

Madera County Drought Workgroup

Weather Forecast Office

Hanford, CA

Friday, November 17

Presenter: Felix Castro

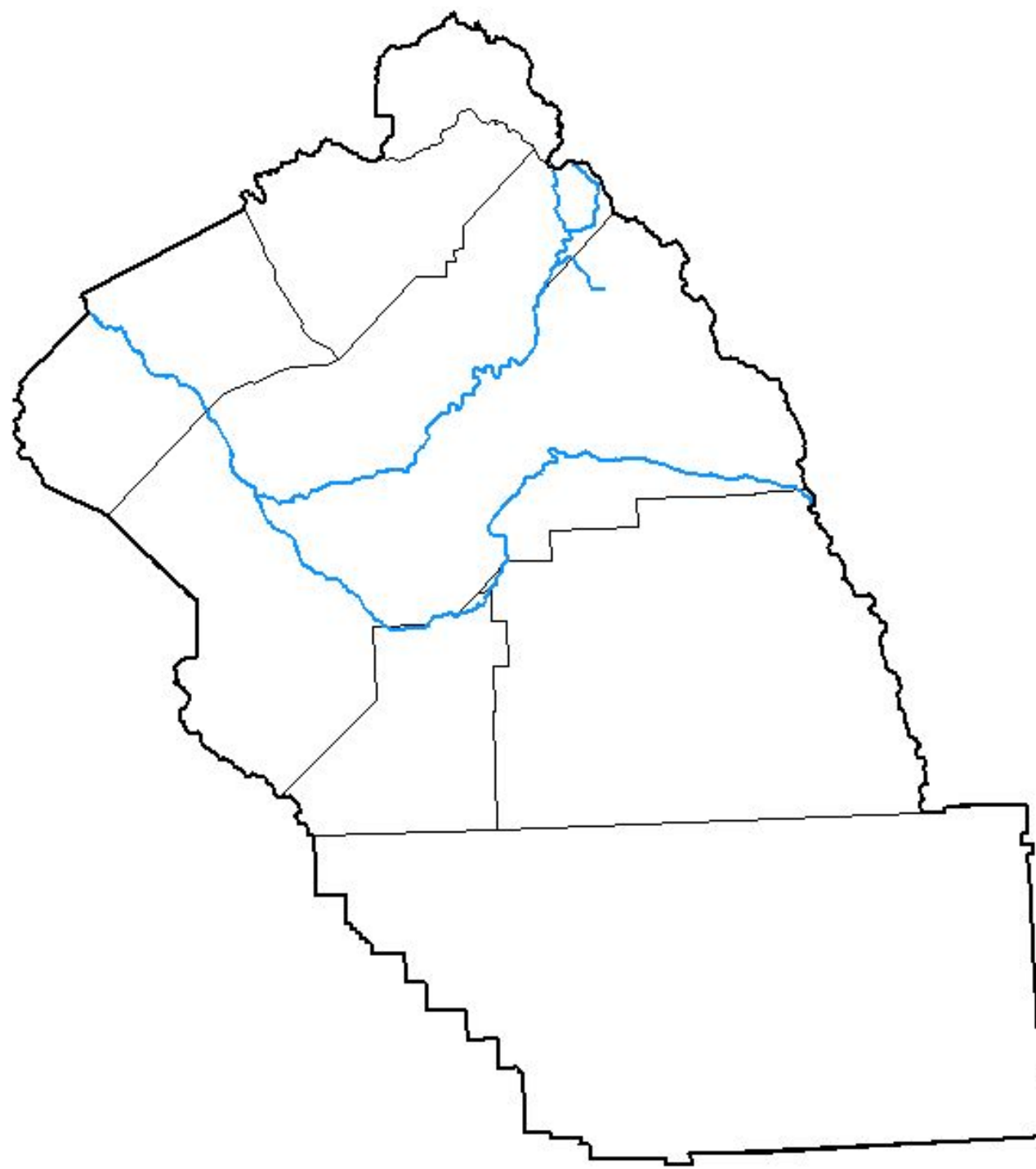




Hanford, CA Current Drought Conditions

Weather Forecast Office
Hanford, CA
Friday, November 17

U.S. Drought Monitor Hanford, CA WFO



November 14, 2023

(Released Thursday, Nov. 16, 2023)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week 11-07-2023	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 08-15-2023	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-03-2023	0.00	100.00	100.00	88.26	63.71	0.00
Start of Water Year 09-26-2023	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago 11-15-2022	0.00	100.00	100.00	100.00	97.41	68.37

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:

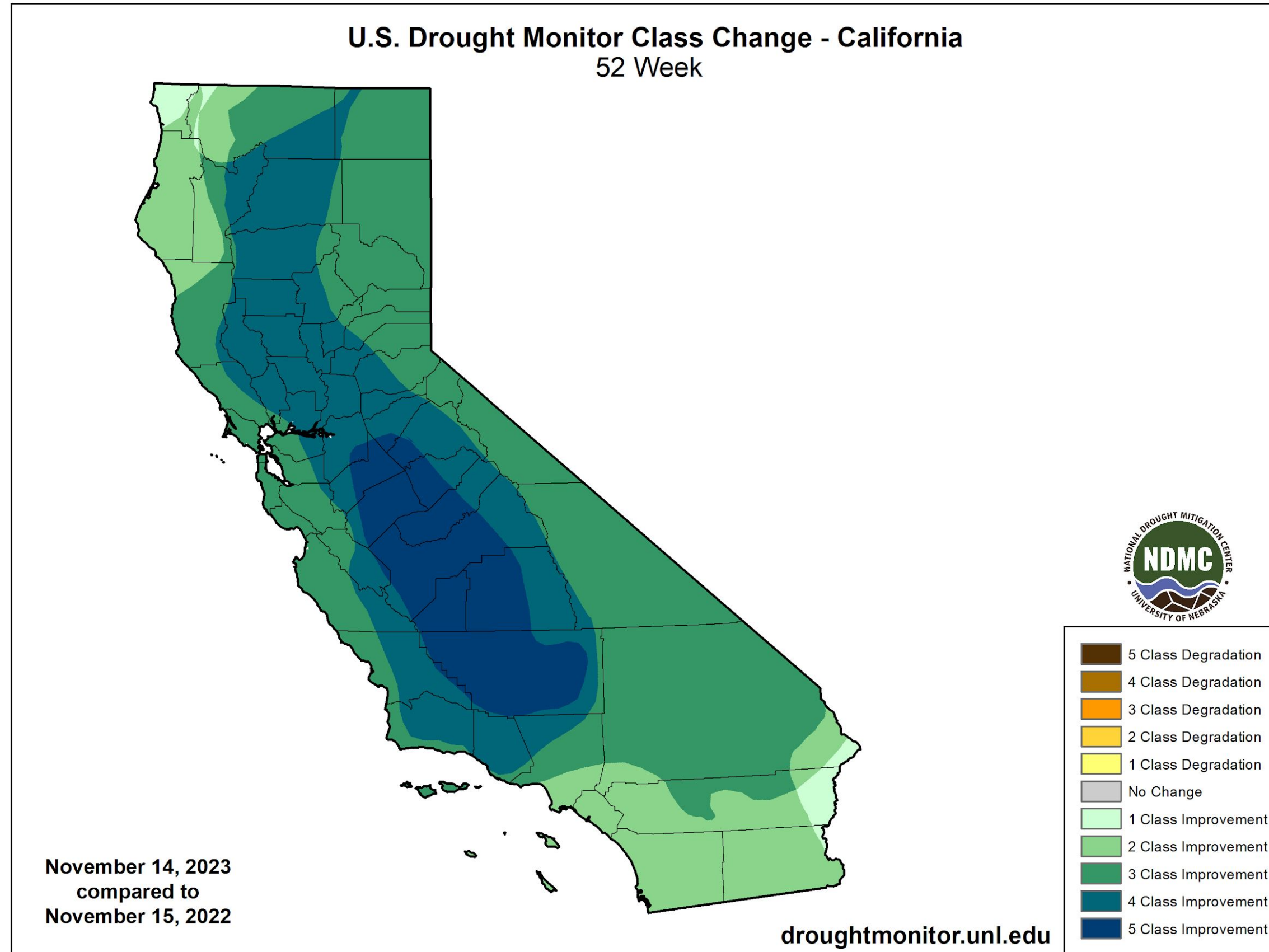
Brad Rippey
U.S. Department of Agriculture



droughtmonitor.unl.edu



California 1 Year Drought Change





Key points for Winter 2023-2024

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Key Points for Winter 2023-24 (As of October 2023)

- Central California is more vulnerable to flooding impacts than usual this wet season, because of the abundant snow and rain from last winter.
- Although an El Niño will be in place, that does not mean central California is guaranteed above normal precipitation/temperatures this winter, or that a repeat of last year's historic winter is assured.
- If we were to have a quick start to the wet season, with a few warm, wet storms in November and December, this will increase our susceptibility to flooding and water management issues for the rest of the winter.
- Central California can experience similar or worse impacts compared to last winter even if less snow and/or rain falls than last year.



