NWS Reno 2026-27 Winter Outlook

El Niño is All the Rage This Winter!

Weather Forecast Office
Reno, NV
Monday, November 9

weather.gov/reno

775-673-8100

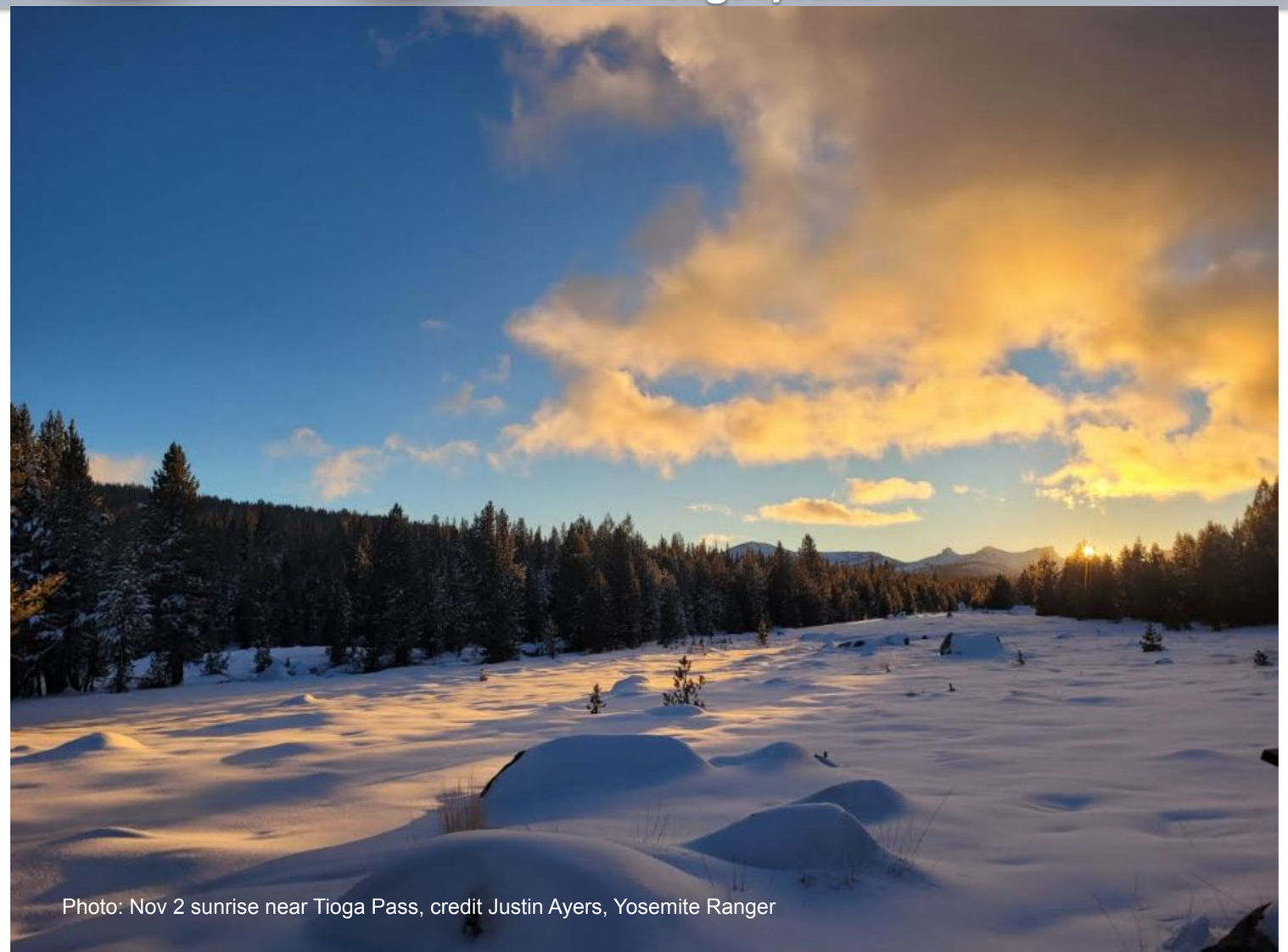


Photo: Nov 2 sunrise near Tioga Pass, credit Justin Ayers, Yosemite Ranger

Dawn Johnson &

Tim Bardsley

Warning Coordination Meteorologist (**WCM**) &

Senior Service Hydrologist (**SSH**)

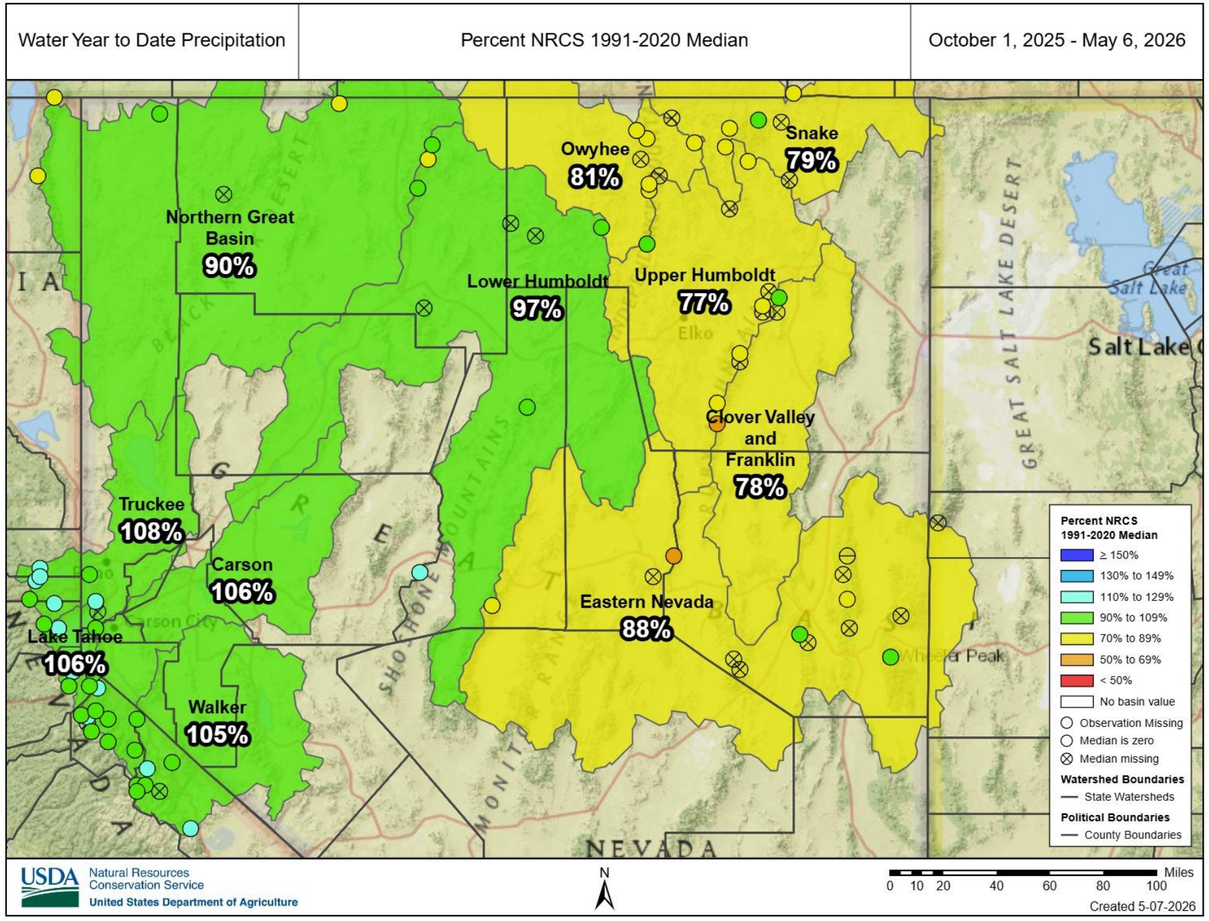
National Weather Service - Reno

Dawn.Johnson@noaa.gov

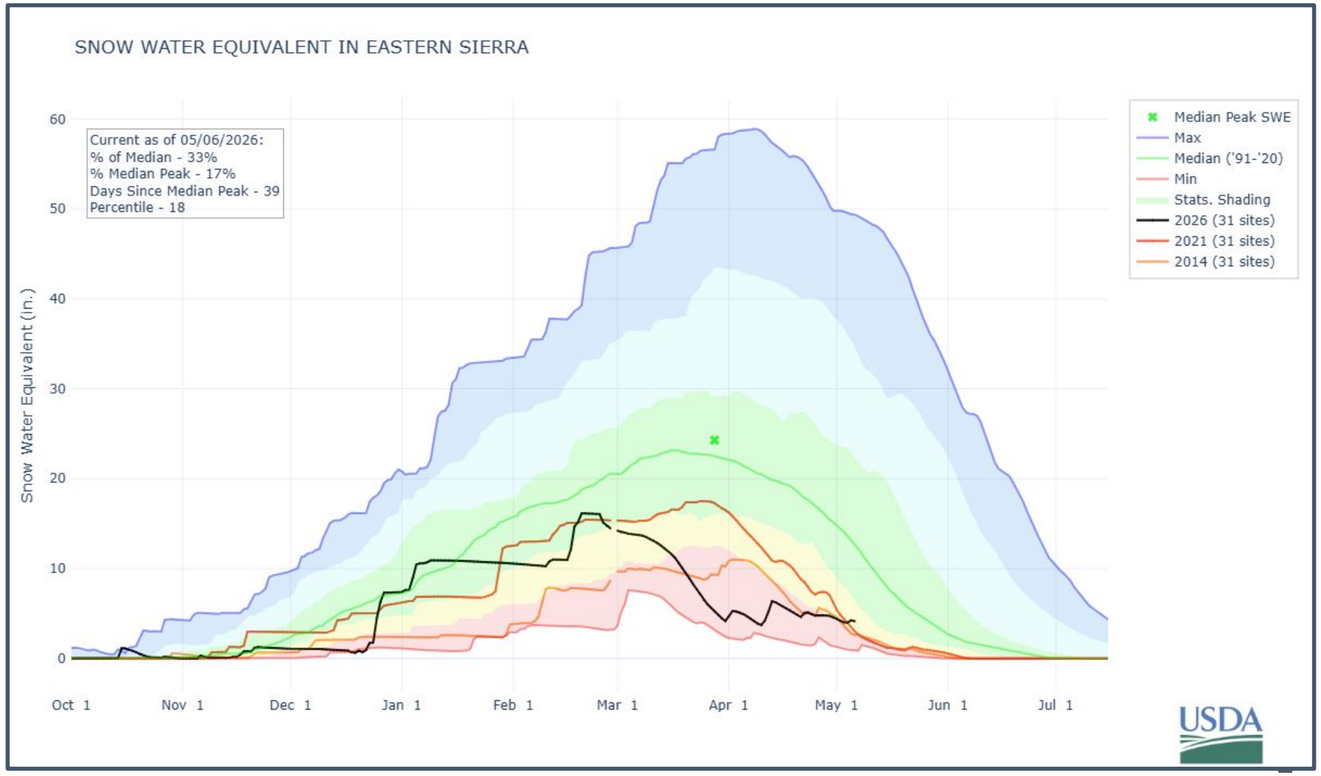
Tim.Bardsley@noaa.gov

Winter 2025-26: Snow Drought

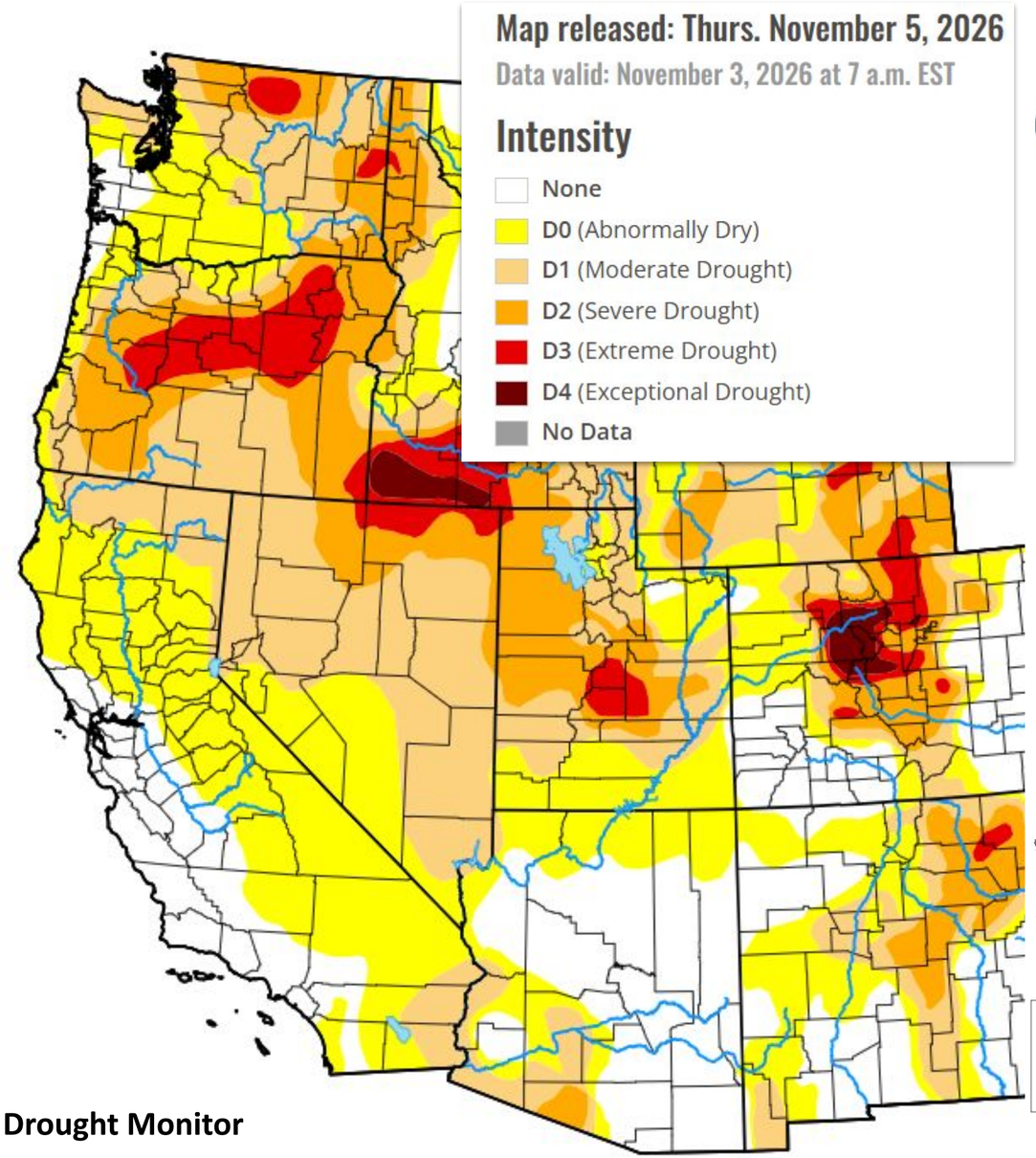
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Monday, November 9



