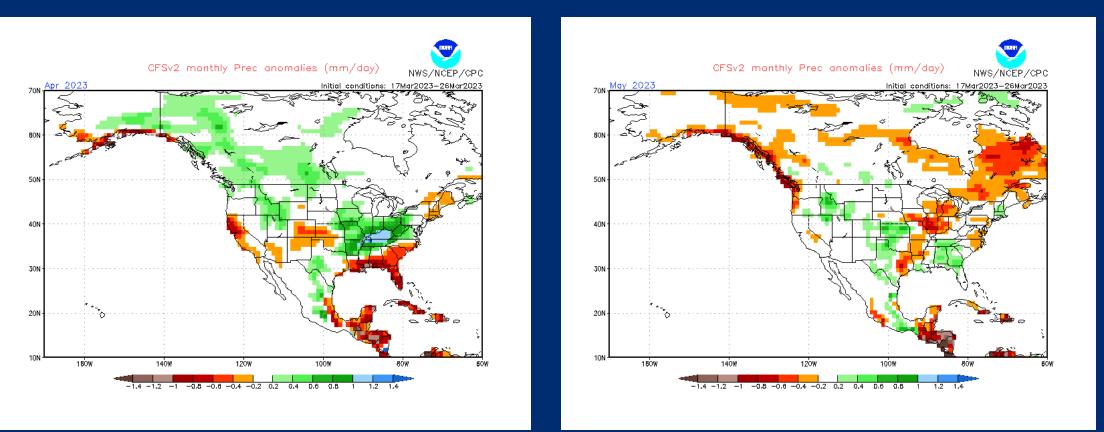


#### **Forecast Model Jet Stream for Spring**



#### Spring Rain Outlook – Climate Forecast System Model

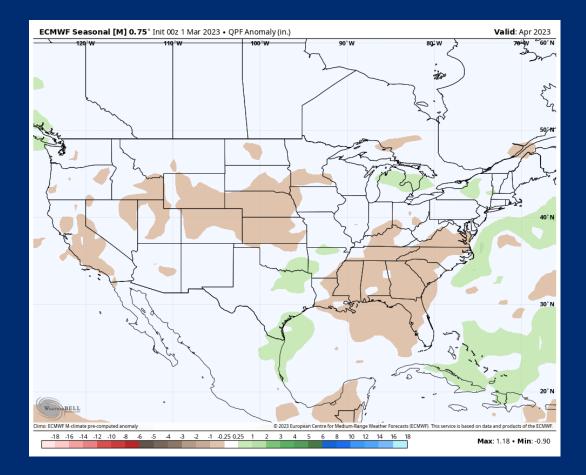
April

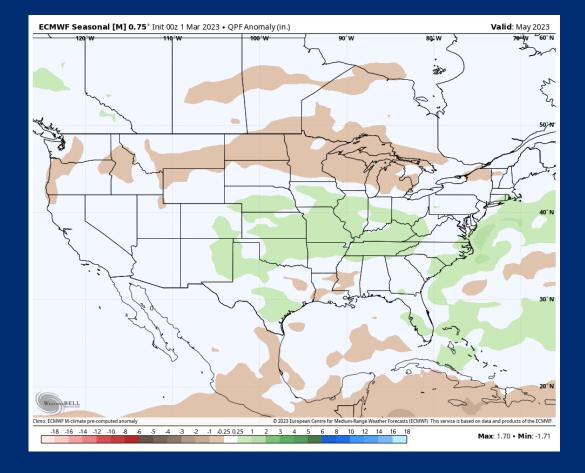


13

May

### Spring Rain Outlook – European Model

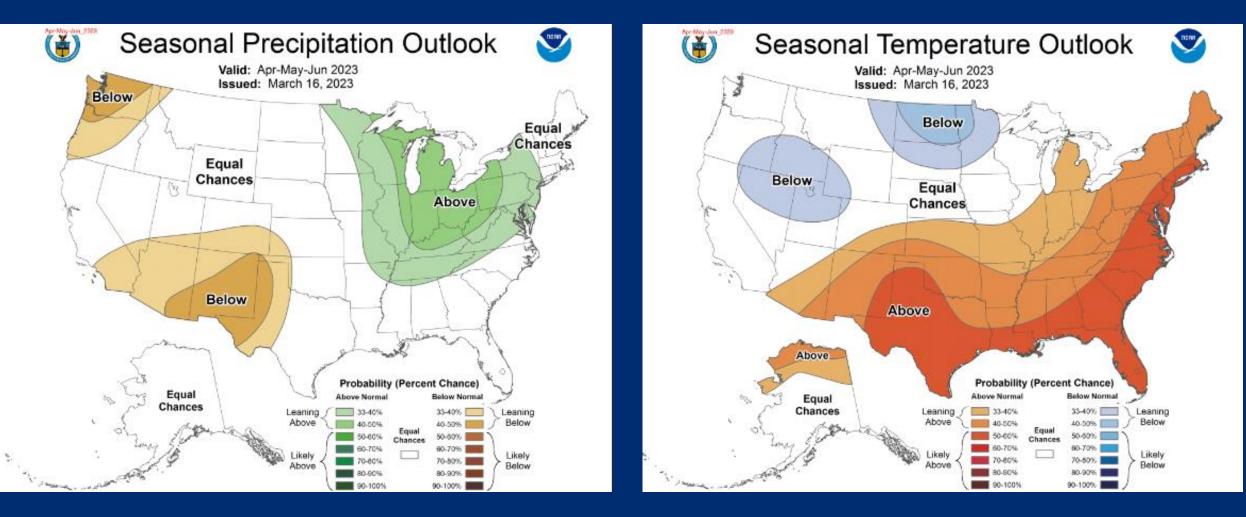






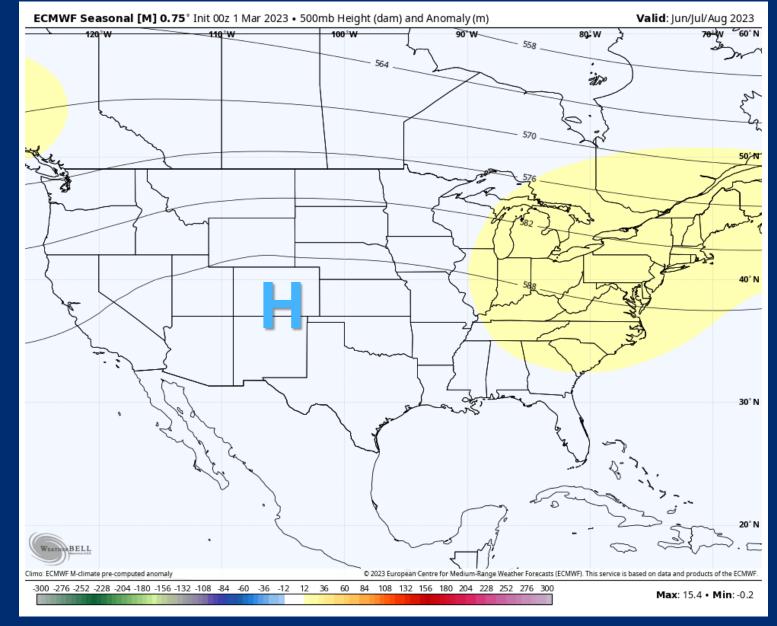


#### National Oceanic and Atmospheric Administration's Spring Outlook

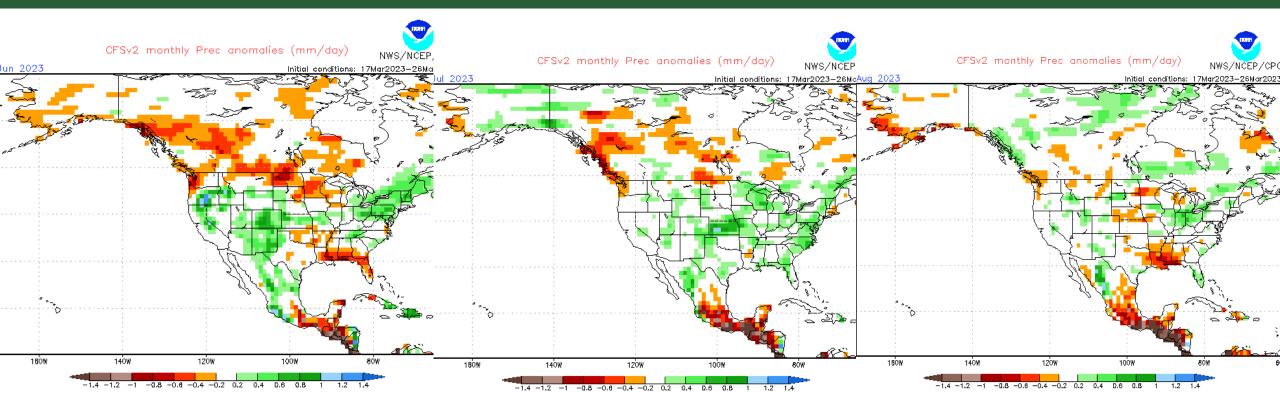