What is ENSO?

El Niño and the Southern Oscillation, also known as ENSO is a periodic fluctuation in sea surface temperature (El Niño) and the air pressure of the overlying atmosphere (Southern Oscillation) across the equatorial Pacific Ocean.

El Niño is so termed because it generally reaches full strength toward the end of the year, and early Christian inhabitants of western equatorial South America equated the warm water current and the resulting impacts with their holiday celebrating the birth of Jesus Christ (known as **El Niño in Spanish).**

- El Niño: **Warmer** than normal temperatures in the Eastern Pacific

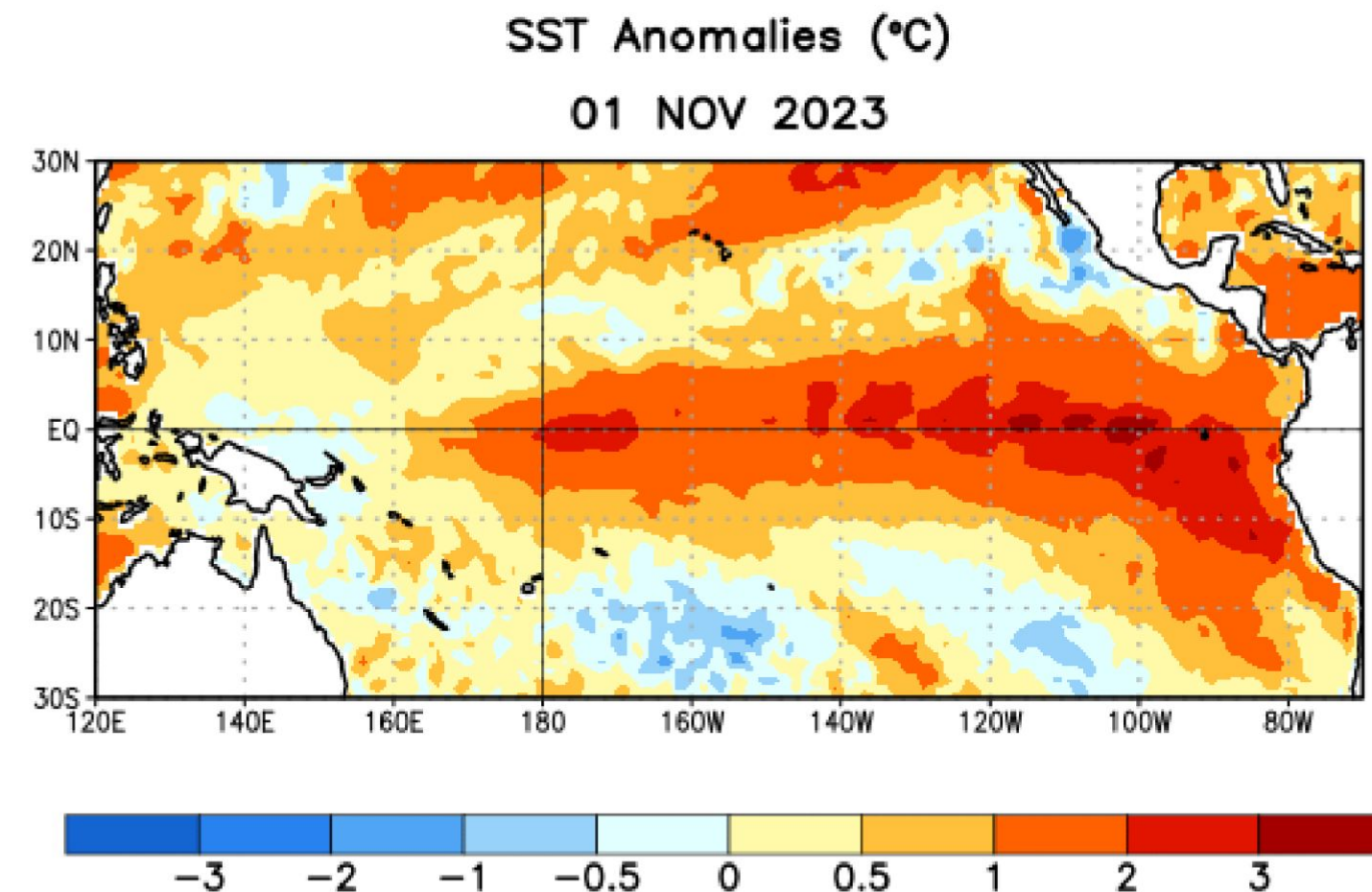
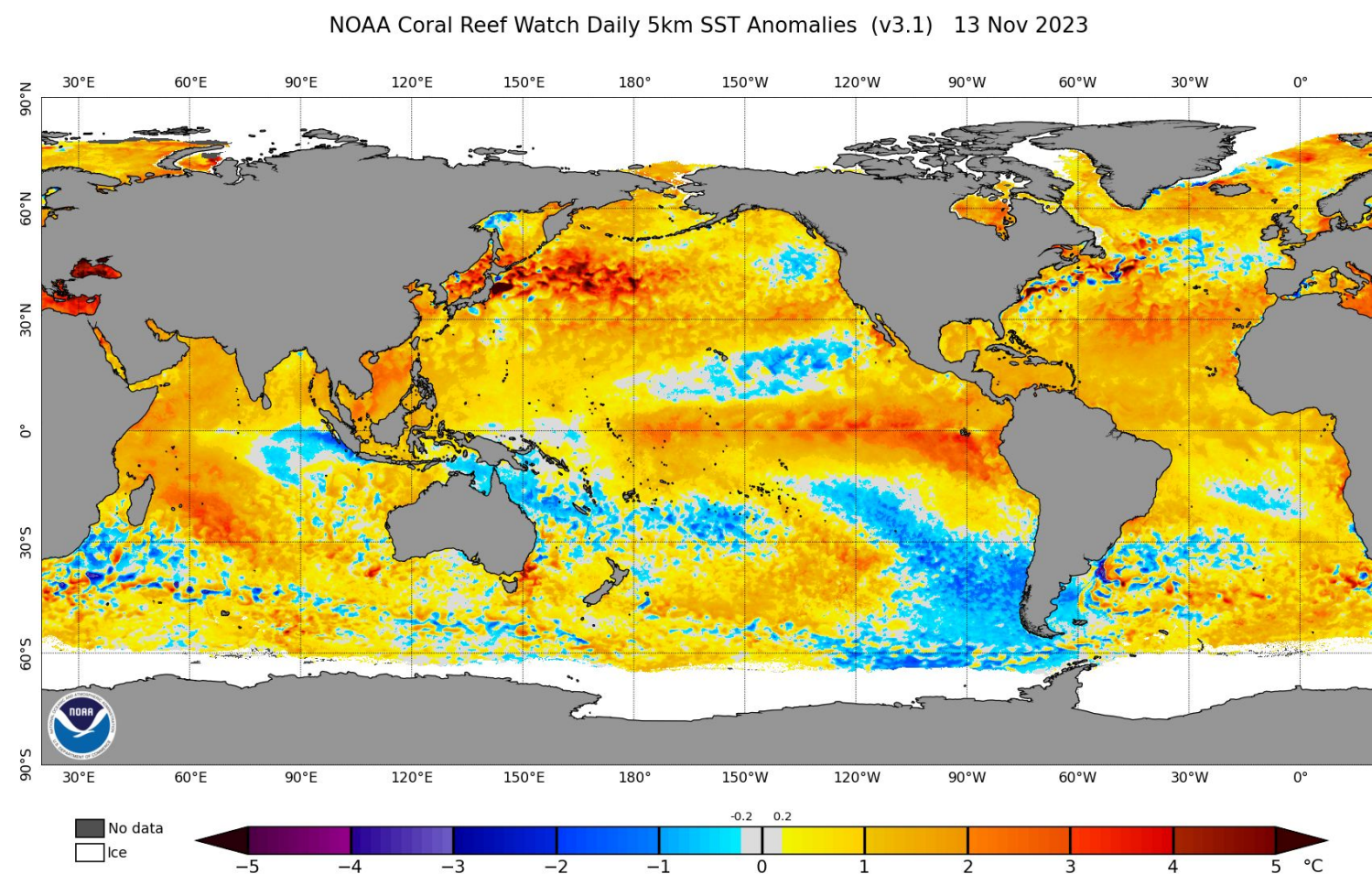