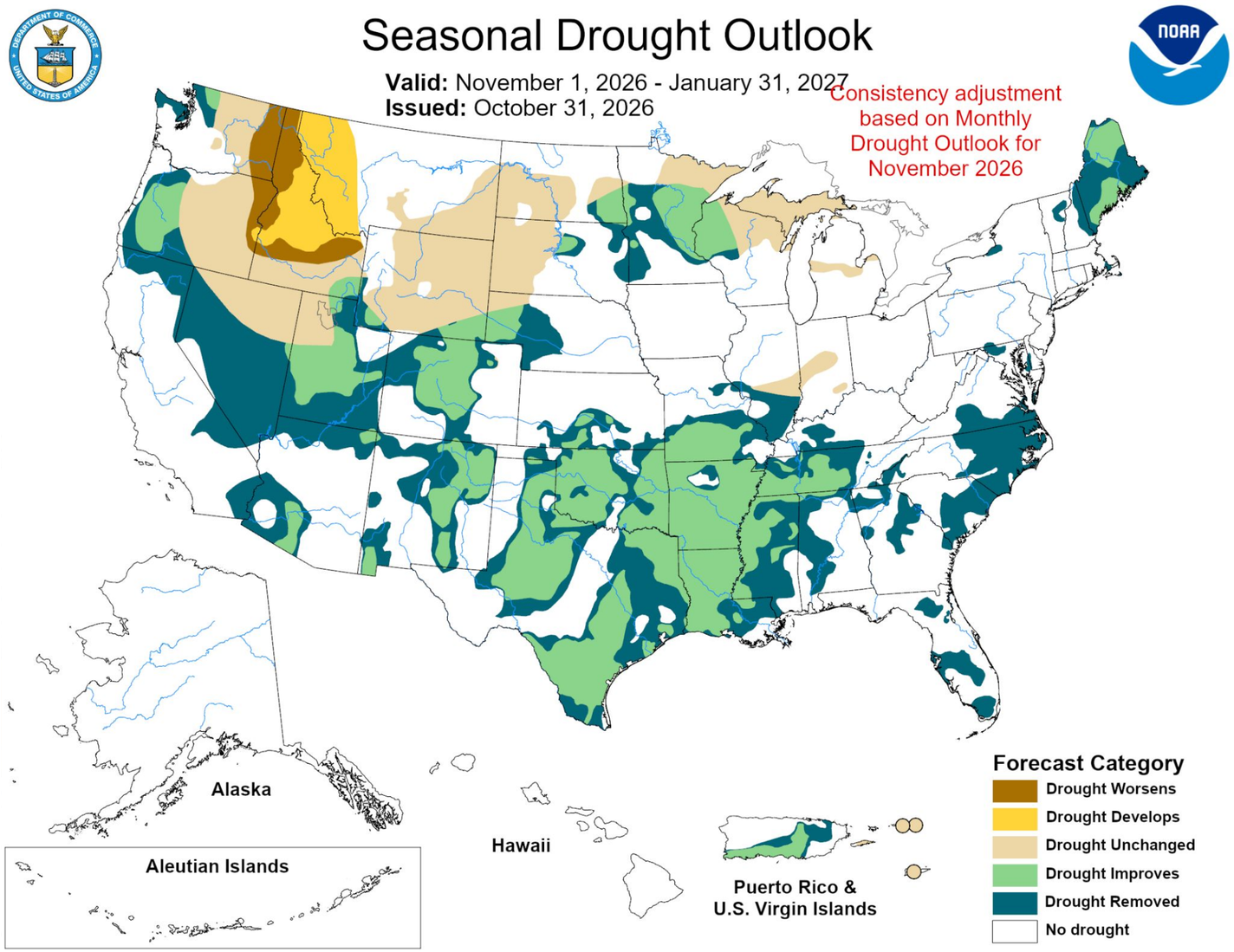
Near normal precipitation, but peaked early (2/21) with only 66% of our snowpack before our Warm AR and March Heatwave.



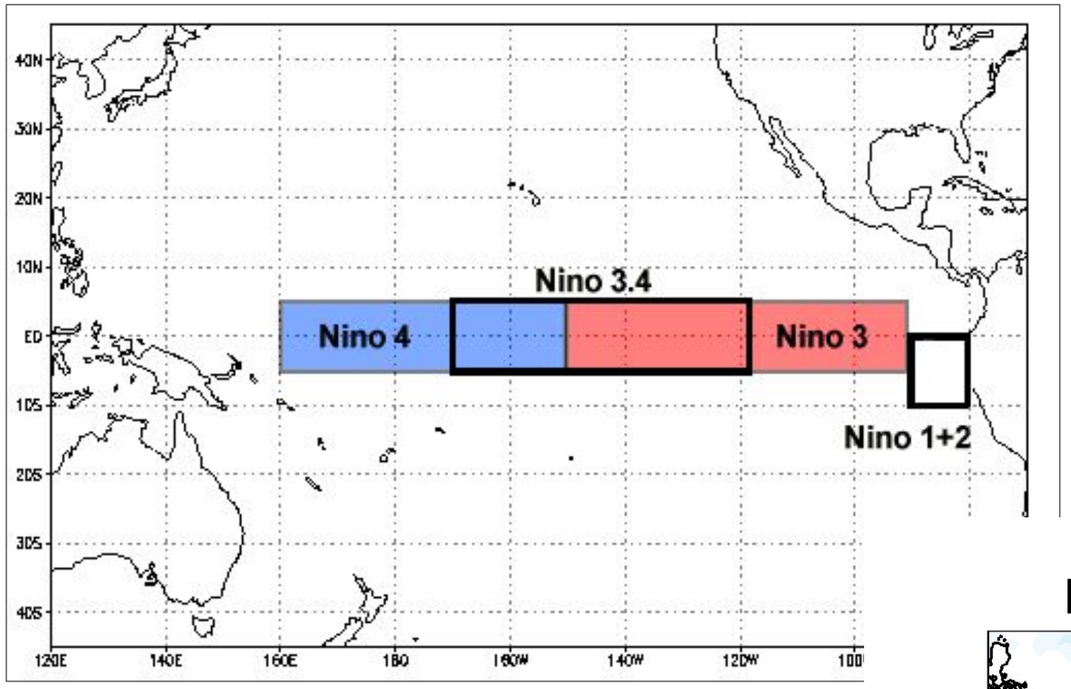
Drought Status



US Drought Monitor

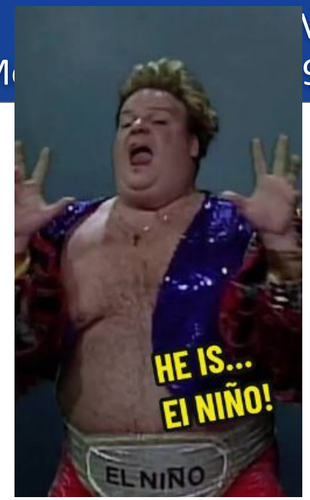


Godzilla? Super? Strong? What Say You?

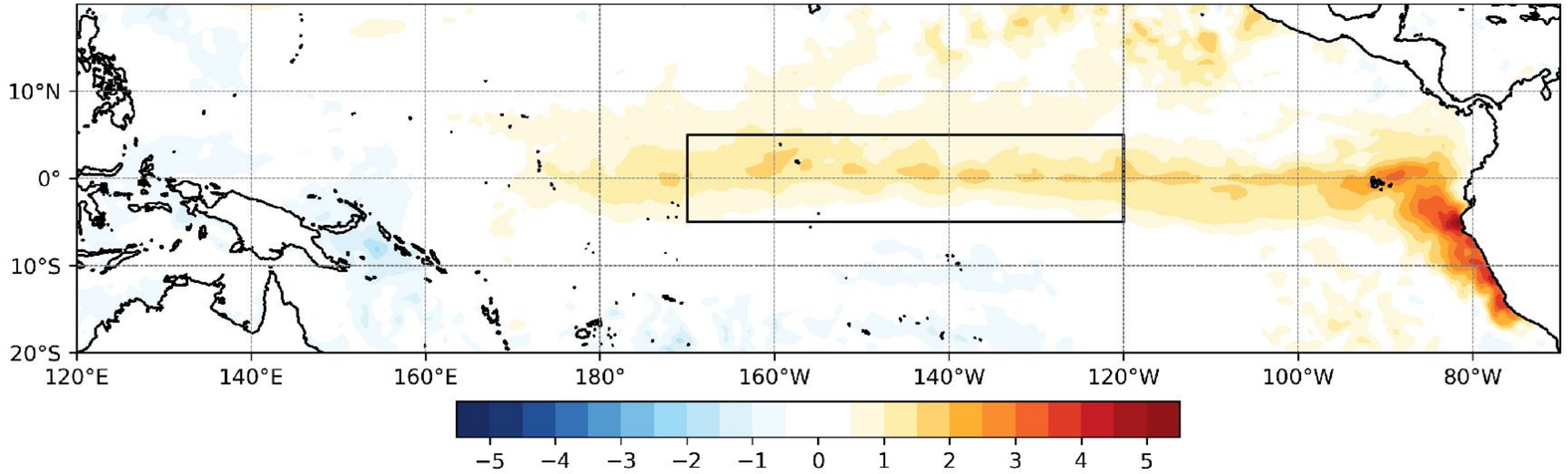




Hello El Niño!



Relative SST Anomalies Week centered on 2026.06.10



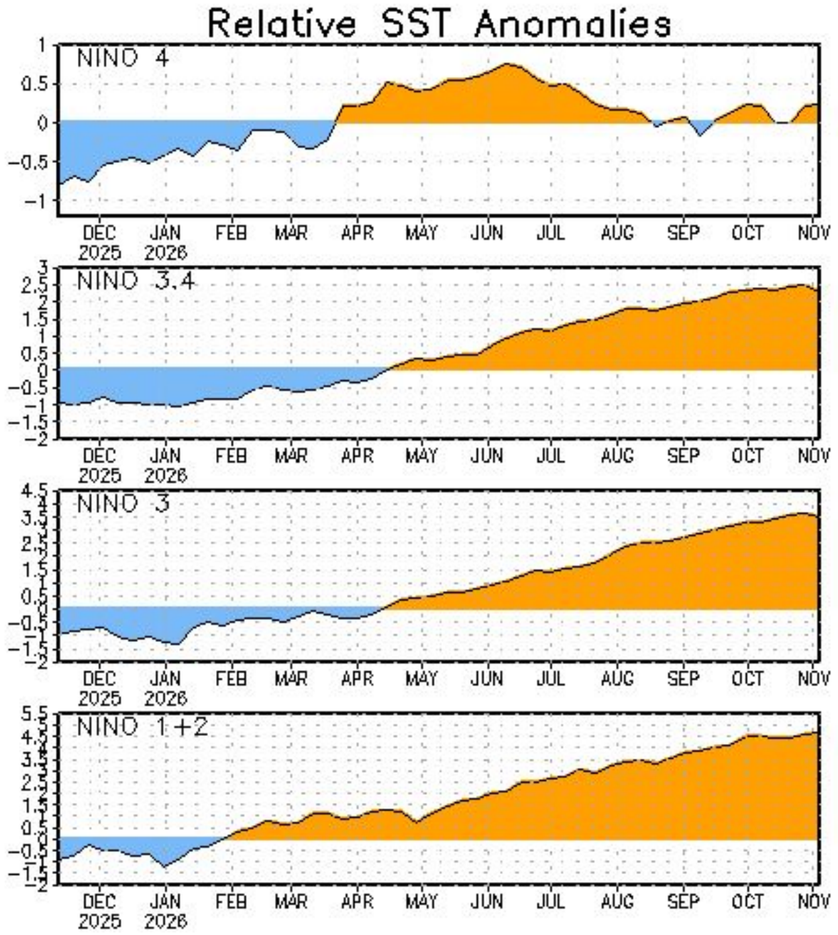
Sources

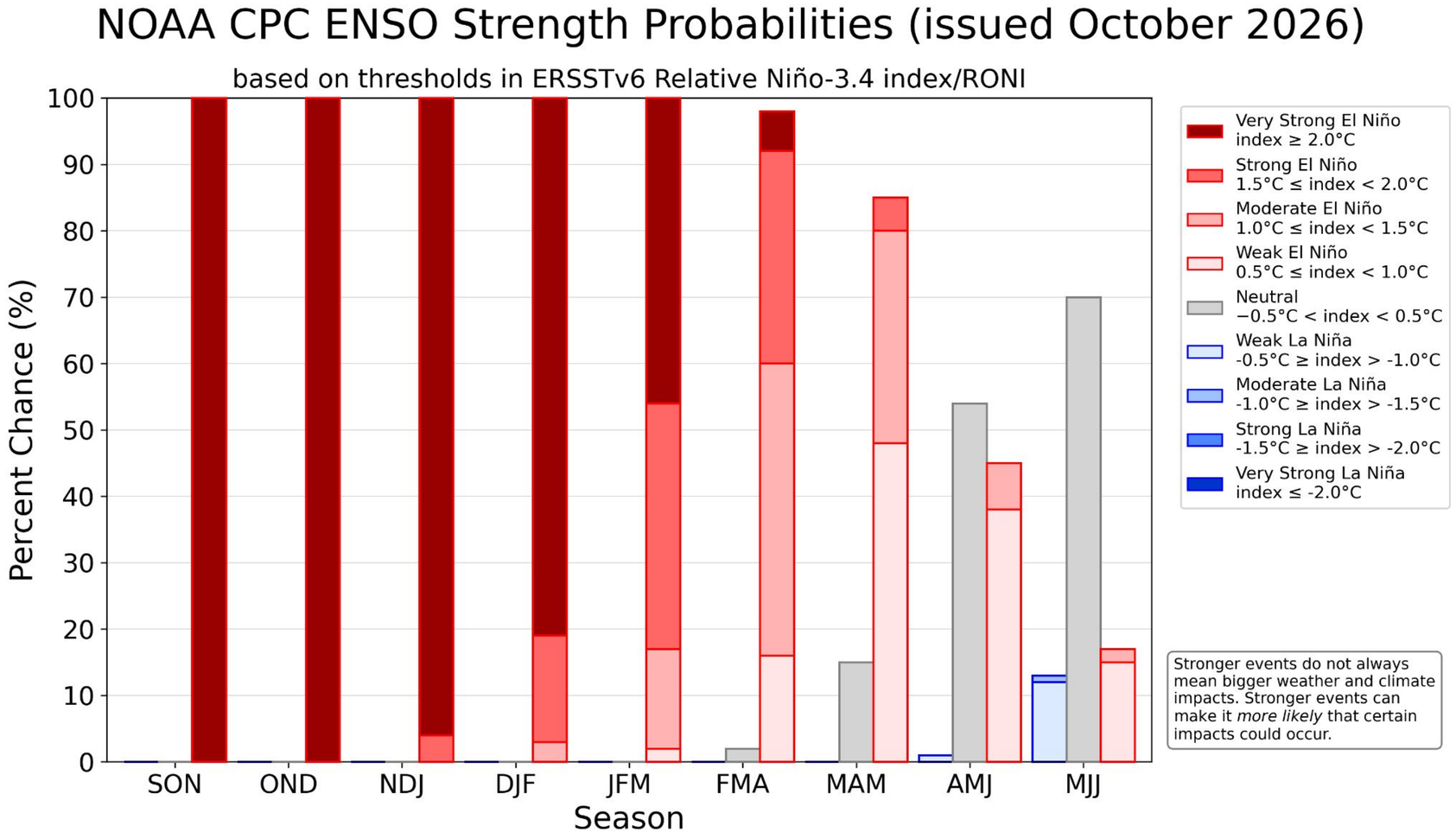
www.ncei.noaa.gov/access/monitoring/enso/sst