### **Forecast Model Jet Stream for**

#### Summer



### Summer Rain Outlook – CFS Model



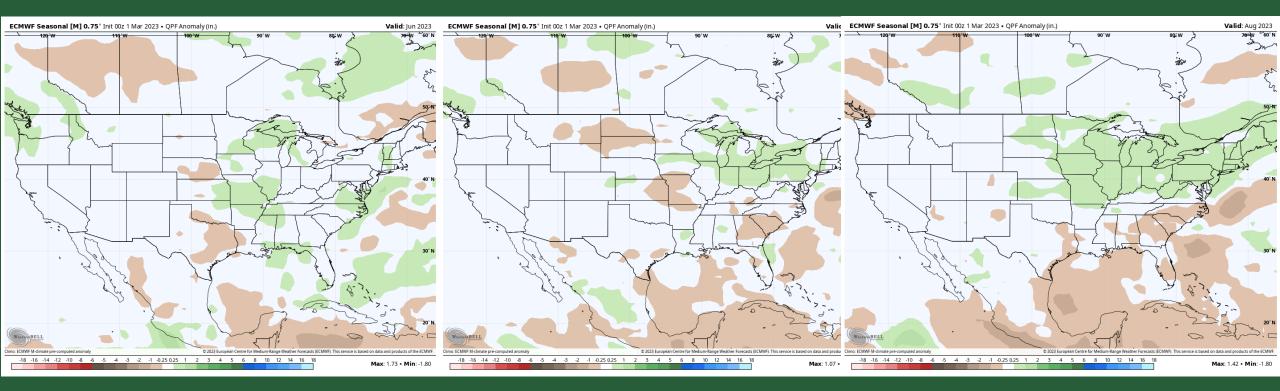
June

July

August

#### CFS: Climate Forecast System

#### Summer Rain Outlook – European Model

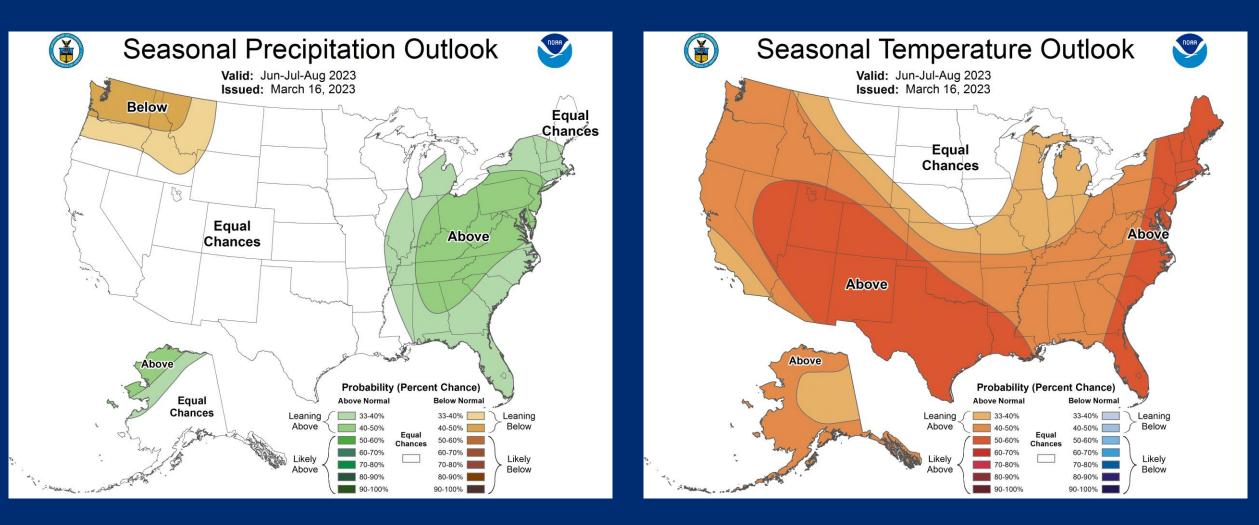


June

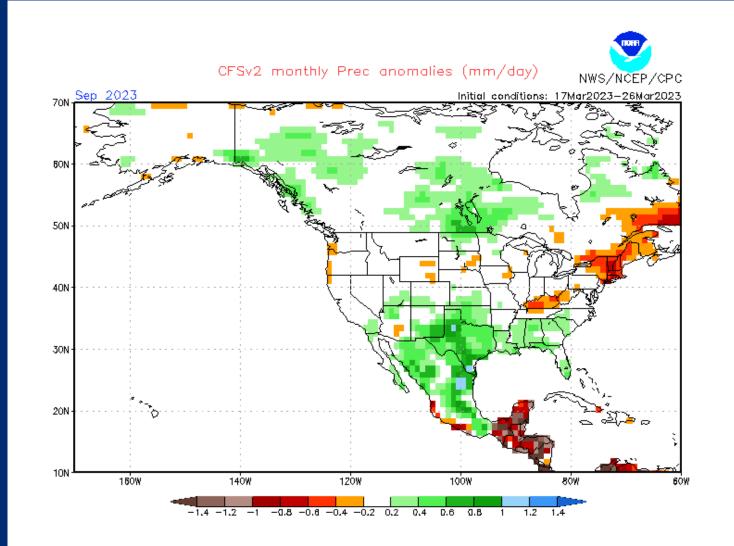
July

#### August

#### **NOAA's Summer Outlook**



#### **CFS Rain Outlook for September**



### **Spring Into Summer Outlook**

- A neutral Pacific will be in place through spring and early summer
- It's not exactly clear when the atmosphere and jet stream will respond to the end of La Niña
- Slightly below-normal rain forecast for March
- Near-normal rainfall forecast April through June
- Summer 2023 is not expected to be as hot or as dry as last summer
- Strong odds for the development of El Niño by fall

#### **ENERGY • WATER • COMMUNITY SERVICES**

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