Figure 1. Average sea surface temperature (SST) anomalies (°C) for the week centered on 1 November 2023. Anomalies are computed with respect to the 1991-2020 base period weekly means.



2023-2024 ENSO Predictions

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According to the **Climate Prediction Center:**

El Niño Advisory: El Niño conditions are observed today.

El Niño is anticipated to continue through the Northern Hemisphere winter with greater than a **80% chance through at least March-May 2024.**

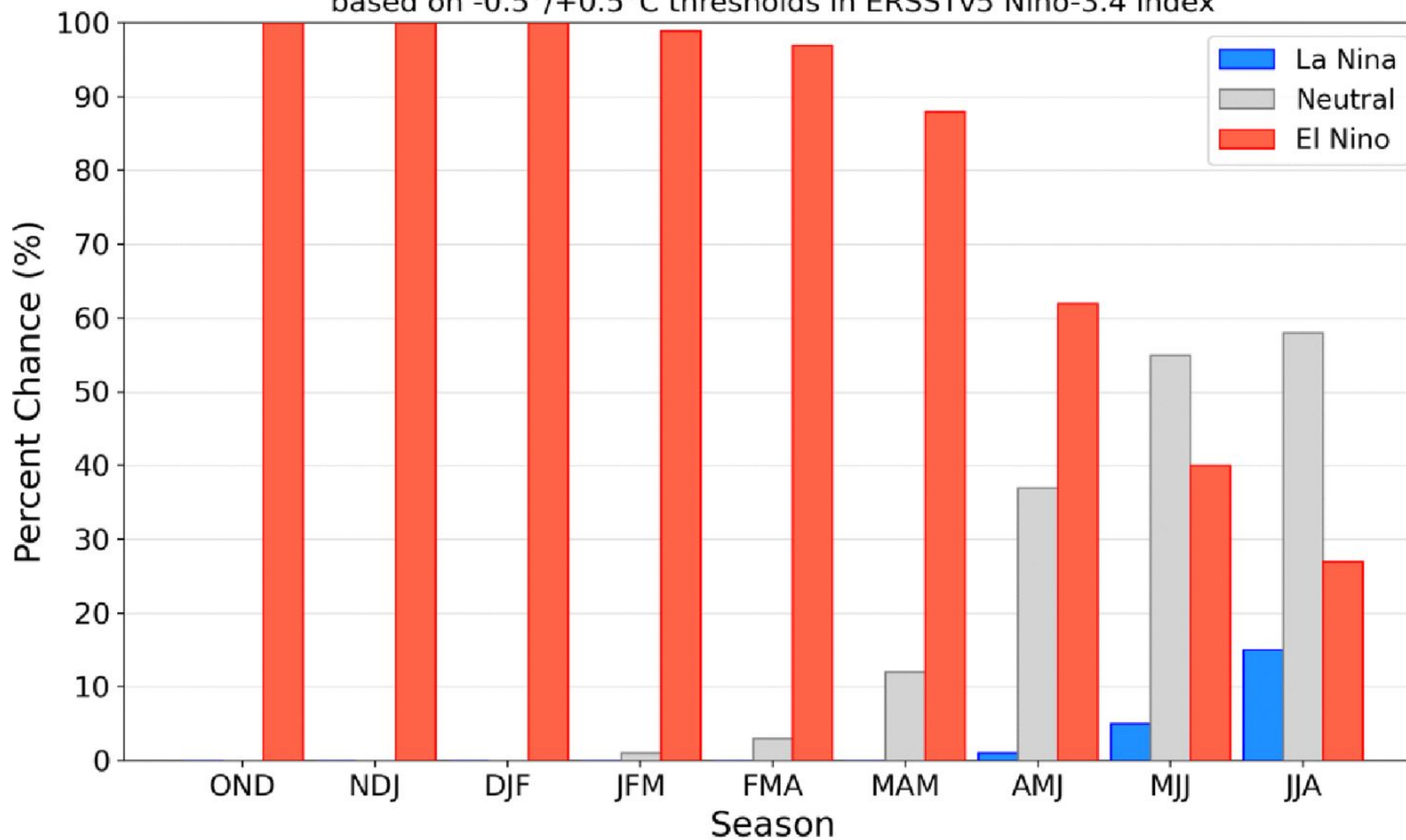
Probability of a **strong El Niño** is **71%.**



ENSO CPC Probabilities

Official NOAA CPC ENSO Probabilities (issued Nov. 2023)

based on $-0.5^{\circ}/+0.5^{\circ}\text{C}$ thresholds in ERSSTv5 Niño-3.4 index