www.ospo.noaa.gov/products/ocean/sst/anomaly/

Fall->Winter 2026-27: Very Strong El Niño

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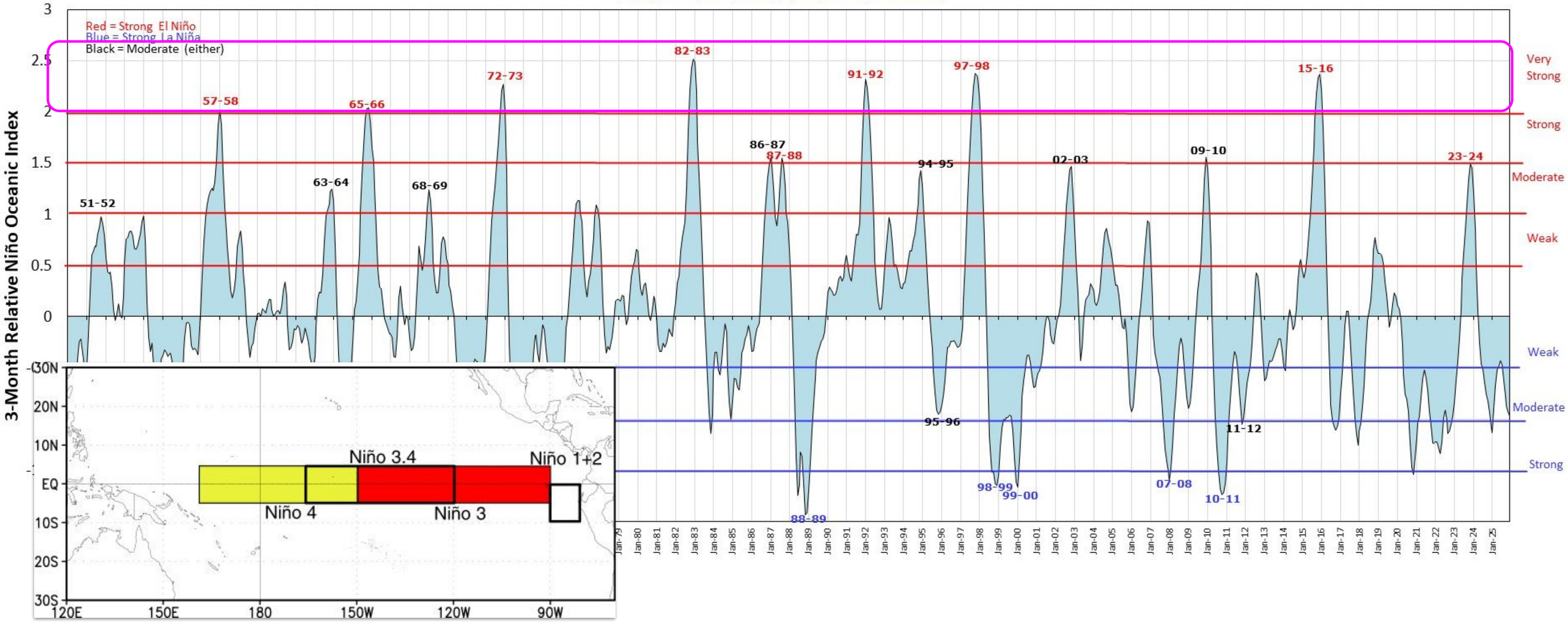


➔ **Near 100% chance for a very strong El Niño this Fall and Winter**

➔ **There's a 83% chance this will be of historic strength going back to 1950**

Relative Oceanic Niño Index (RONI)

https://www.cpc.ncep.noaa.gov/data/indices/RONI.ascii.txt



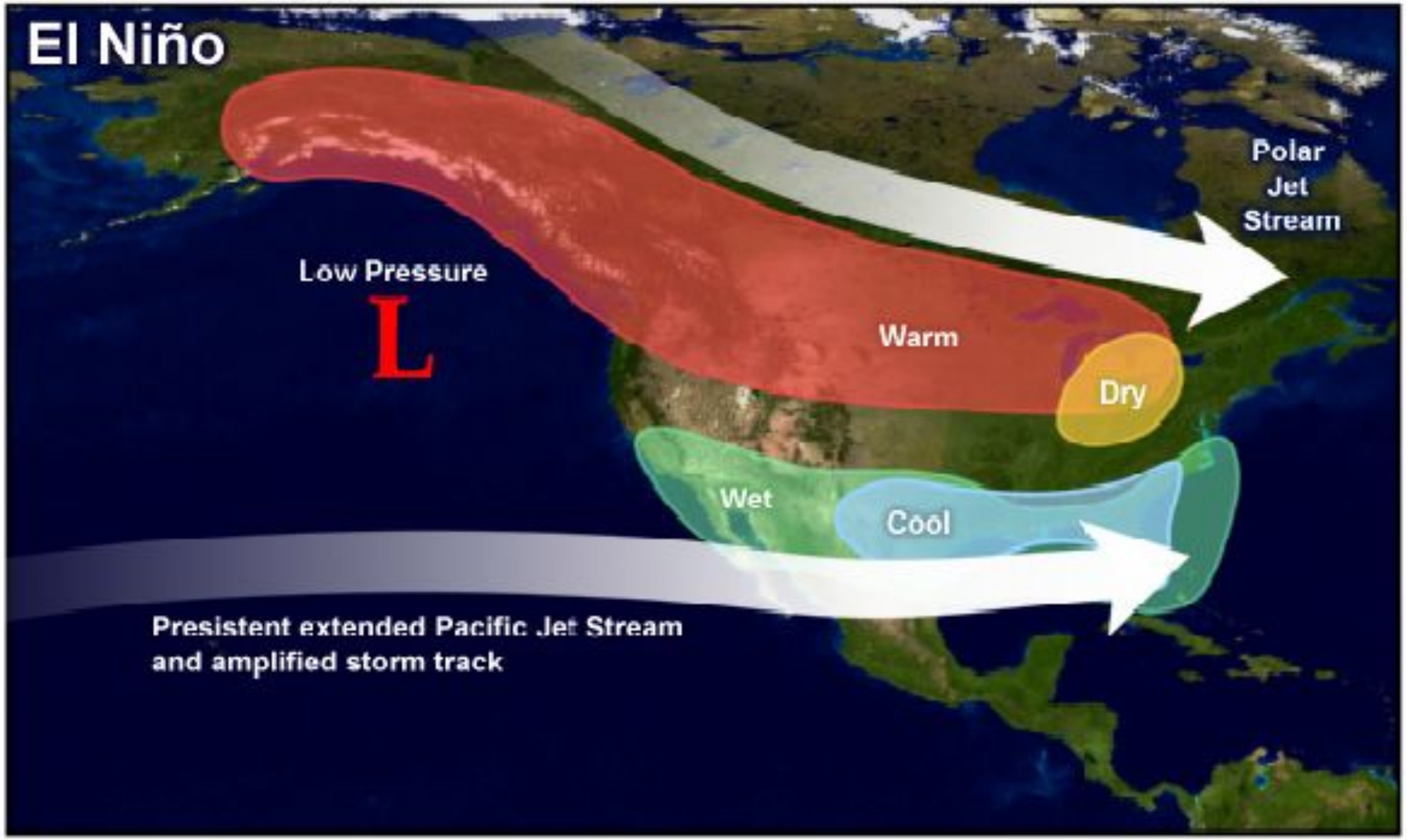
ONI measures temperature departures in one Pacific region (Niño-3.4). RONI measures those departures relative to the departures across the broader tropical oceans, which better represents the physics that drive ENSO impacts.

Very Strong (6 events) RONI 2.0+:

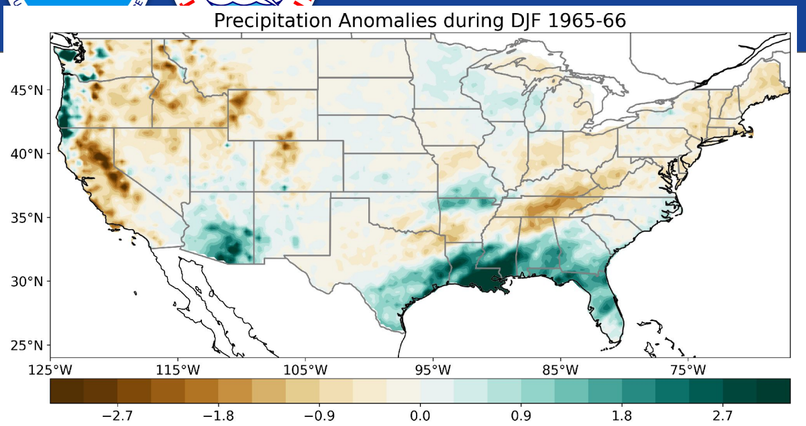
1965-66
1972-73
1982-83
1991-92
1997-98
2015-16

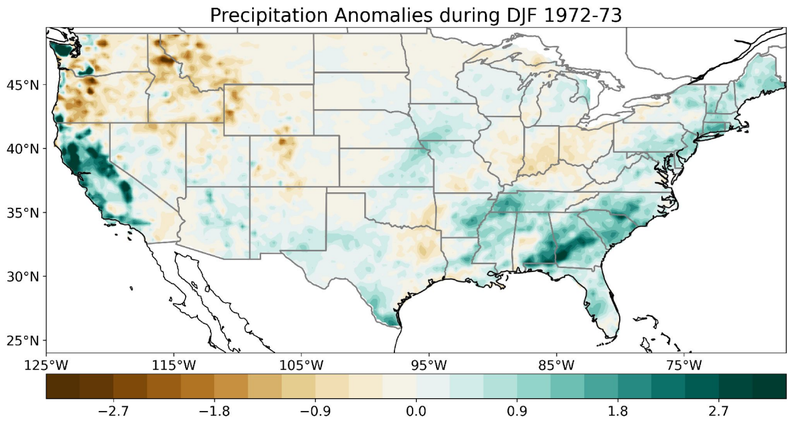
“Typical” El Niño Winter Pattern

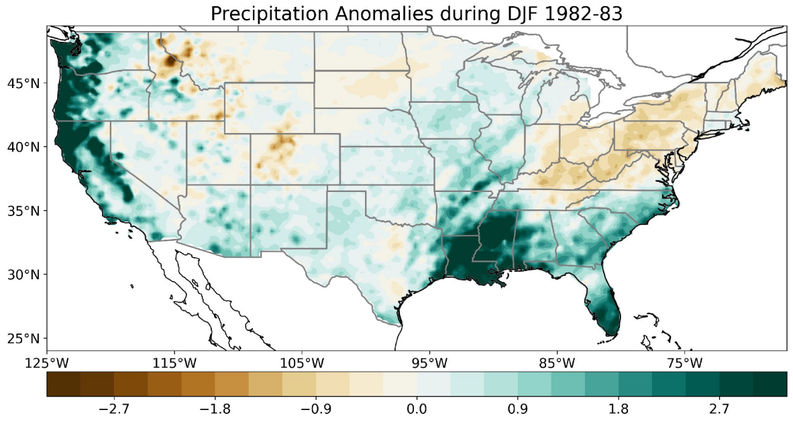
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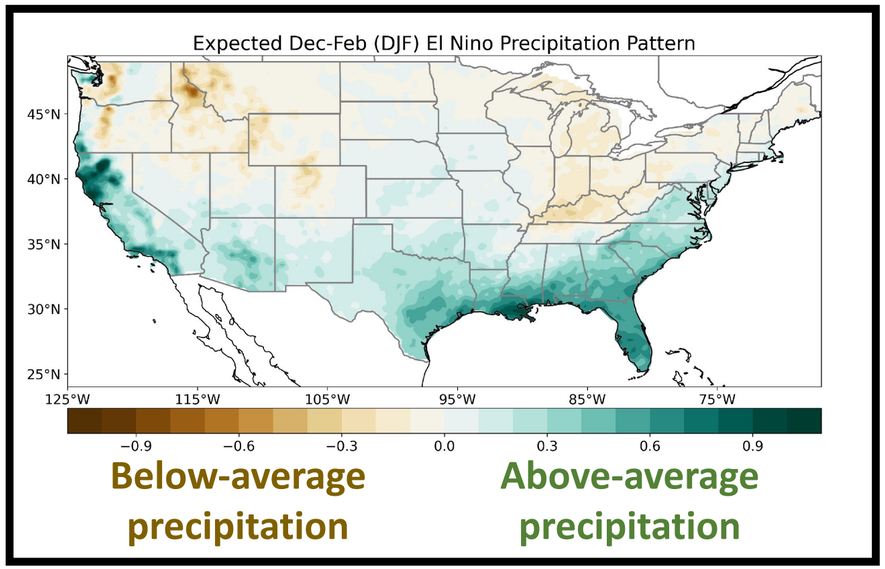


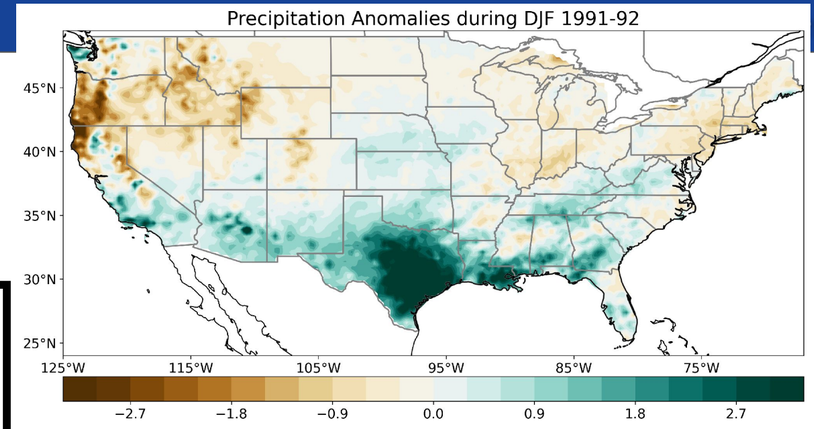
Very Strong El Niños (RONI ≥ 2.0C) Can Have Event-to-Event Variability

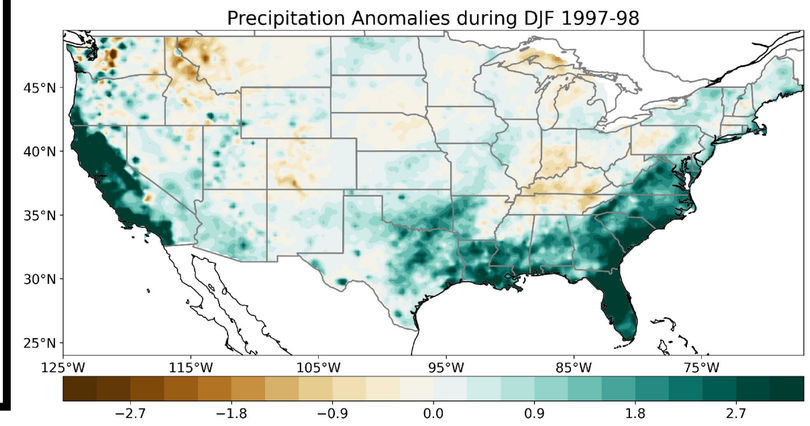


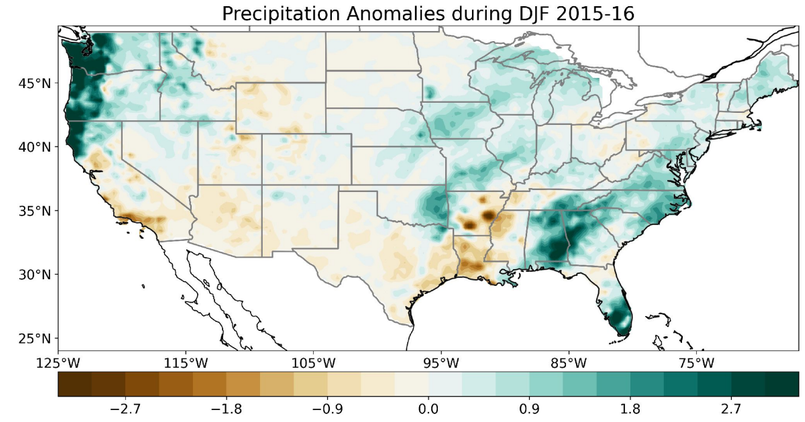






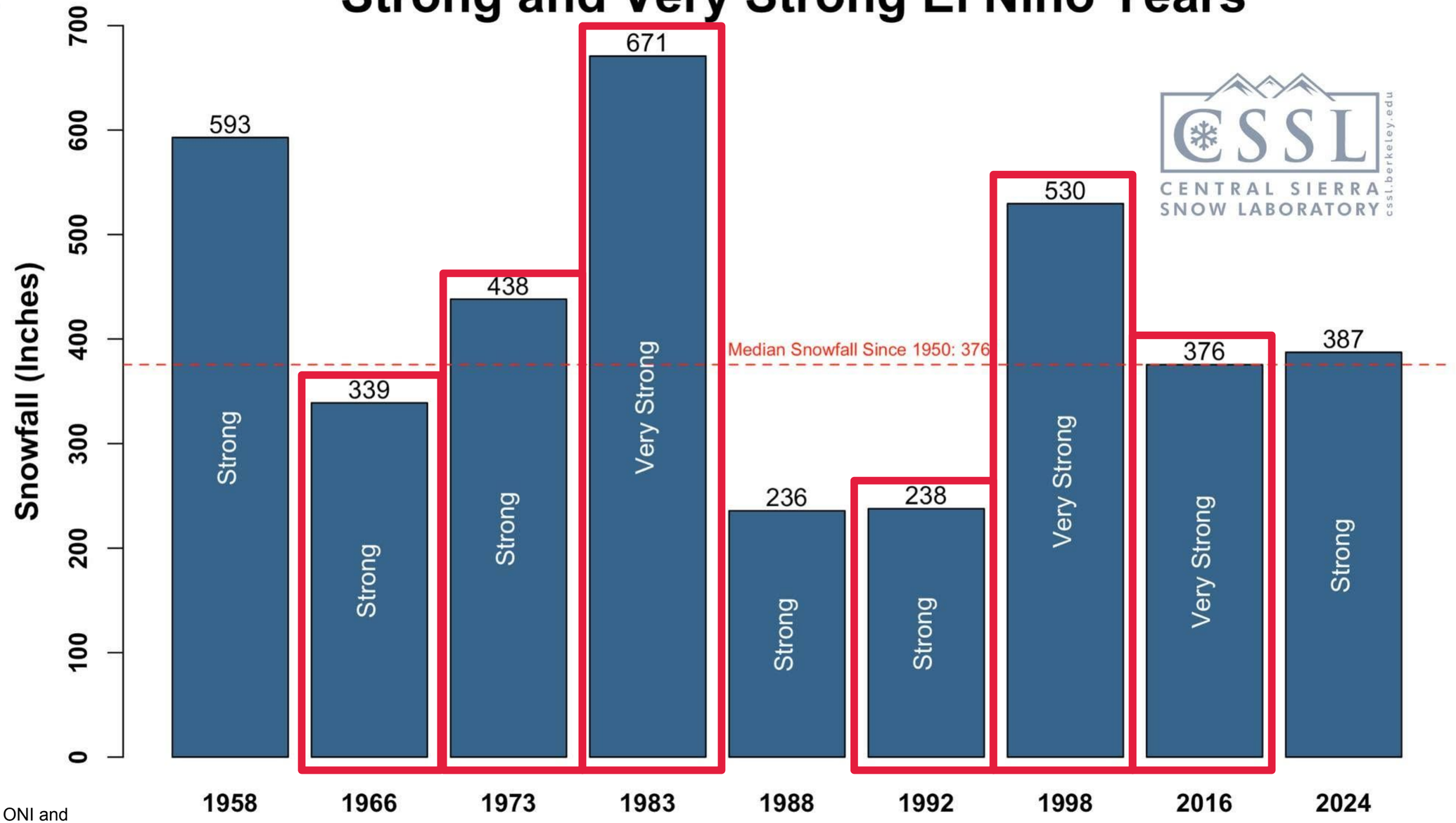






CPC Guage-based Unified data (mm/day)

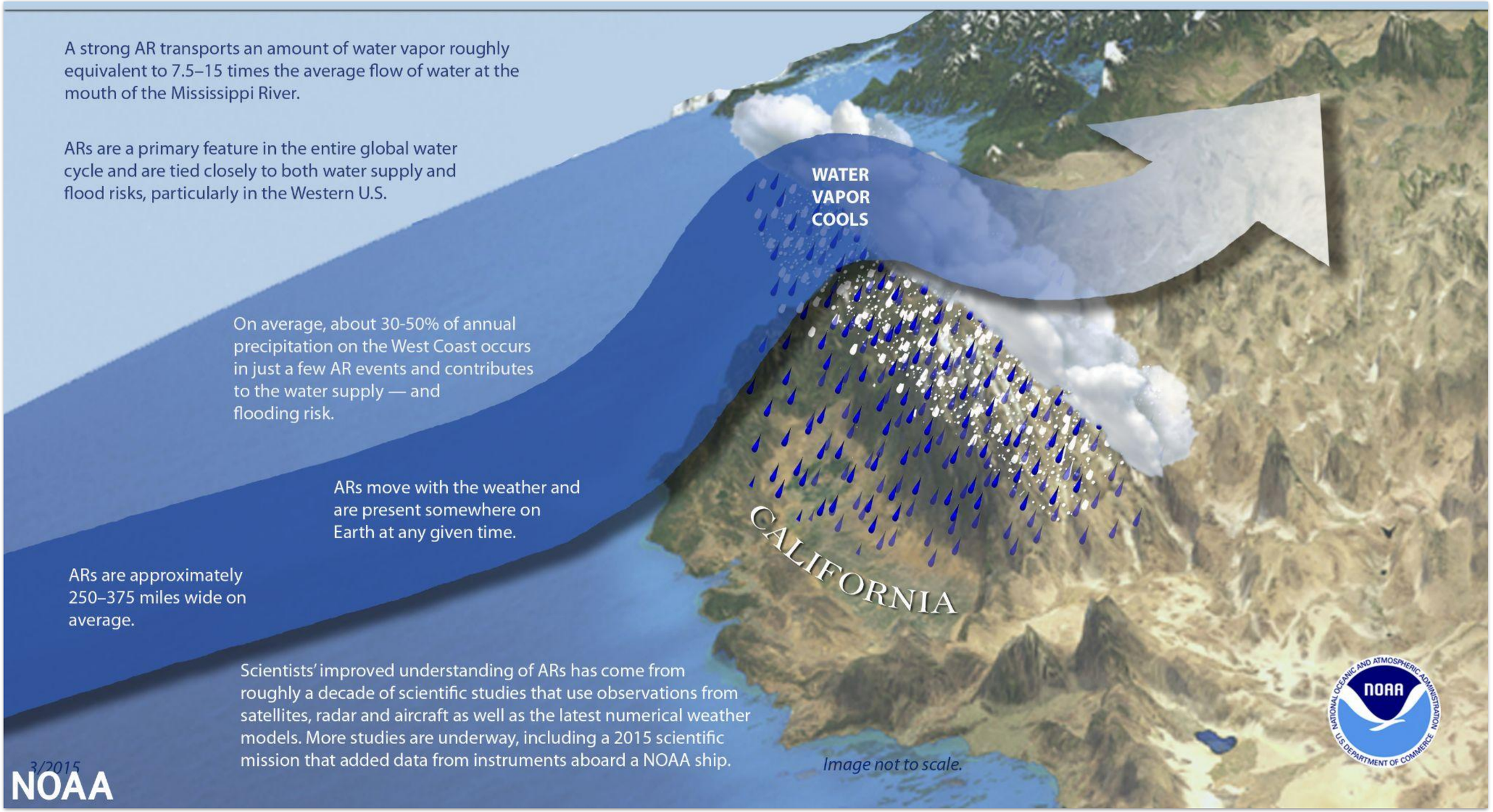
Snowfall at the Central Sierra Snow Lab
Strong and Very Strong El Niño Years



Note: This is using ONI and not RONI for Strong vs Very Strong definitions. Very strong highlighted in Red.

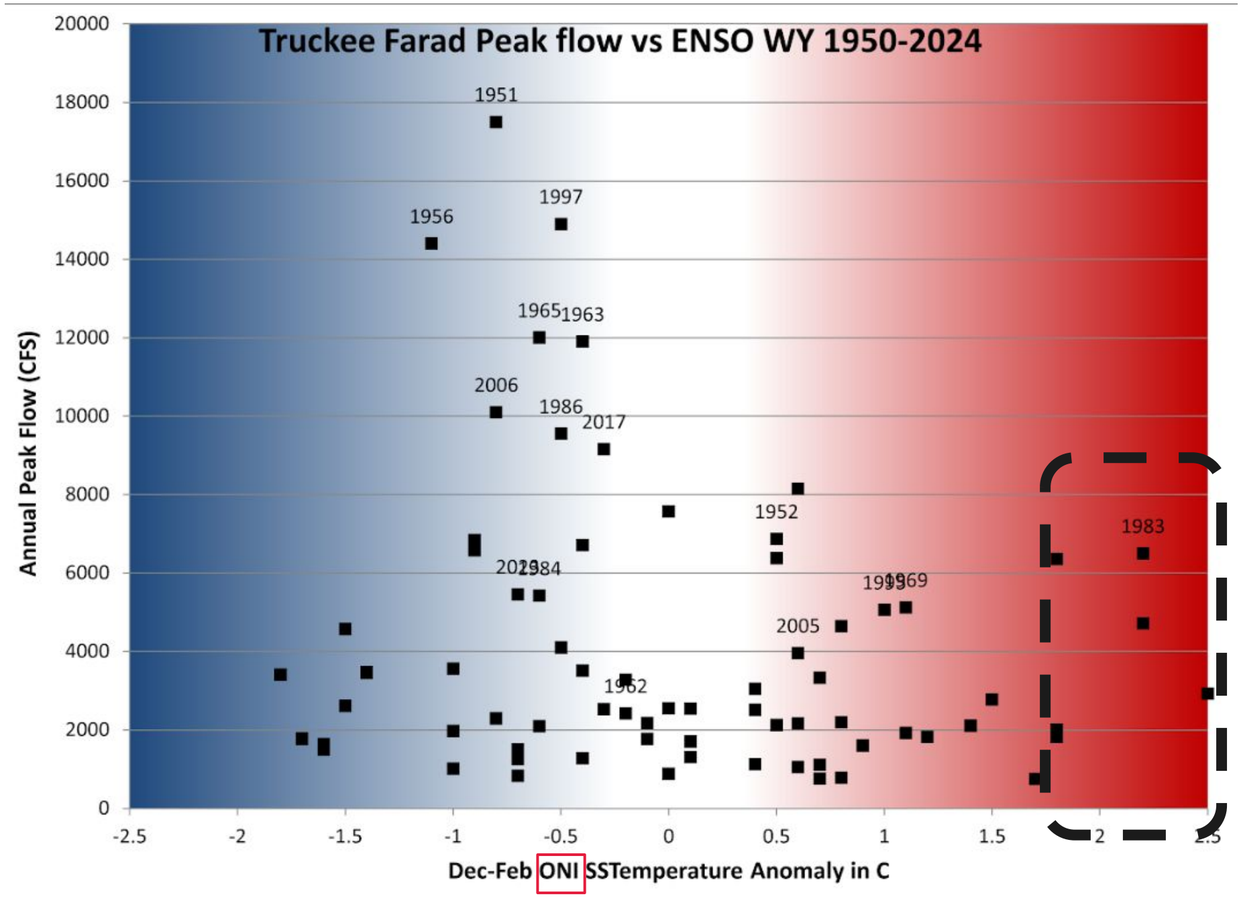
NOTE: Years are Water Years (Oct 1 - Sept 30). Example: Winter 2022/2023 is Water Year 2023