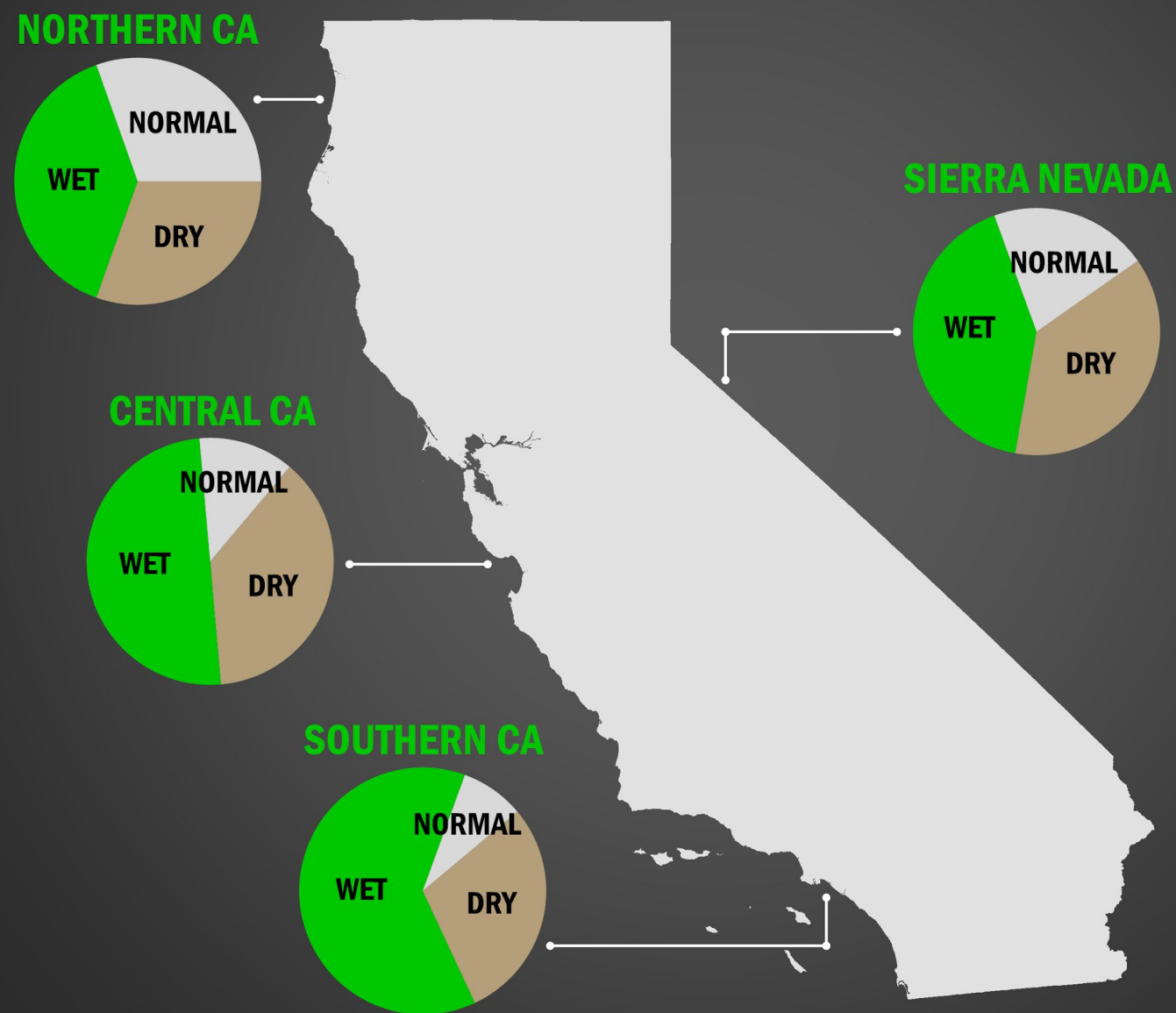


Greater than 80% chance of El Niño continuing into spring

Figure 7. Official ENSO probabilities for the Niño 3.4 sea surface temperature index (5°N - 5°S , 120°W - 170°W). Figure updated 9 November 2023.

PAST EL NIÑO EVENTS

1950-2022*

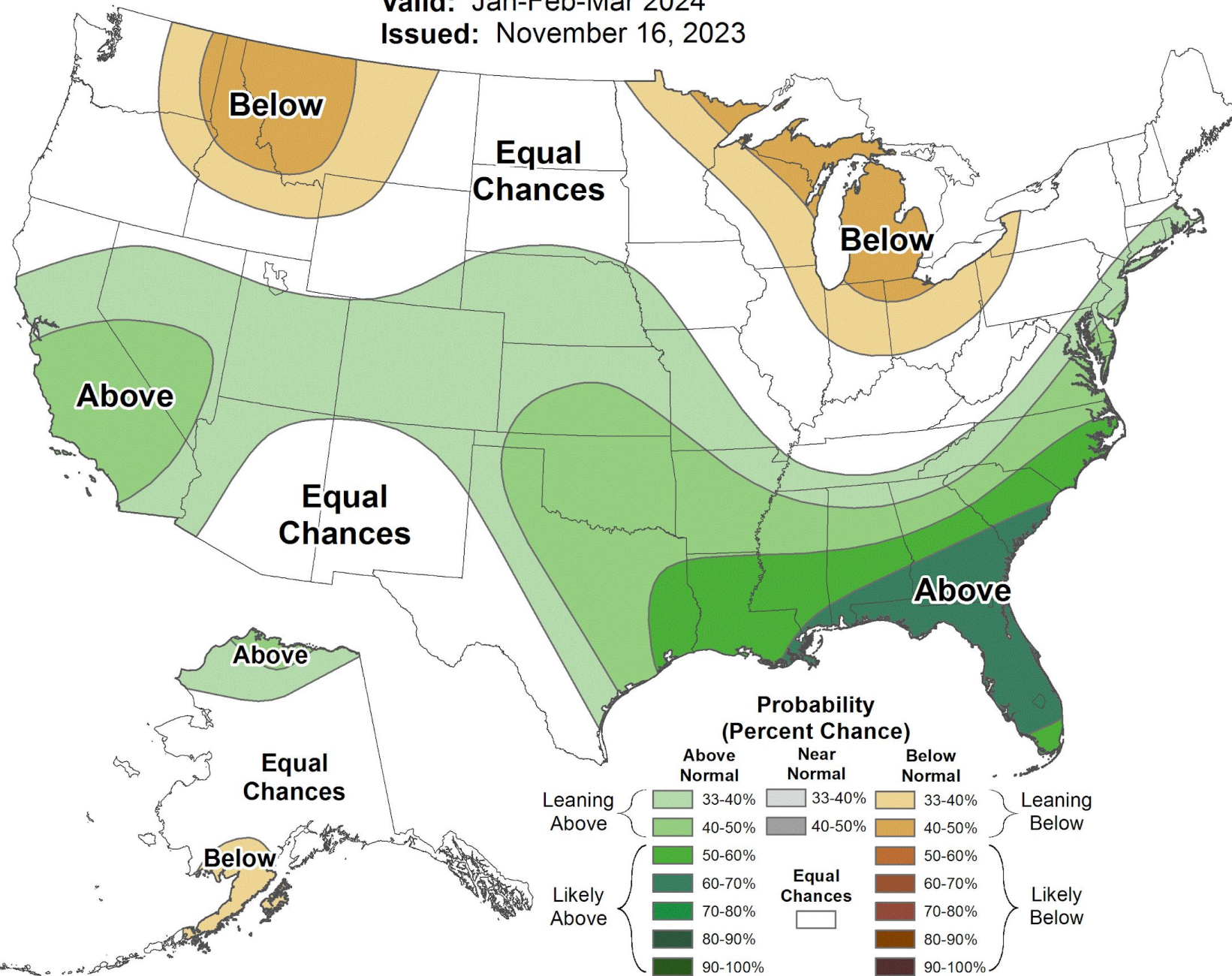


- El Niño conditions typically drive the storm track farther south than a average winter
- Southern California has better predictability of precipitation than northern California in El Niño winters
- *El Niños have recorded anywhere from **very dry** to **very wet** winters!*
- Remember, our future water supply will be dependent on individual storms!