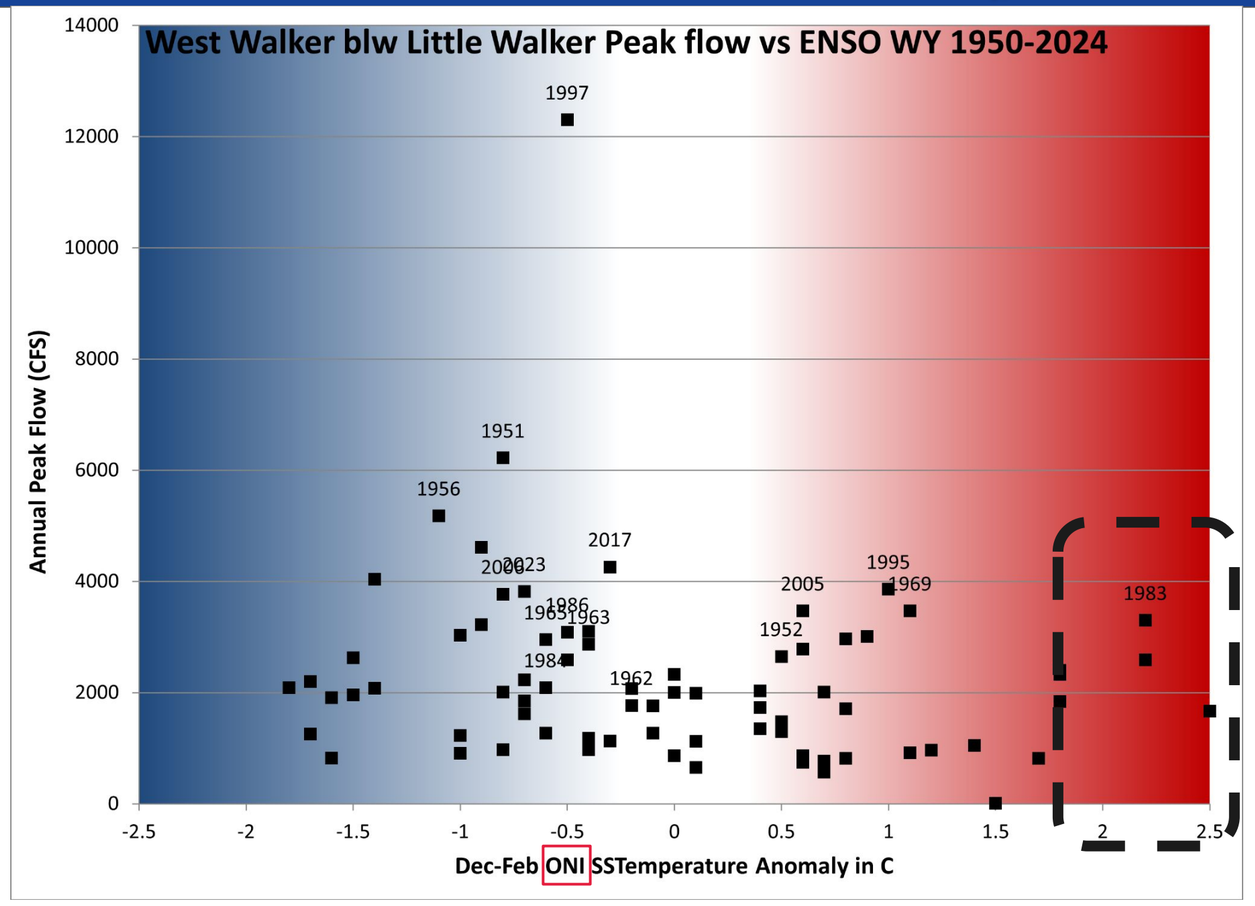
Atmospheric Rivers



Flood Risk: El Niño Edition

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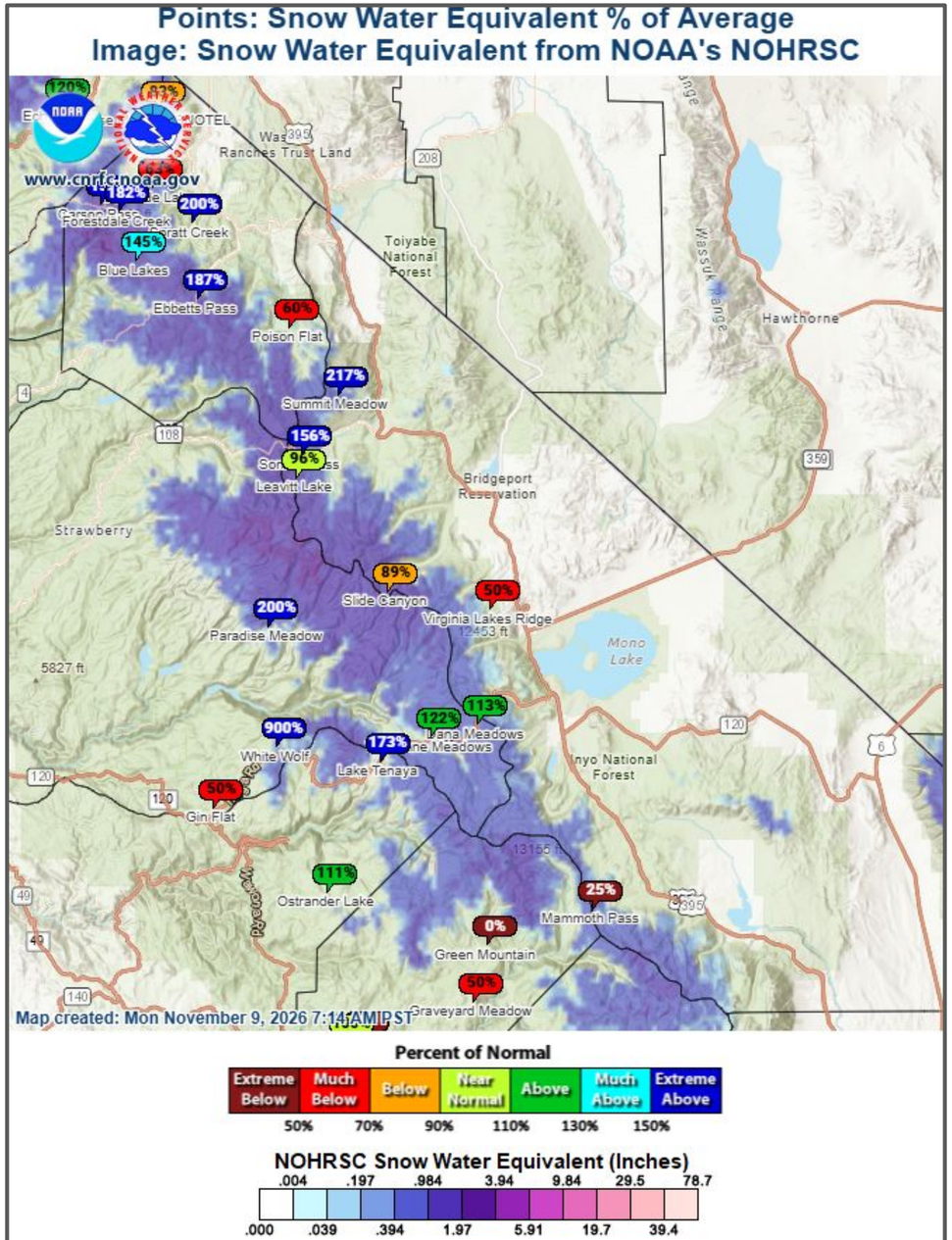


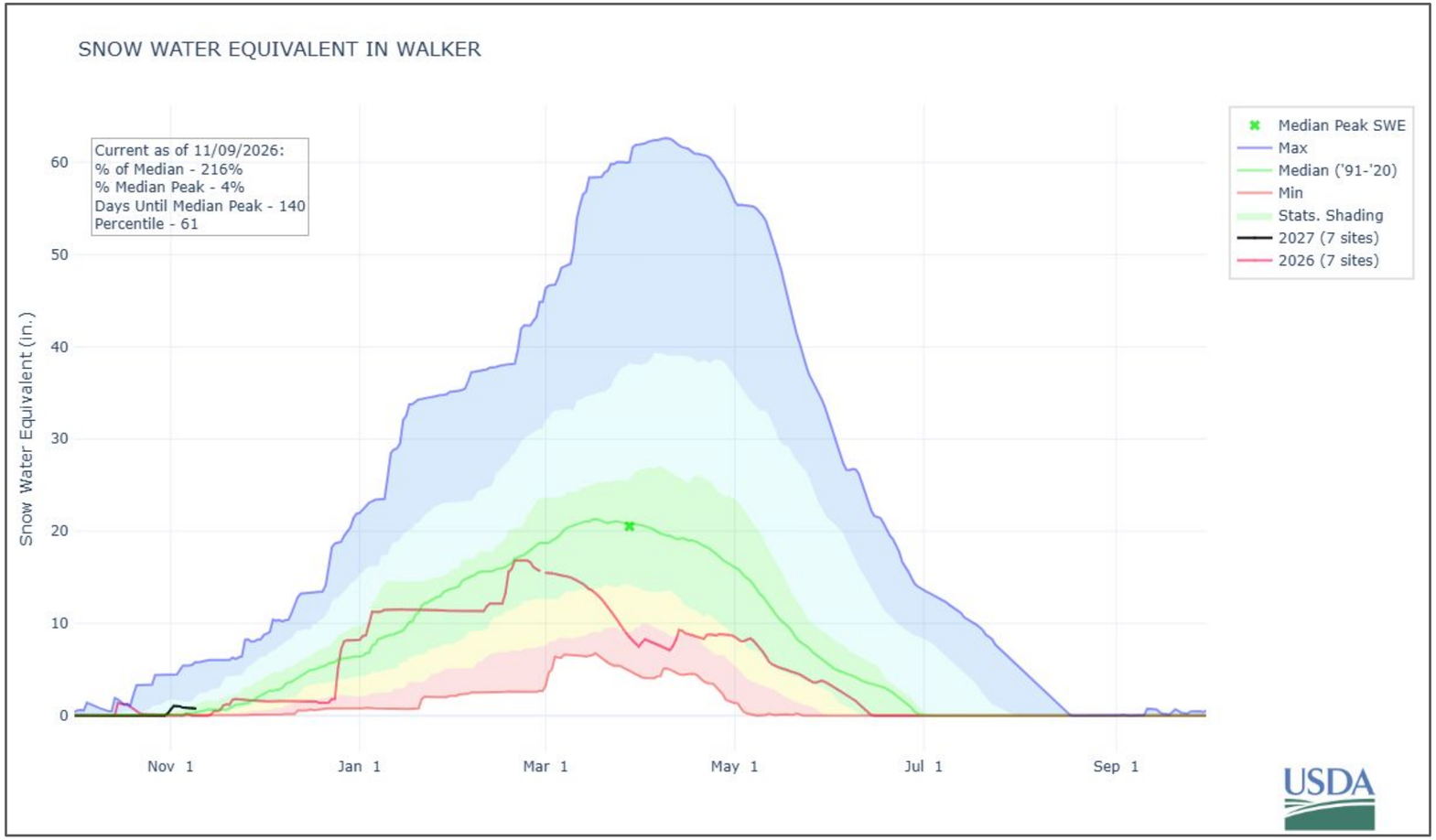
Historically lesser major flood risk in Moderate to Strong El Niño years, but that doesn't mean it can't happen.

Note the Great Flood of 1997 was NOT the same WY as the 1997-98 El Niño!

Early Snow conditions

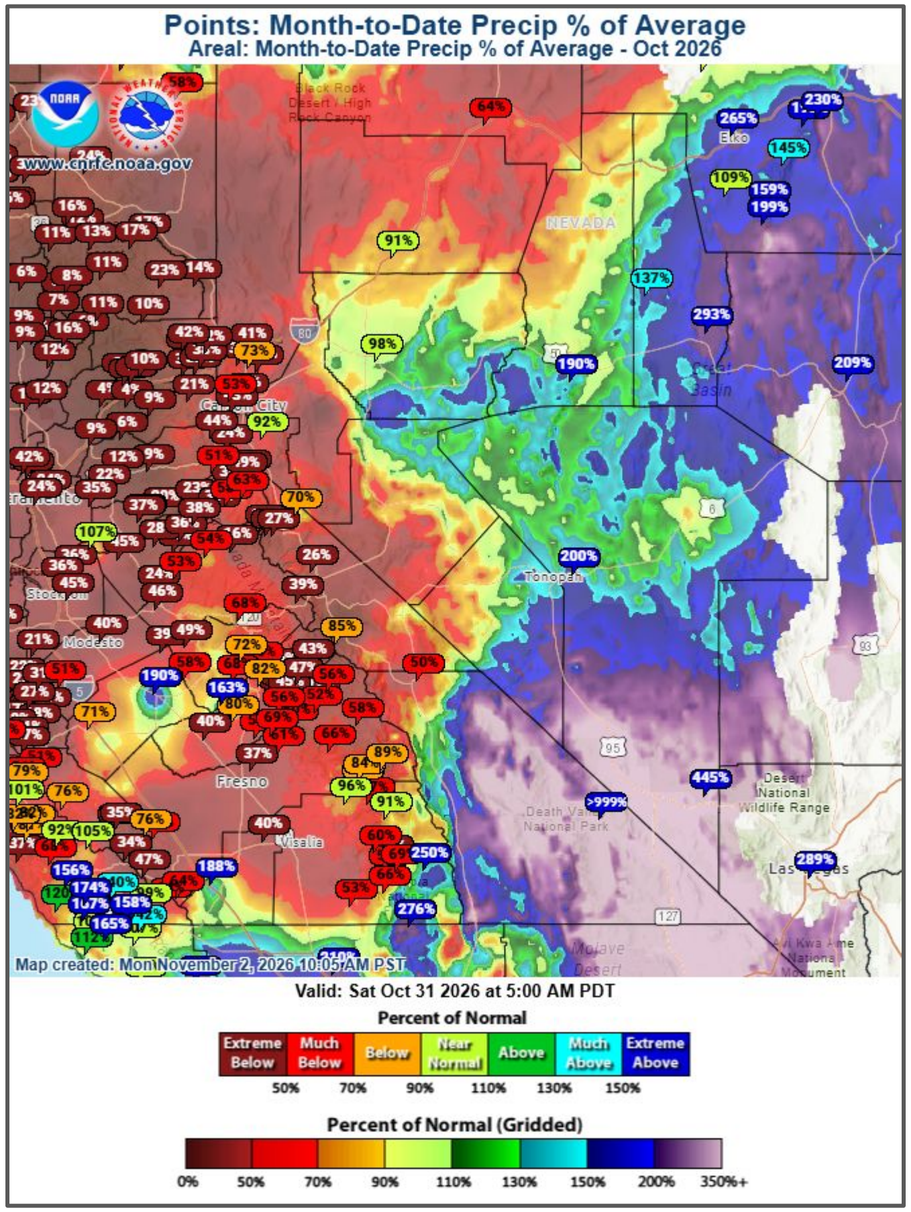
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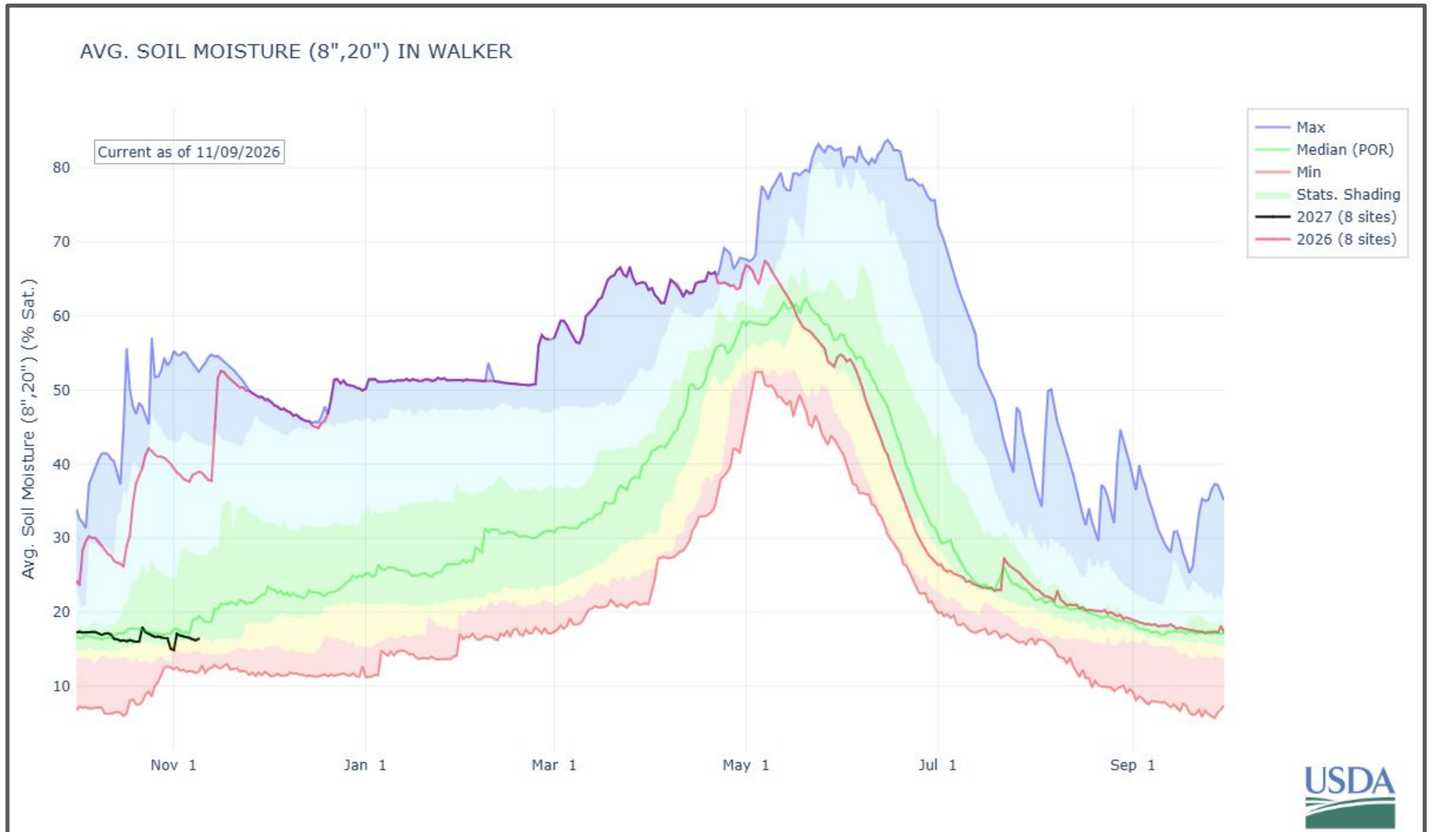




October Precipitation and Soil Moisture Status

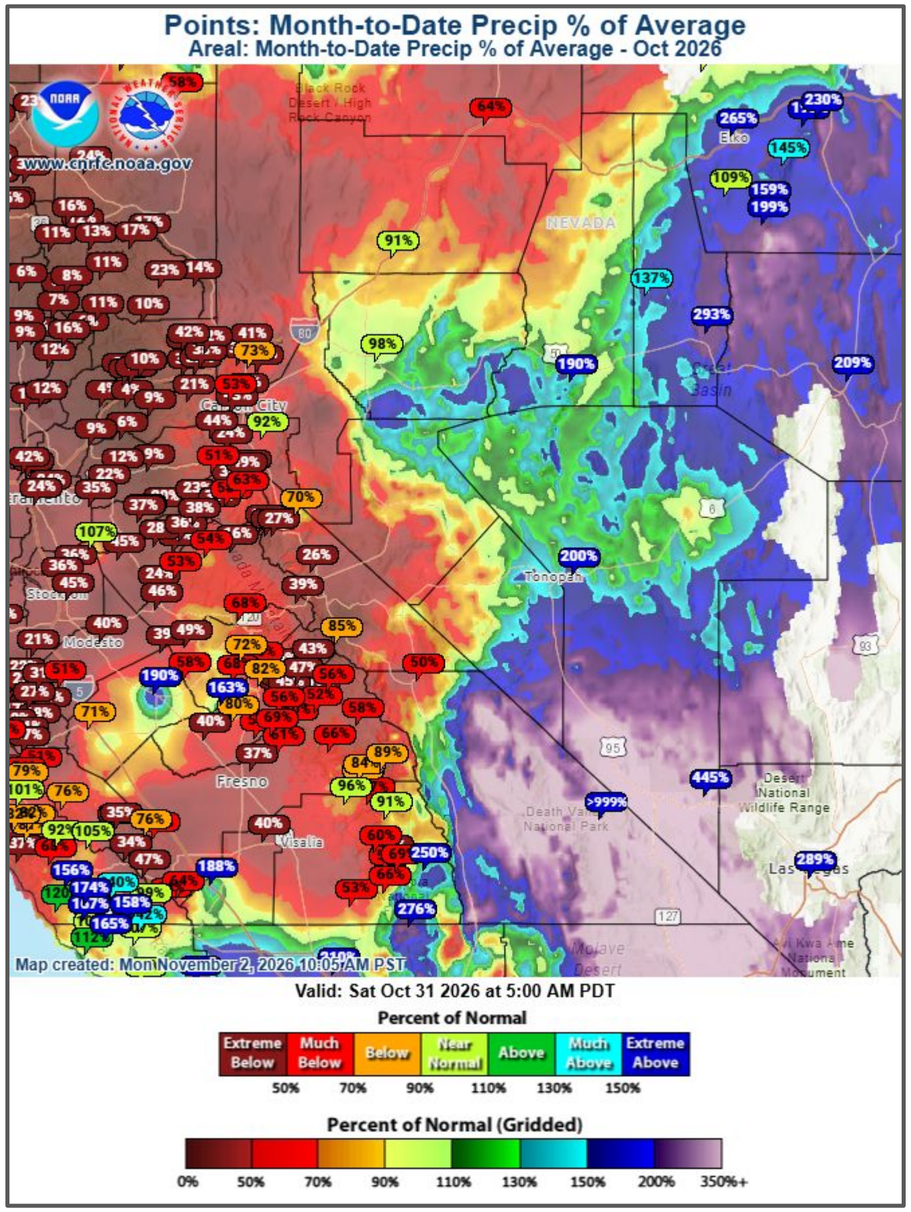
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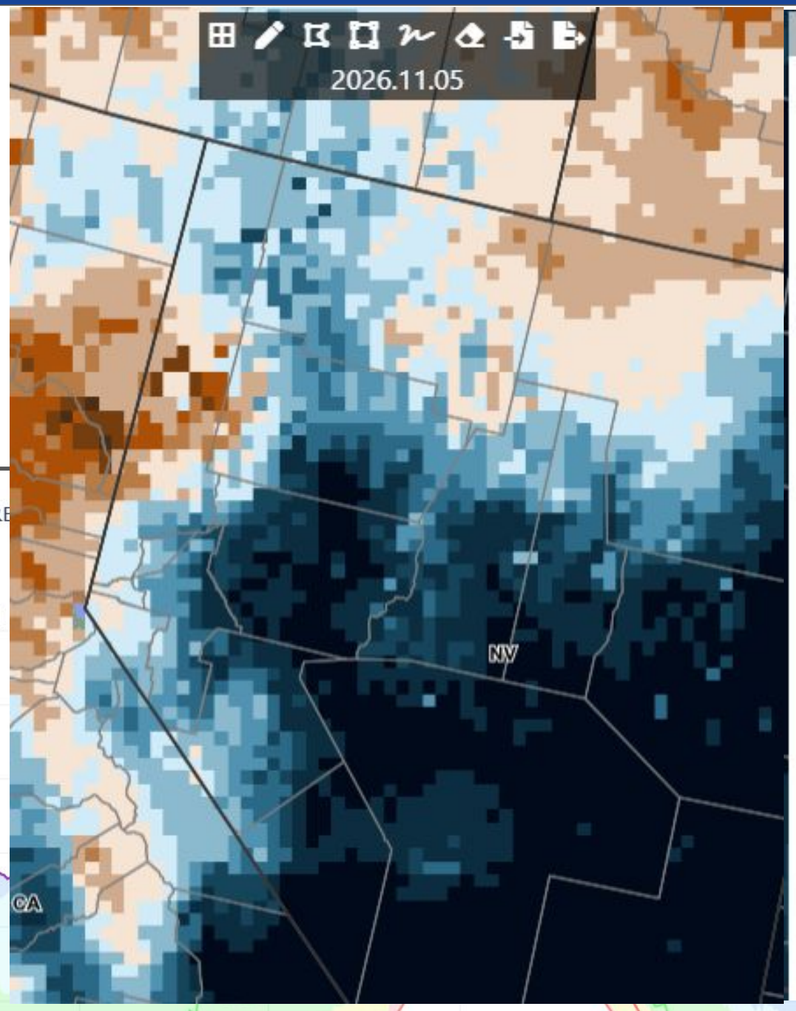




October Precipitation and Soil Moisture Status

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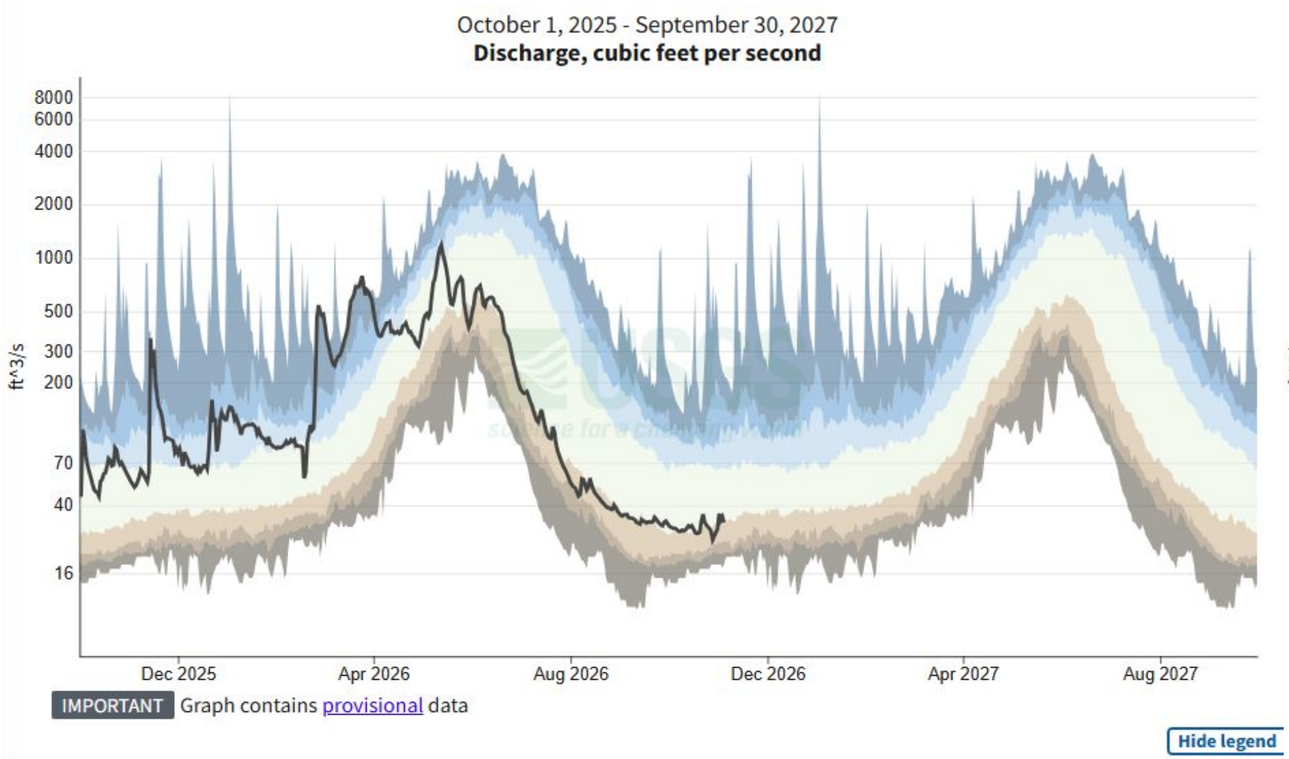


USDA

Observed Streamflow Conditions

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W Walker RV Blw L Walker RV NR Coleville, CA - USGS-10296000



IMPORTANT Graph contains provisional data

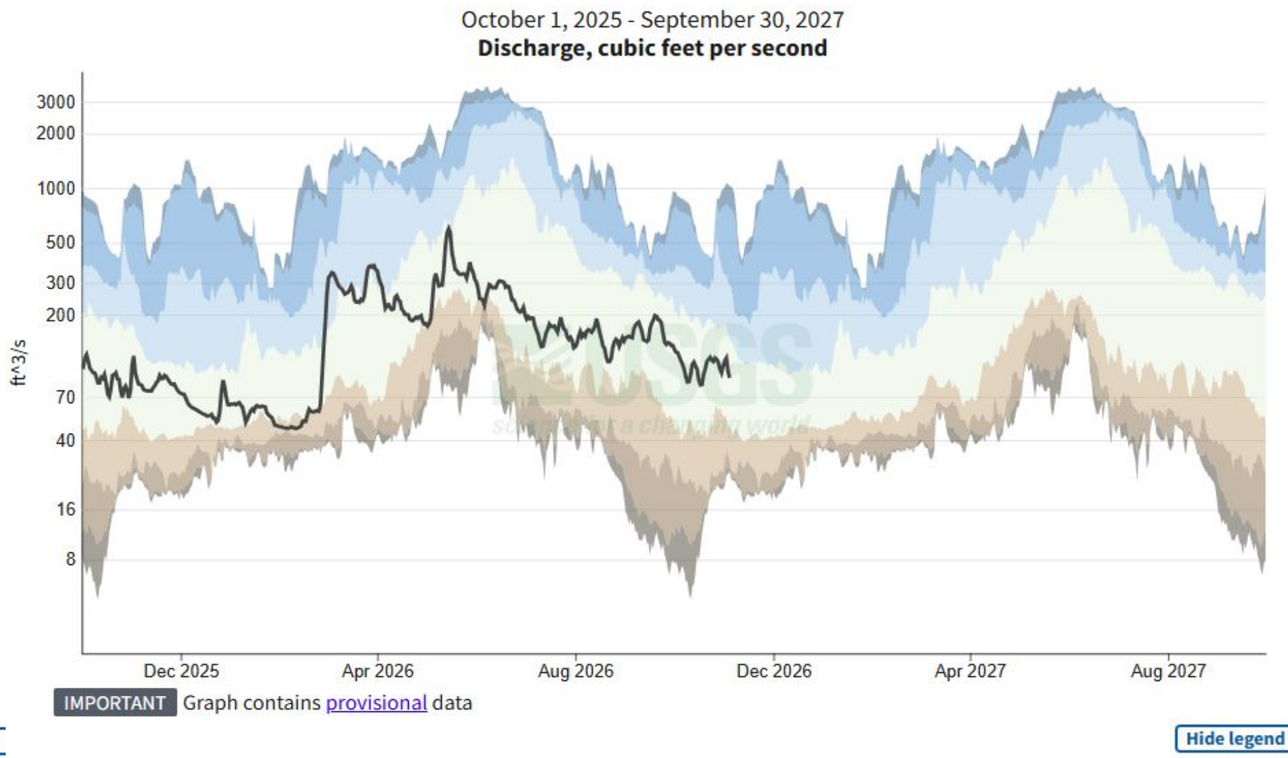
Hide legend

— Daily average (mean) for Discharge, cubic feet per second

Percentile ranges for daily averages (means) for each day of a year (with comparison to normal)

0-5	5-10	10-25	25-75	75-90	90-95	95-100
Extremely below	Much below	Below normal	Normal	Above normal	Much above	Extremely above