January-February-March

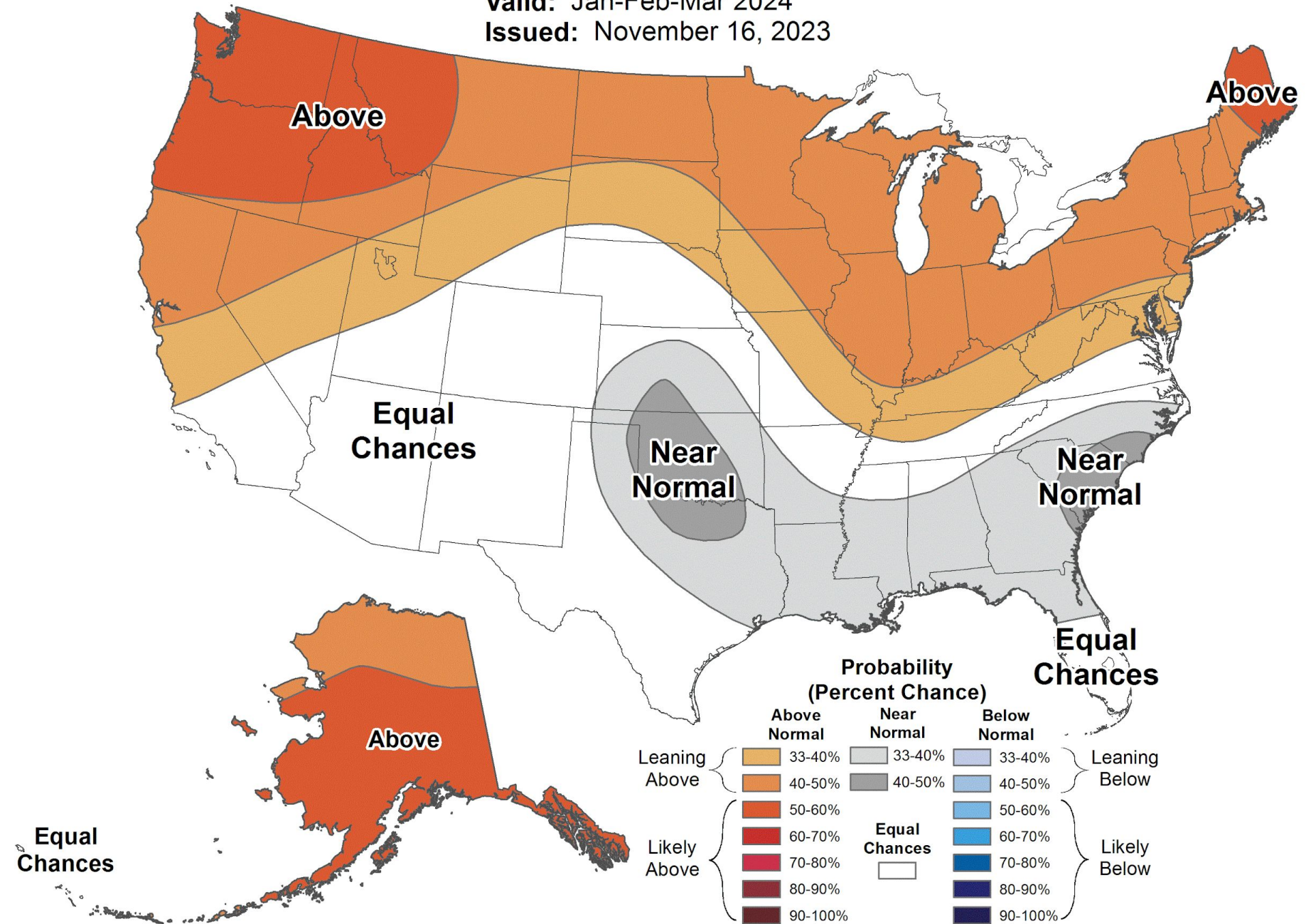
Seasonal Precipitation Outlook

Valid: Jan-Feb-Mar 2024
Issued: November 16, 2023



Seasonal Temperature Outlook

Valid: Jan-Feb-Mar 2024
Issued: November 16, 2023



Precipitation:

Odds leaning to **ABOVE CHANCES** for precipitation for Central California

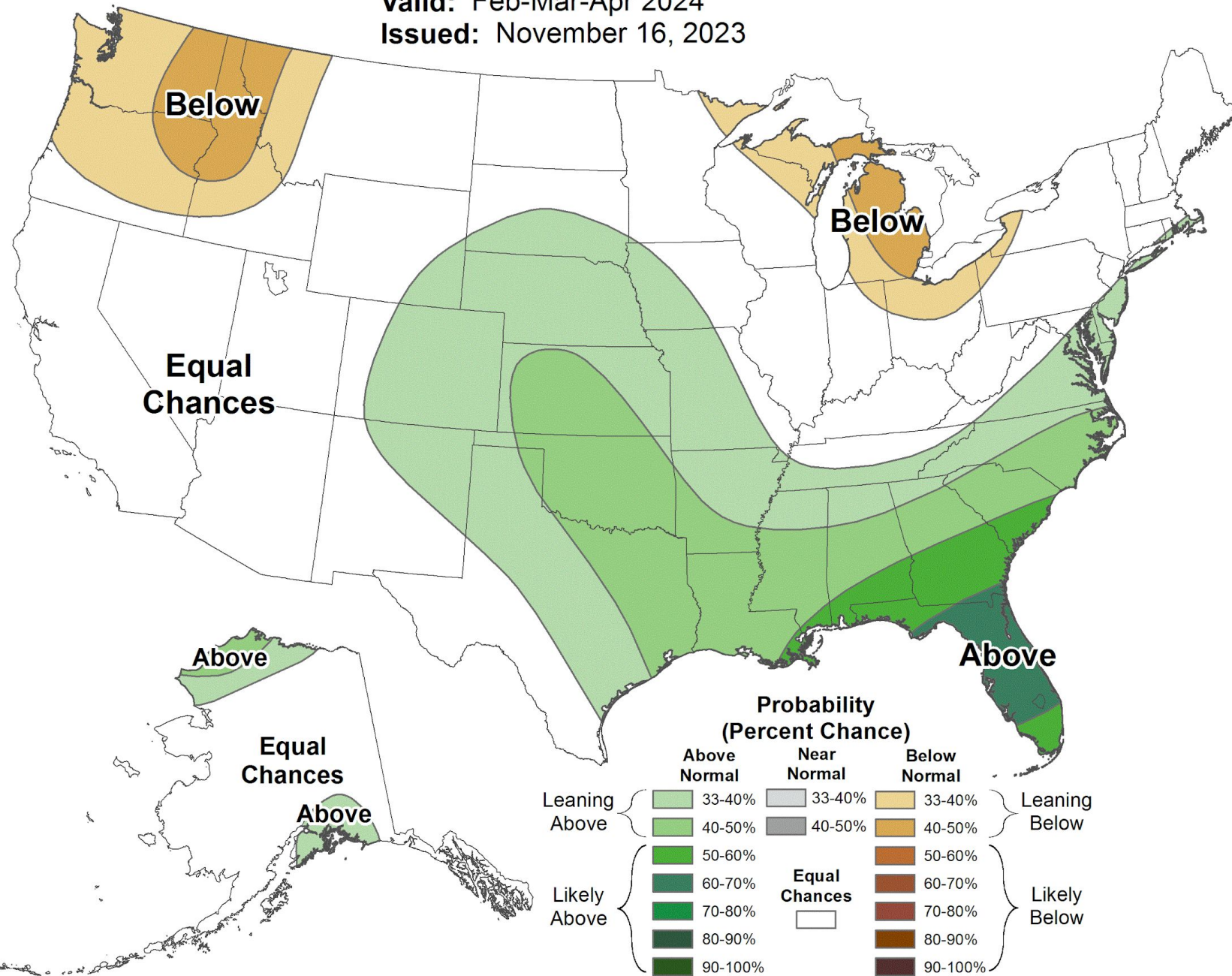
Temperature:

Odds leaning towards **ABOVE NORMAL** temperatures in Central California

February-March-April

Seasonal Precipitation Outlook

Valid: Feb-Mar-Apr 2024
Issued: November 16, 2023

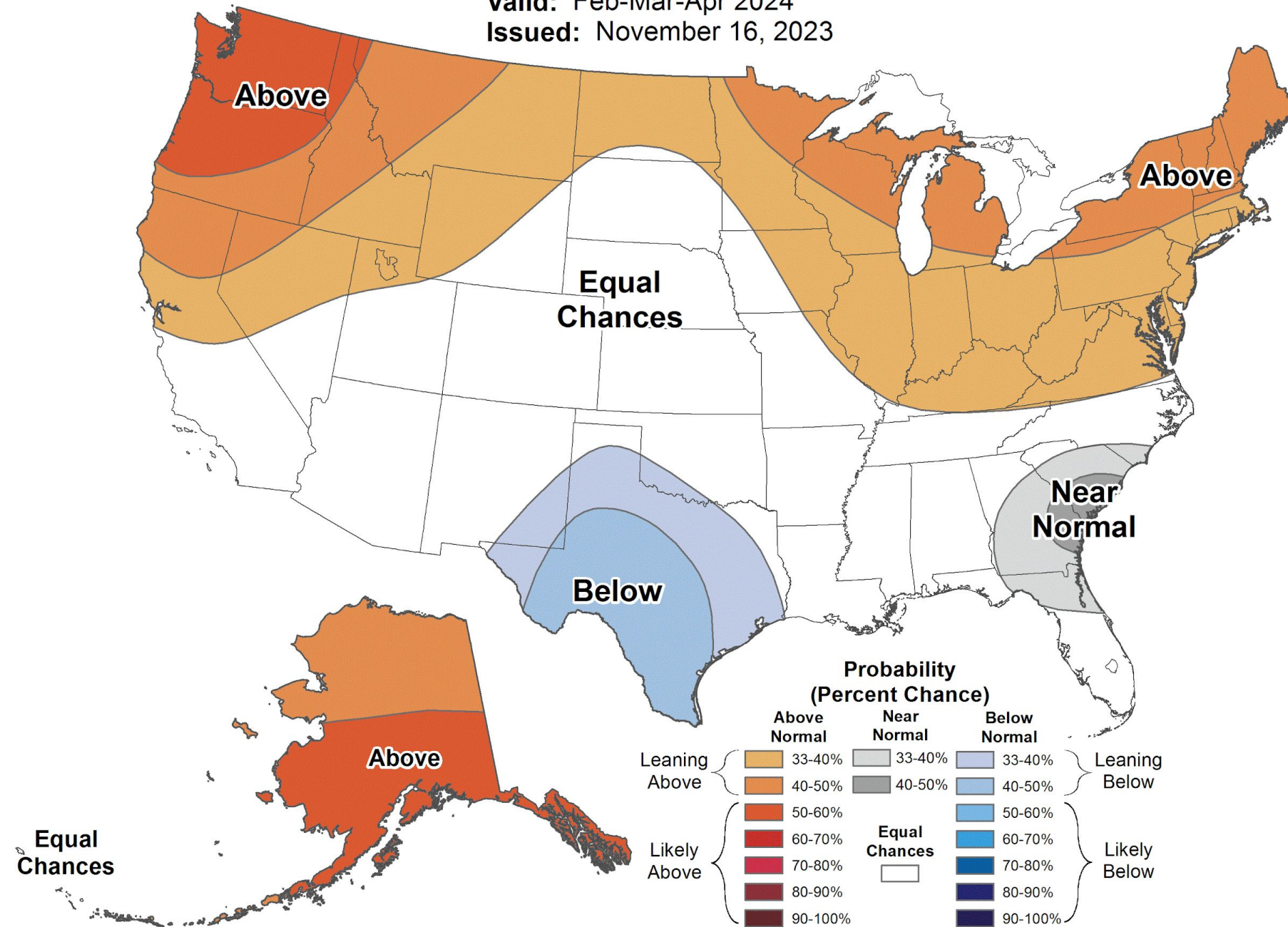


Precipitation:

Odds leaning to EQUAL CHANCES precipitation for Central California

Seasonal Temperature Outlook

Valid: Feb-Mar-Apr 2024
Issued: November 16, 2023



Temperature:

Odds leaning to **EQUAL CHANCES TO LEANING ABOVE** temperature for Central California