Walker RV at Snyder LN NR Mason, NV - USGS-10300600



IMPORTANT Graph contains provisional data

Hide legend

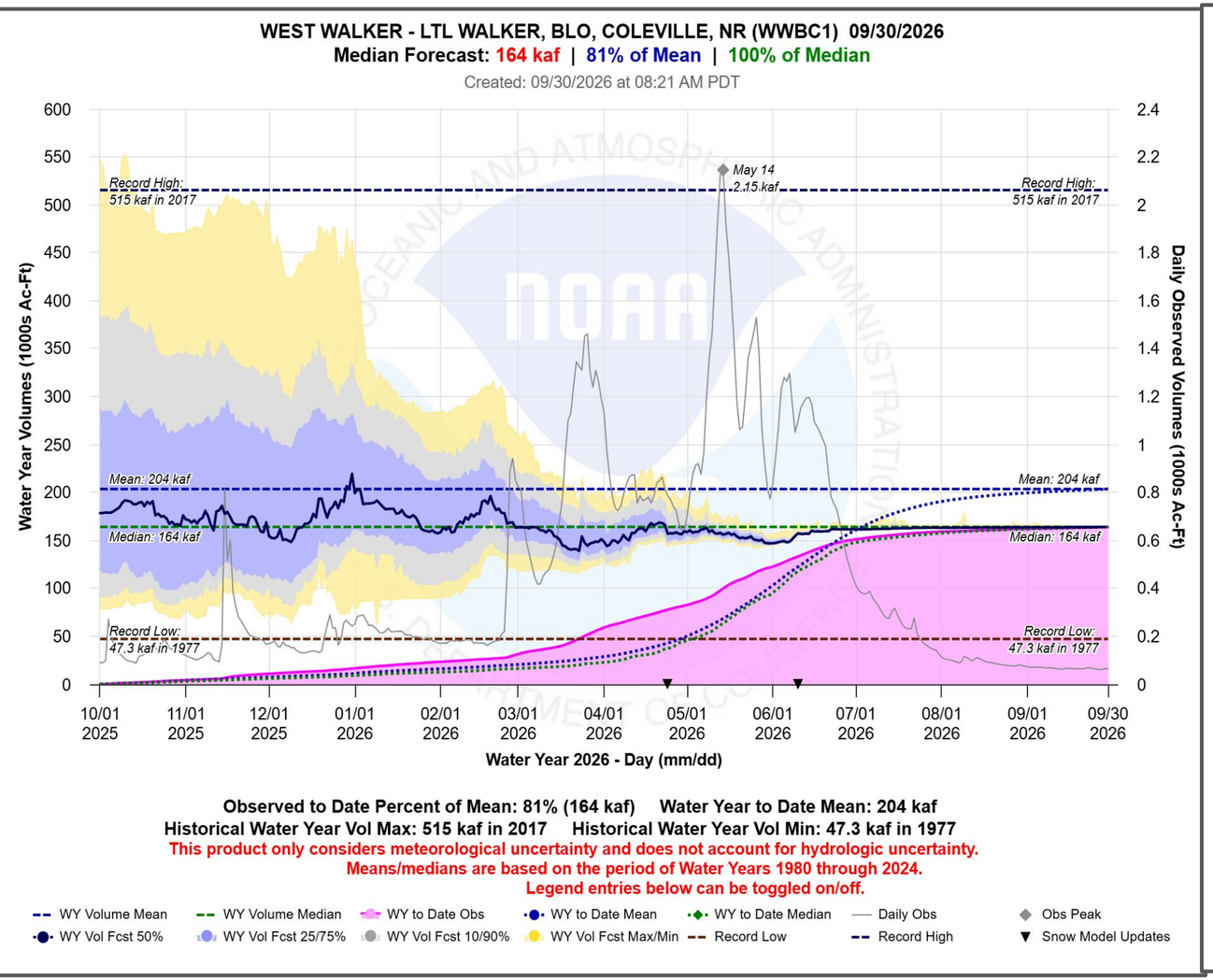
— Daily average (mean) for Discharge, cubic feet per second

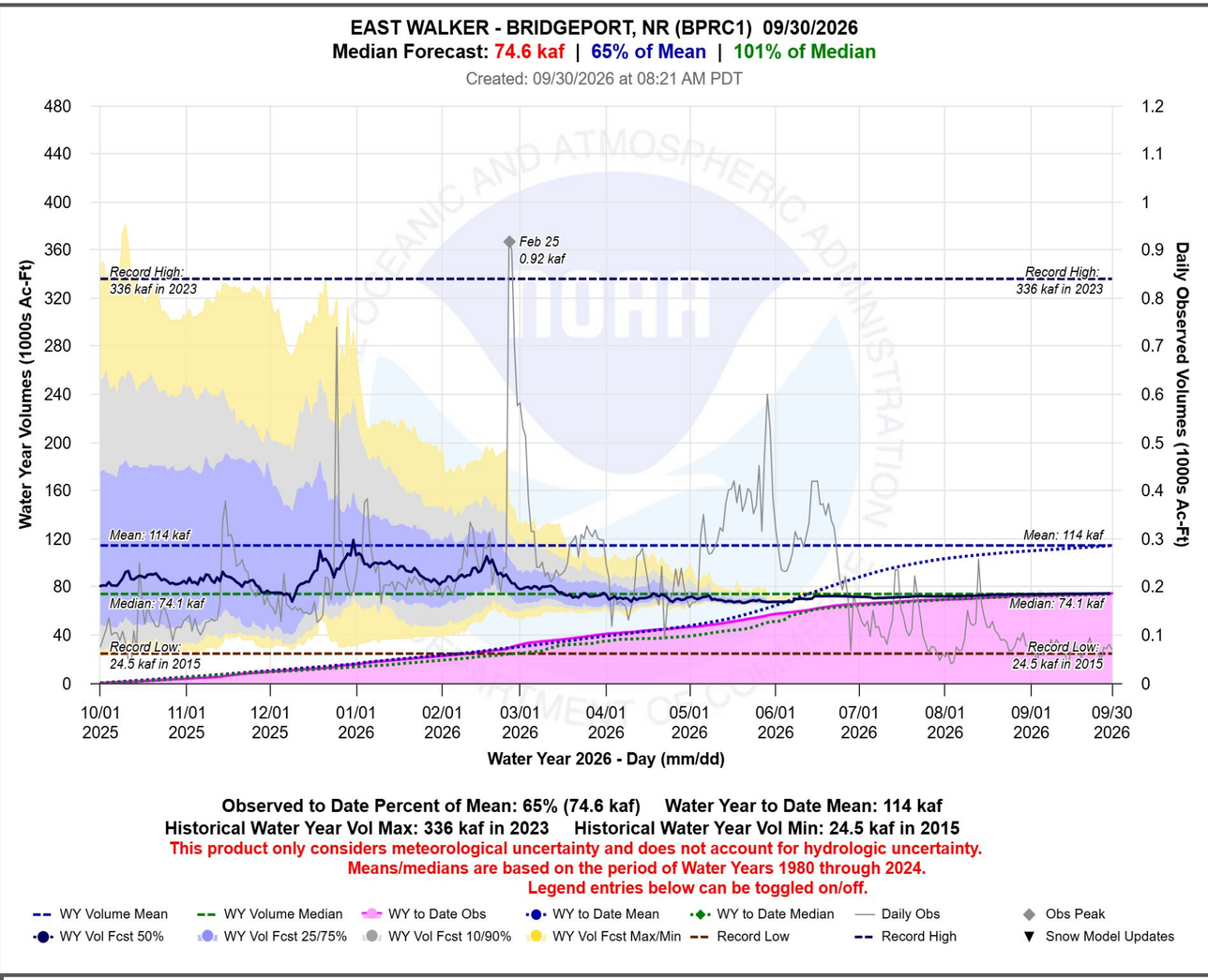
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2026 Water Supply Forecast Review

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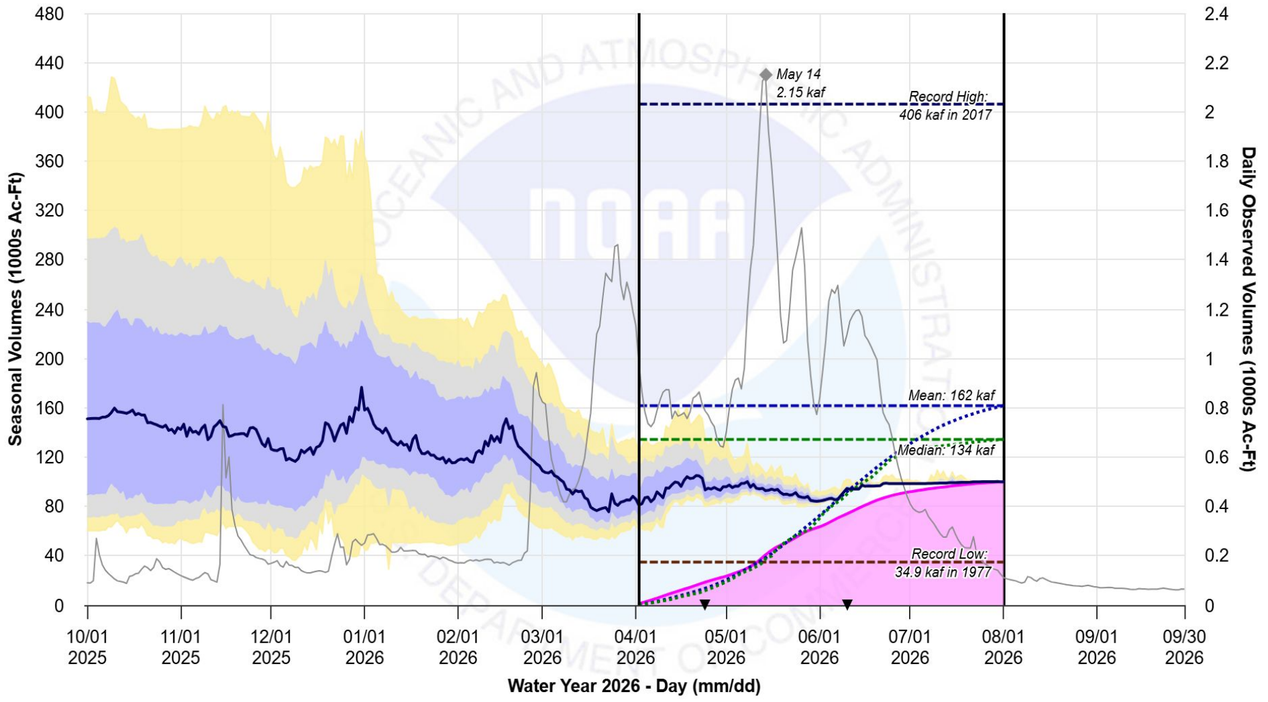




2026 Water Supply Forecast Review

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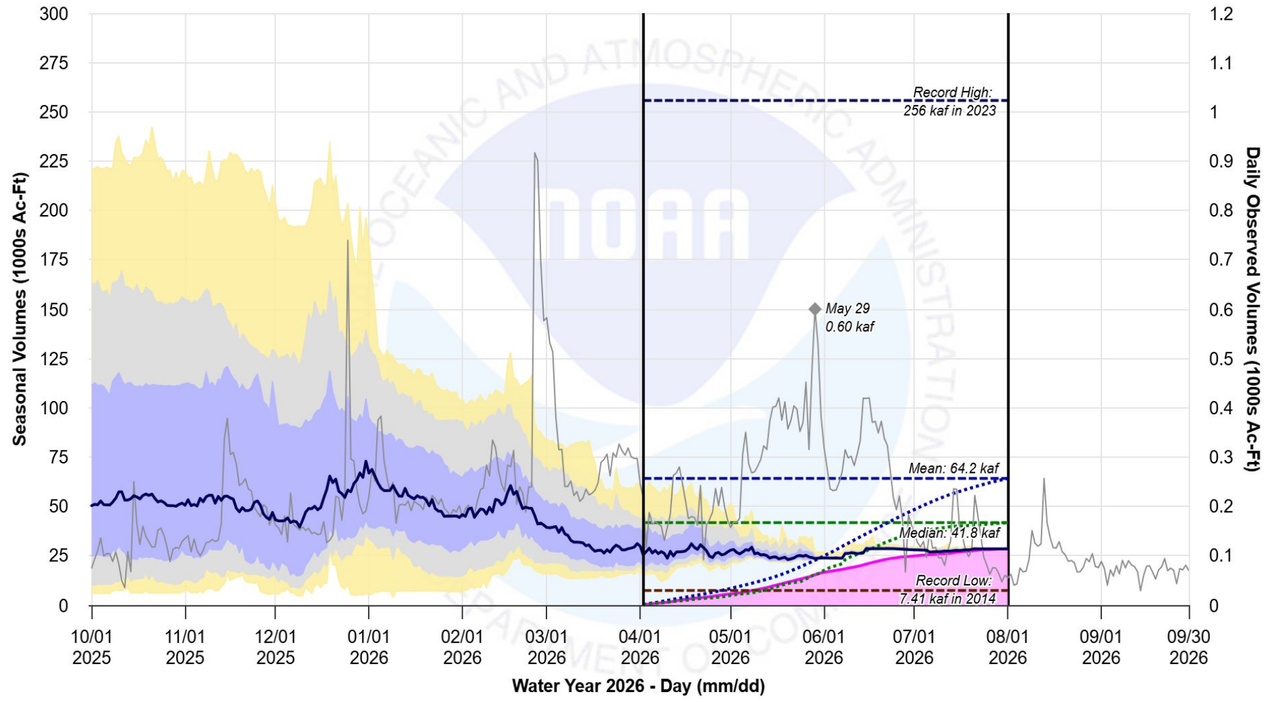
WEST WALKER - LTL WALKER, BLO, COLEVILLE, NR (WWBC1) 09/30/2026
Median Forecast: 100 kaf | 62% of Mean | 74% of Median
Created: 09/30/2026 at 08:20 AM PDT



Observed Season to Date Percent of Mean: 62% (100 kaf) Season to Date Mean: 162 kaf
Historical Apr-Jul Vol Max: 406 kaf in 2017 Historical Apr-Jul Vol Min: 34.9 kaf in 1977
This product only considers meteorological uncertainty and does not account for hydrologic uncertainty.
Means/medians are based on the period of Water Years 1980 through 2024.
Legend entries below can be toggled on/off.

Apr-Jul Vol Mean | Apr-Jul Vol Median | Season to Date Mean | Season to Date Median | Season to Date Obs | Daily Obs
Obs Peak | Apr-Jul Fcst 50% | Apr-Jul Fcst 25/75% | Apr-Jul Fcst 10/90% | Apr-Jul Fcst Max/Min | Record Low
Record High | Snow Model Updates

EAST WALKER - BRIDGEPORT, NR (BPRC1) 09/30/2026
Median Forecast: 28.6 kaf | 45% of Mean | 68% of Median
Created: 09/30/2026 at 08:19 AM PDT



Observed Season to Date Percent of Mean: 45% (28.6 kaf) Season to Date Mean: 64.2 kaf
Historical Apr-Jul Vol Max: 256 kaf in 2023 Historical Apr-Jul Vol Min: 7.41 kaf in 2014
This product only considers meteorological uncertainty and does not account for hydrologic uncertainty.
Means/medians are based on the period of Water Years 1980 through 2024.
Legend entries below can be toggled on/off.