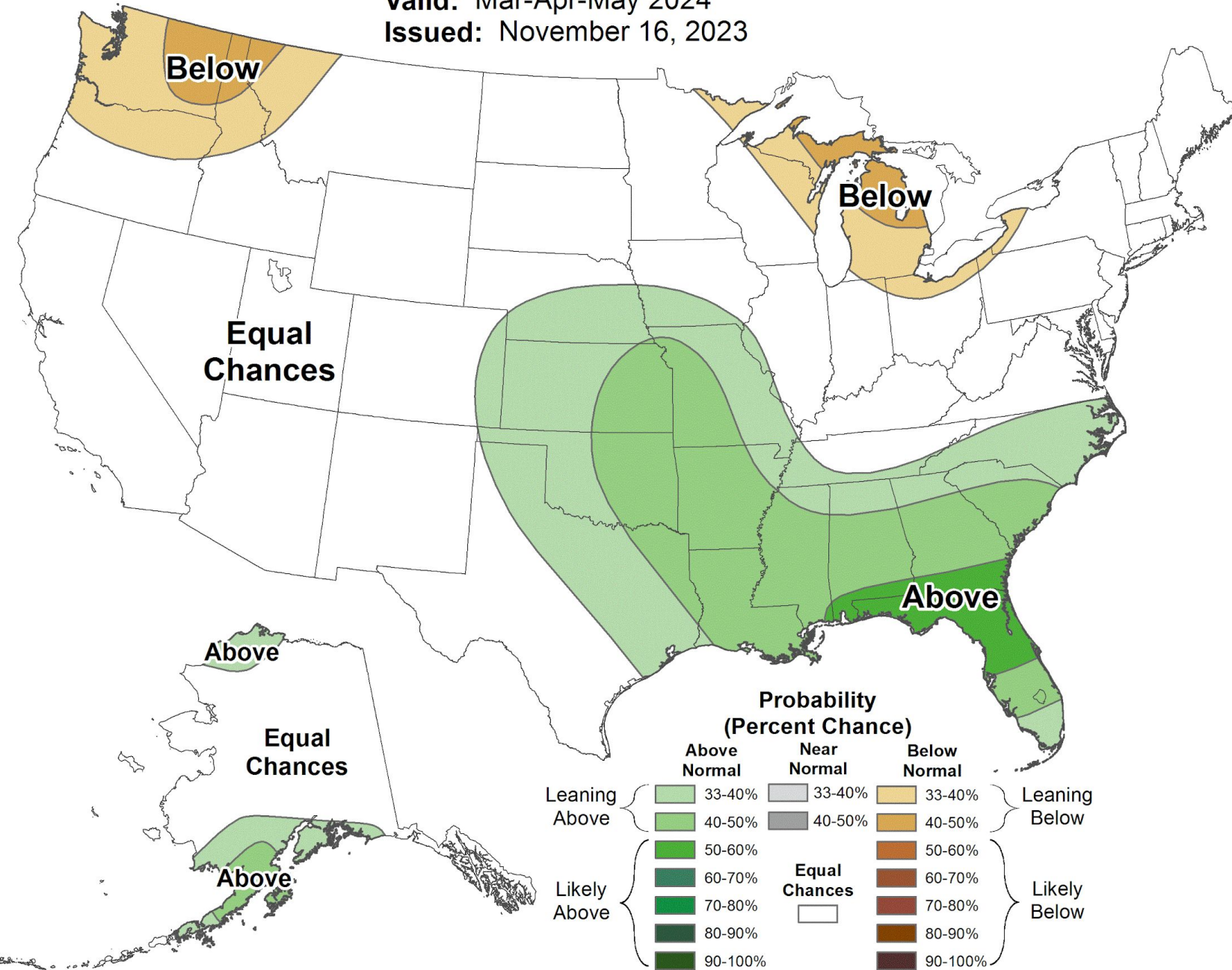
CPC 3 Month Outlooks

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March-April-May

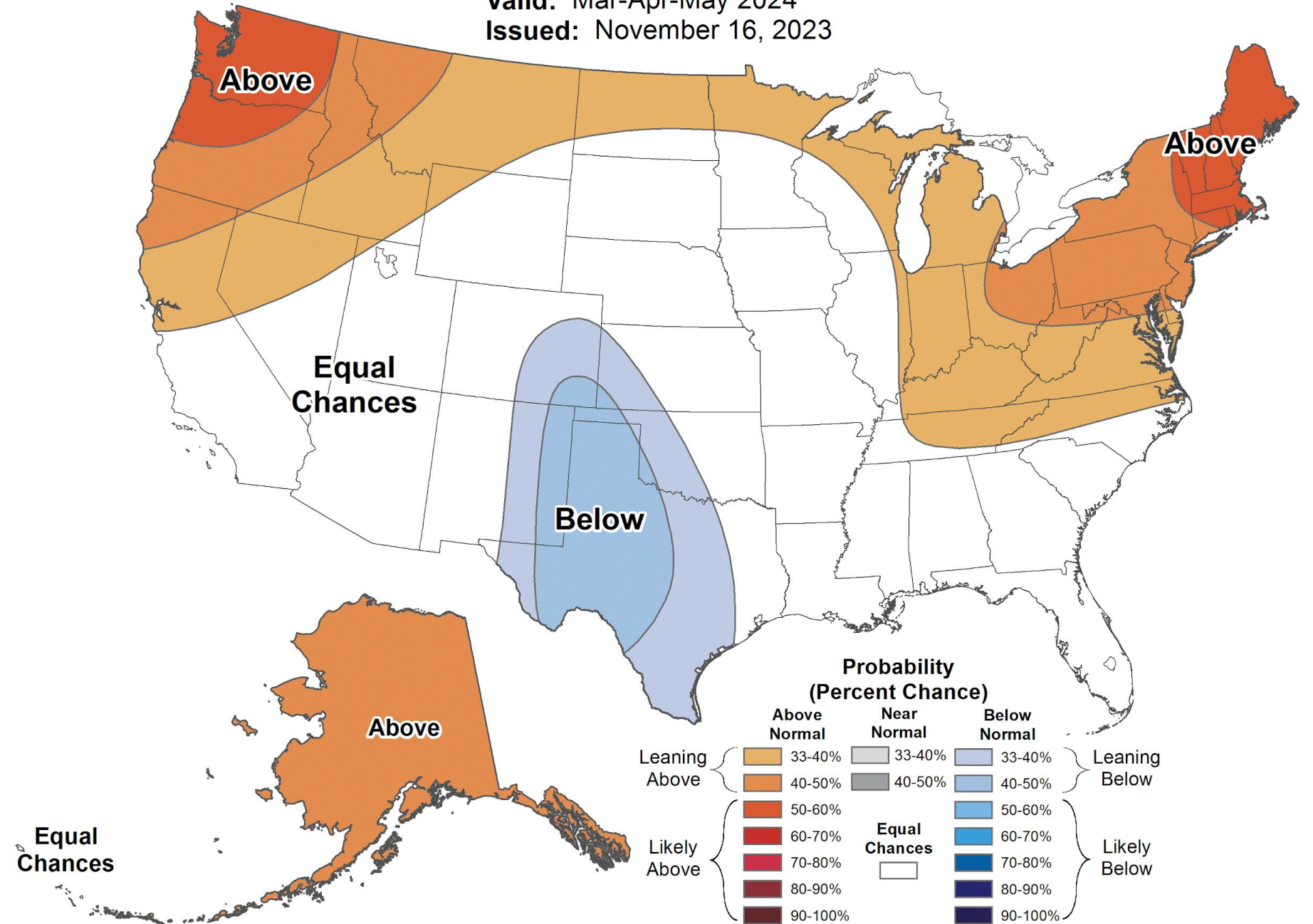
Seasonal Precipitation Outlook

Valid: Mar-Apr-May 2024
Issued: November 16, 2023



Seasonal Temperature Outlook

Valid: Mar-Apr-May 2024
Issued: November 16, 2023

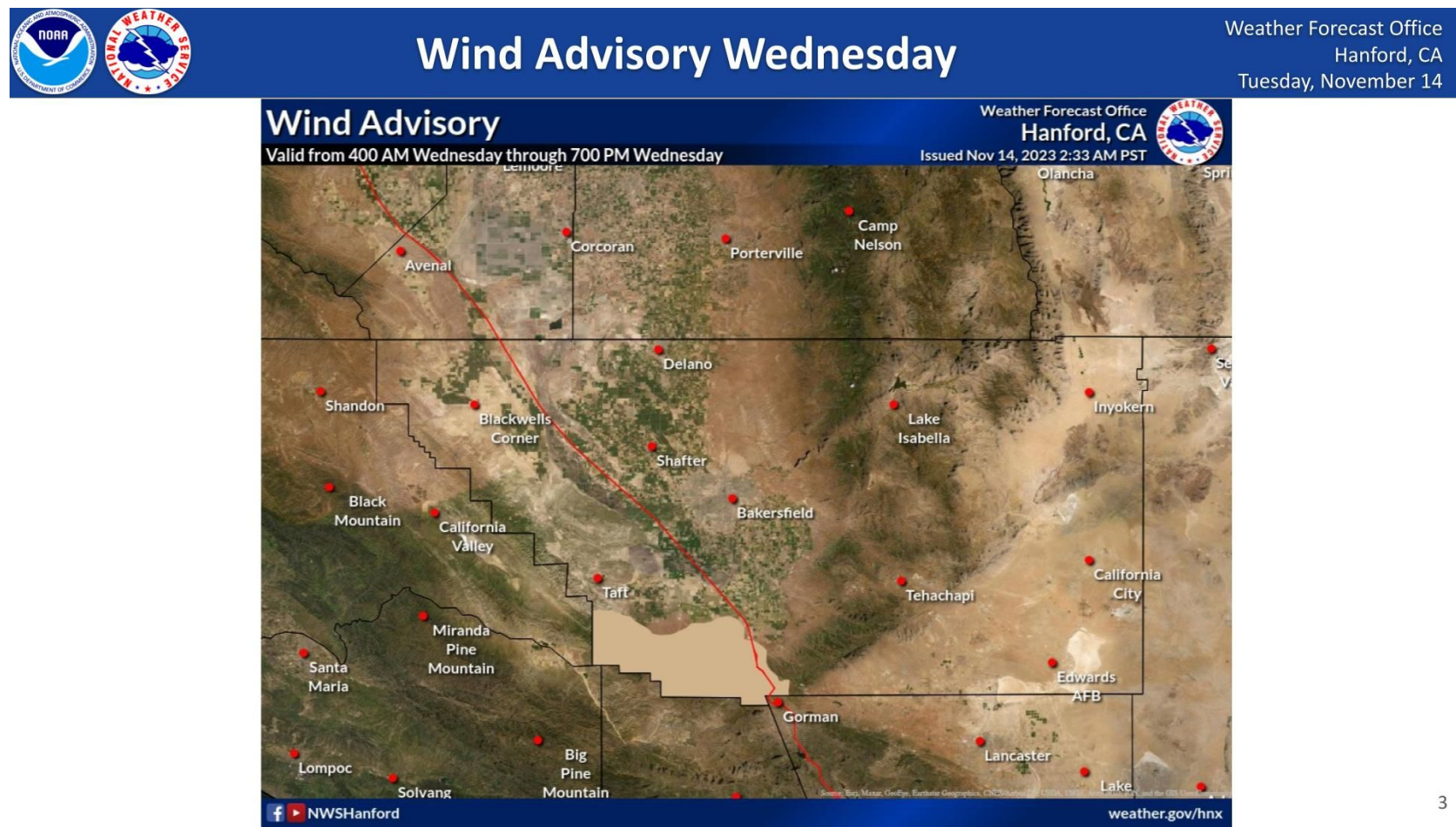


Precipitation:

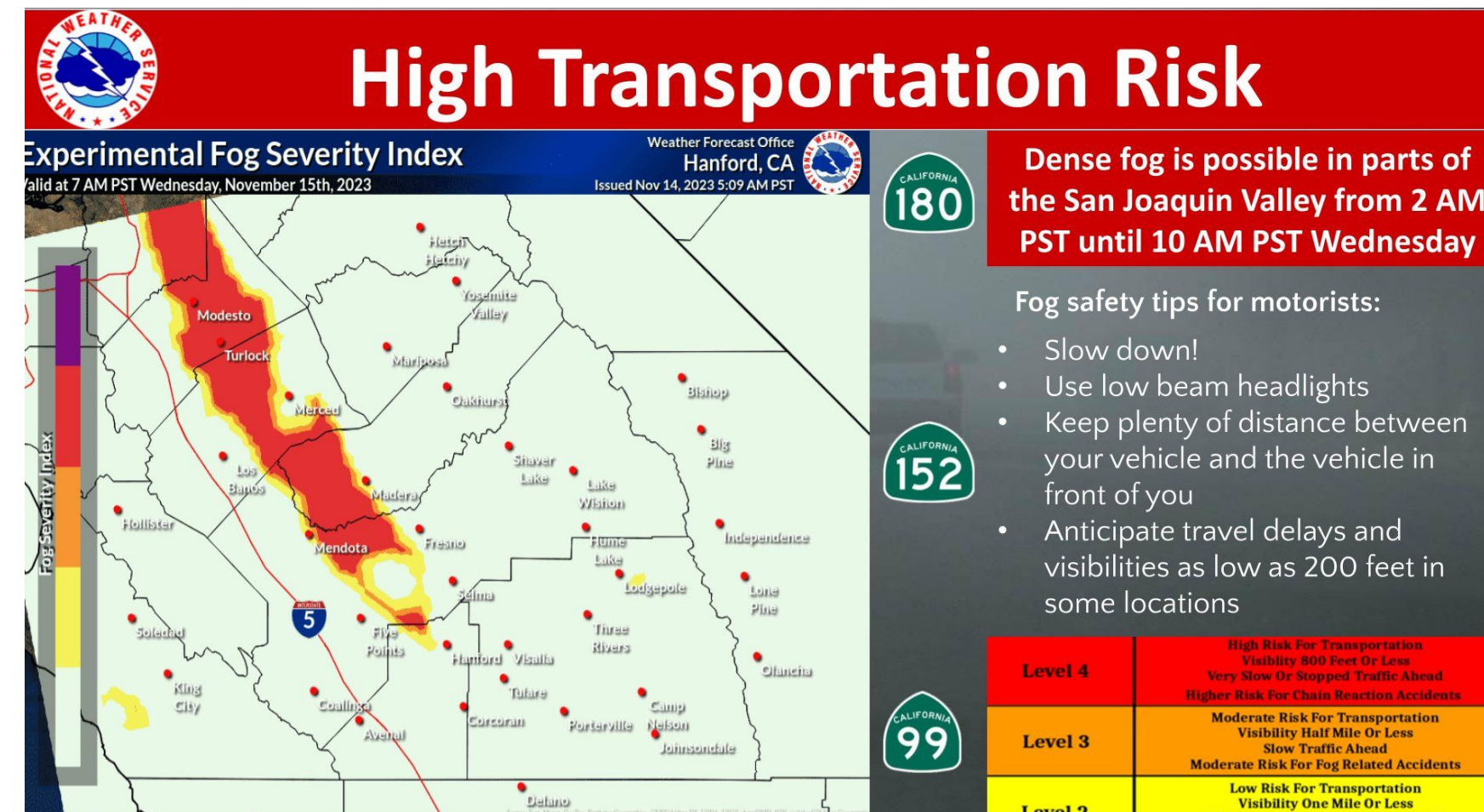
Odds leaning to **EQUAL CHANCES** precipitation for Central California

Temperature:

Odds leaning to **Equal Chances** for temperature for Central California



3



- **Wind Products(Wind Advisories, High Wind Watch, Or High Wind Warnings)**
- **Dense Fog Advisory/High Transportation Risk**



What Products Do We Issue?

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- **Severe Thunderstorm Warning/Tornado Warning**
- **Heat Advisory/Excessive Heat Watch/Excessive Heat Warning**
- **Flood Products**
- **National Products**
 - Weather Prediction Center Excessive Rainfall Outlook
 - National Hurricane Center/Tropical Outlook
 - Storm Prediction Center/Severe Weather Outlook

Excessive Heat Warning Today

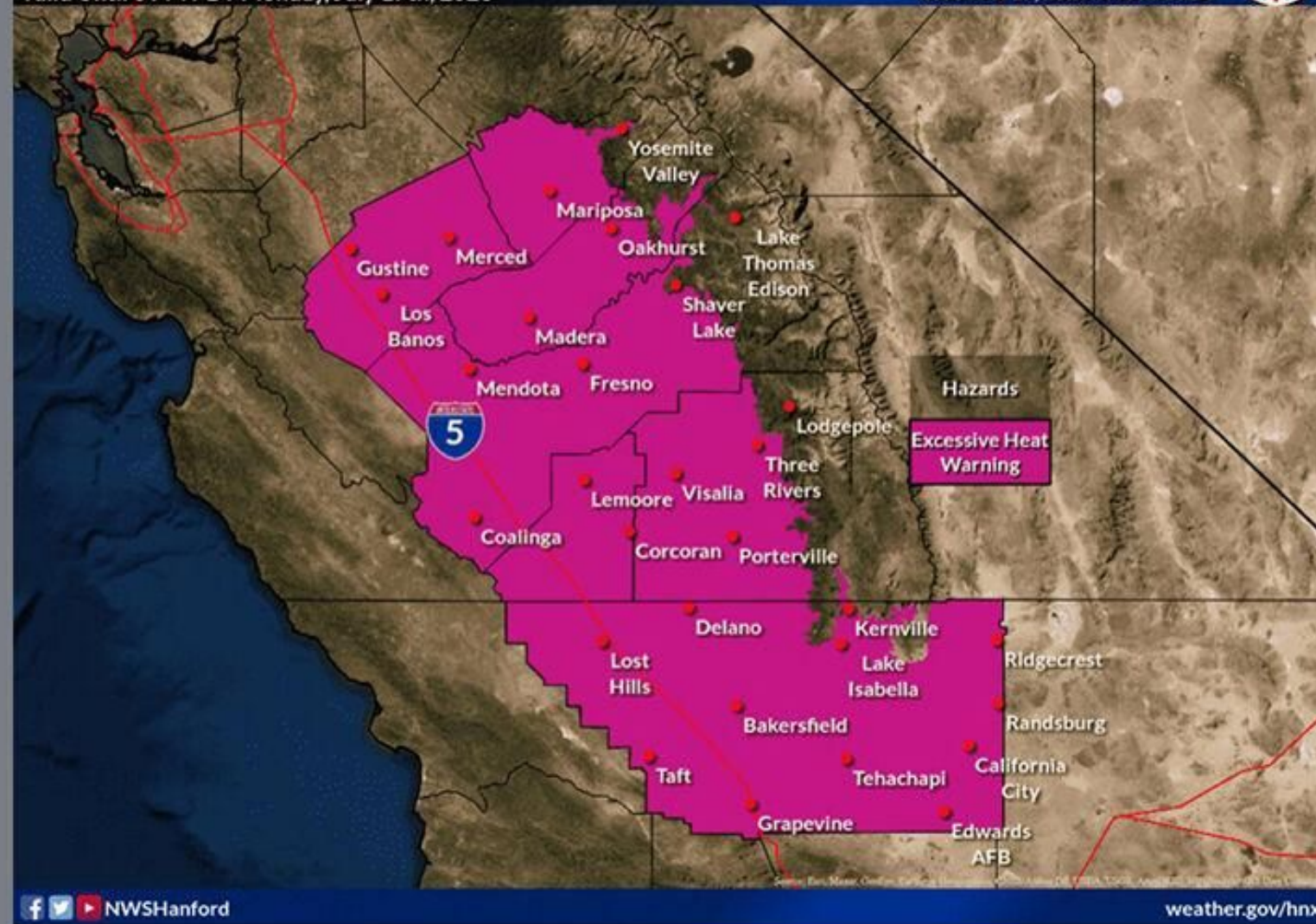
Information as of Monday, July 17th, 2023 at 3:30 AM PDT

Excessive Heat Warning

Valid Until 8 PM PDT Monday, July 17th, 2023

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Issued Jul 17, 2023 3:30 AM PDT



NWSHanford

weather.gov/hnx

BOTTOM LINE

- High temperatures 104 to 109 degrees in the San Joaquin Valley
- High temperatures 99 to 104 degrees in the Lower Sierra foothills, Yosemite Valley, and Kern River Valley

WHAT TO DO

- Stay in air conditioning
- Drink plenty of water
- Reduce time in the sun
- Limit outdoor activities



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<http://www.weather.gov/hnx>

facebook.com/NWSHanford @NWSHanford

July 17, 2023



Differences Between a Watch and Warning

FLOOD WARNING

A Flood Warning is issued when flooding is **happening** or will happen soon. Some roads will be **flooded**.

Move to higher ground.

Never drive through flooded roads.

take action.

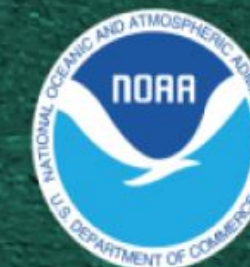
FLOOD WATCH

A Flood Watch is issued when flooding is possible.

Stay tuned to radio/TV, follow **weather.gov** and be ready to seek higher ground.

Learn more at **weather.gov/flood**.

be prepared.





Weather Ready Nation Ambassador

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As a WRN Ambassador, you will serve as a change agent and leader in your community. You will inspire others to be better informed and prepared, helping to minimize or even avoid the impacts of these natural disasters.

To support your efforts, NOAA can:

- Provide outreach content about creating a Weather-Ready Nation;
- Explore innovative approaches for collaboration with your organization;
- Assist with [StormReady®/TsunamiReady™](#) opportunities for communities;
- Recognize your organization as a WRN Ambassador; and
- Share the WRN Ambassador logo for your use.

<https://www.weather.gov/wrn/amb-tou>





Contact Information

Weather Forecast Office
Hanford, CA
Friday, November 17

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Warning Coordination Meteorologist (WCM) Contact Information:

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Hydrology Specific Questions:

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 nws.hanford@noaa.gov

 (559) 584-9051

 weather.gov/hanford