Apr-Jul Vol Mean | Apr-Jul Vol Median | Season to Date Mean | Season to Date Median | Season to Date Obs | Daily Obs
Obs Peak | Apr-Jul Fcst 50% | Apr-Jul Fcst 25/75% | Apr-Jul Fcst 10/90% | Apr-Jul Fcst Max/Min | Record Low
Record High | Snow Model Updates

Water Supply Verification Plots

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WEST WALKER RIVER - BELOW LITTLE WALKER RIVER NEAR COLEVILLE (WWBC1)

Latitude: 38.38° N Longitude: 119.45° W Elevation: 6591 Feet
Location: Mono County in California Bulletin Group: Eastern Sierra River Group: Eastern Sierra

Issuance Time: Jan 21, 2025 at 12:21 PM PST

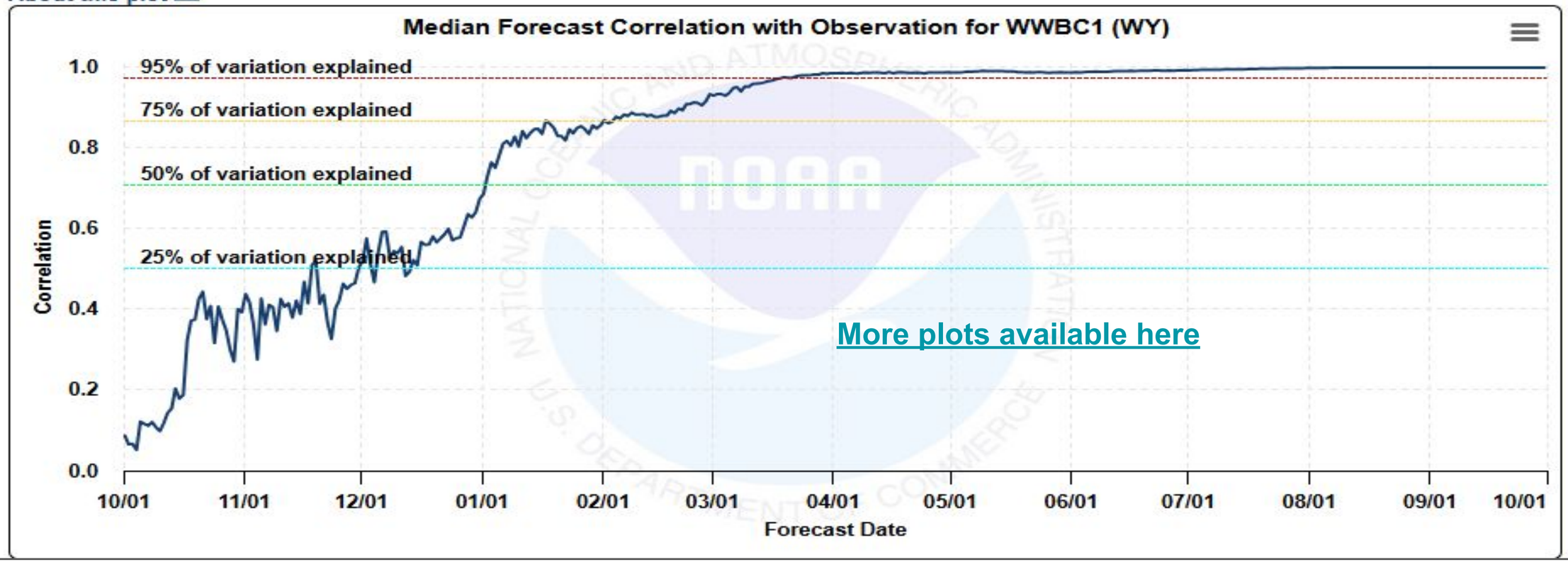
Water Resources Verification

About These Plots and Help

Seasonal (Apr-Jul) | Water Year

Correlation Plot | Scatter Plots | Percent Error Plots | Box Plots | Reliability Histograms

About this plot

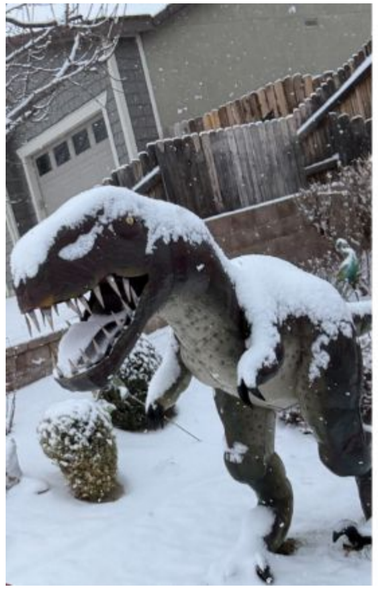


More plots available here

What Might Winter Have in Store…?

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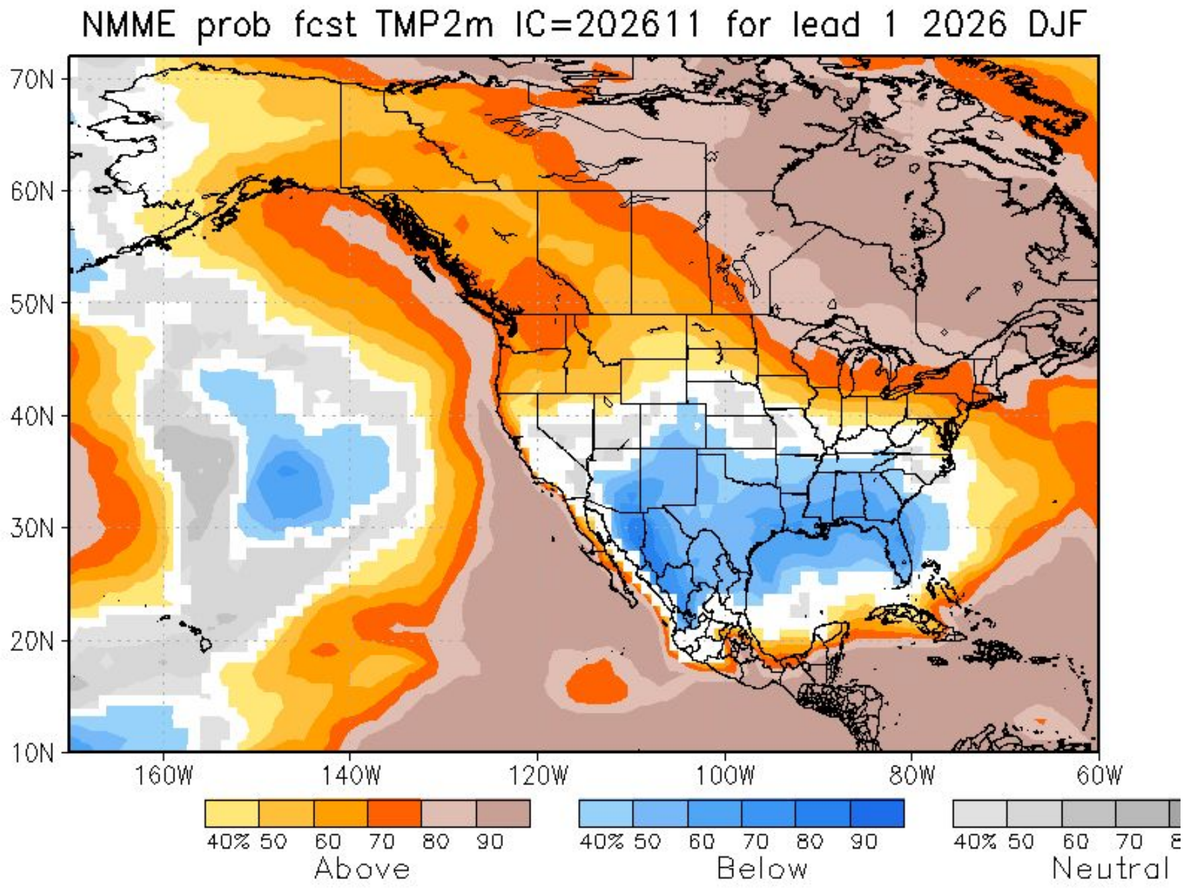






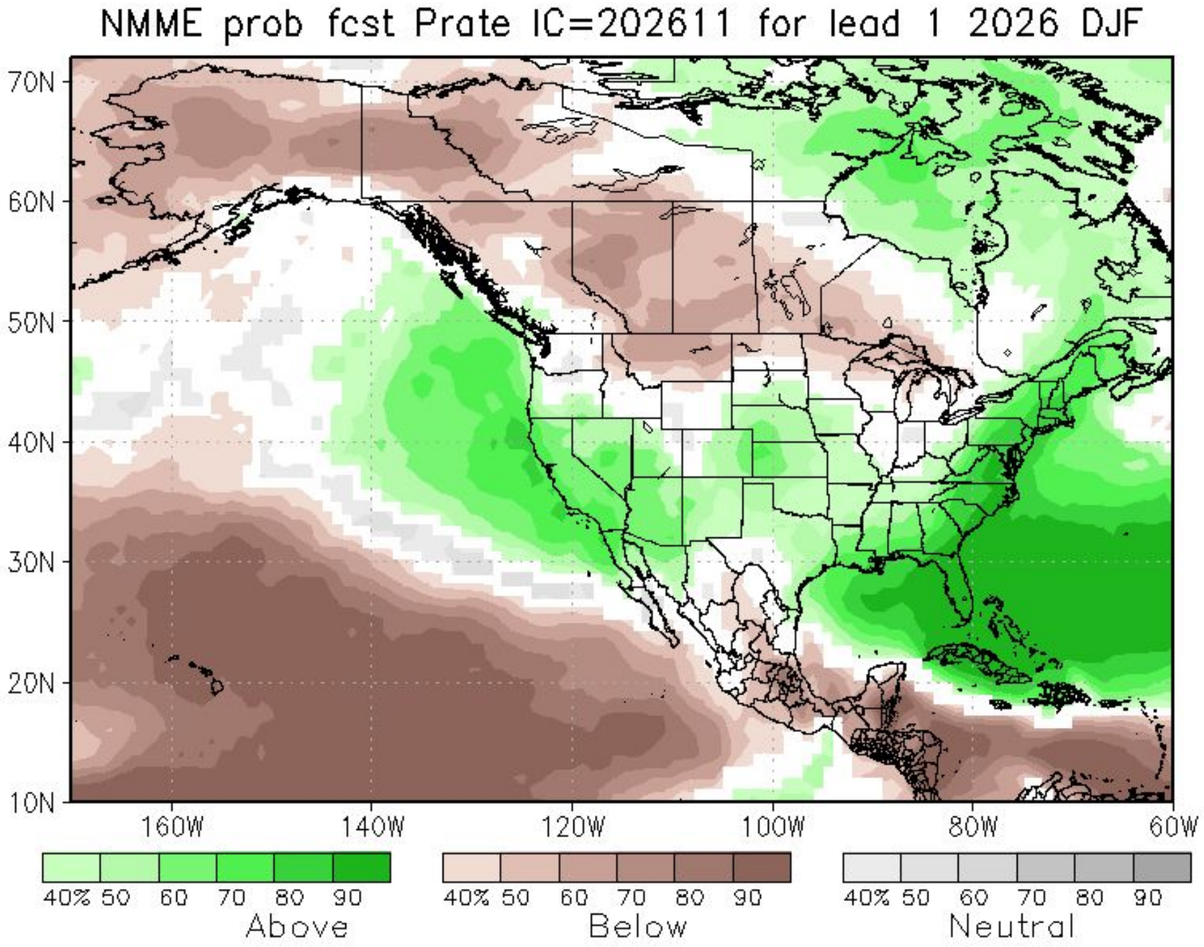
Main Course Outlook: Dec-Jan-Feb (NMME)

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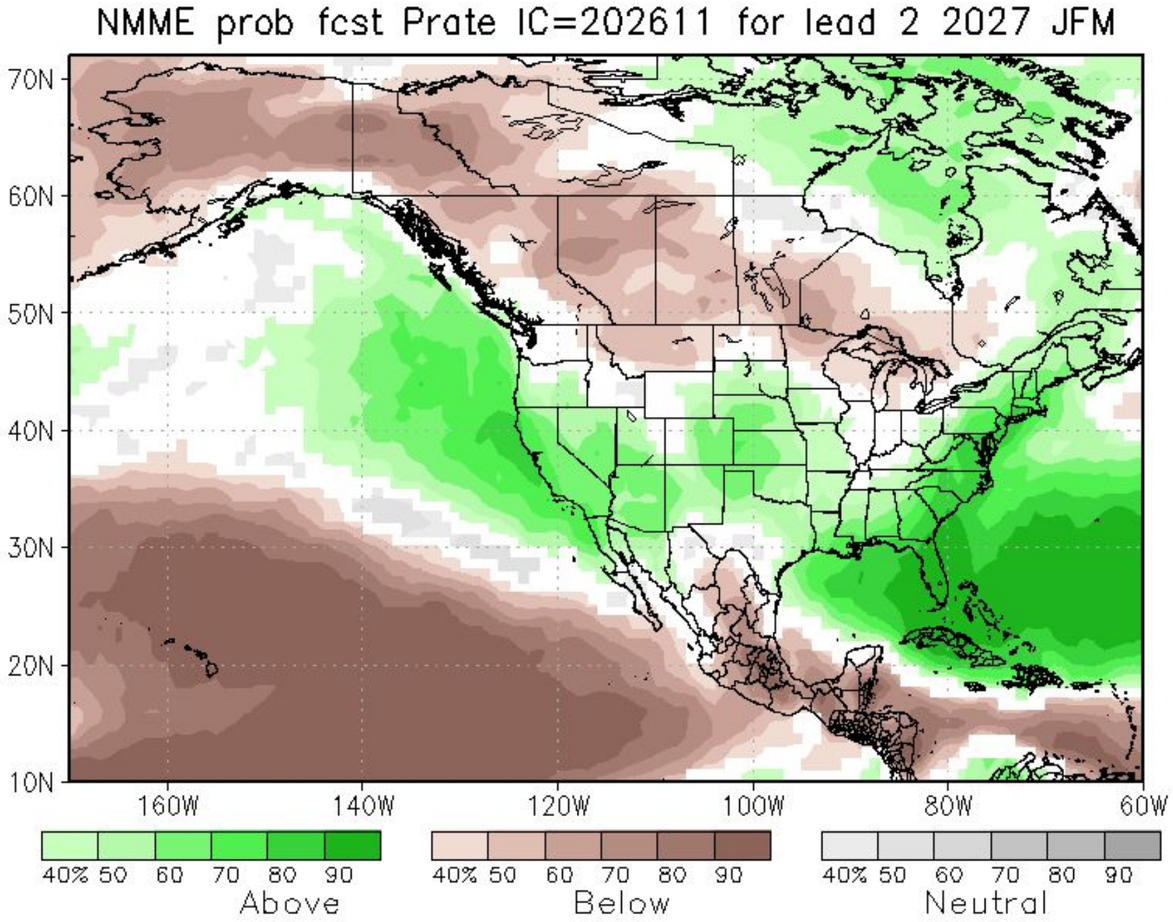


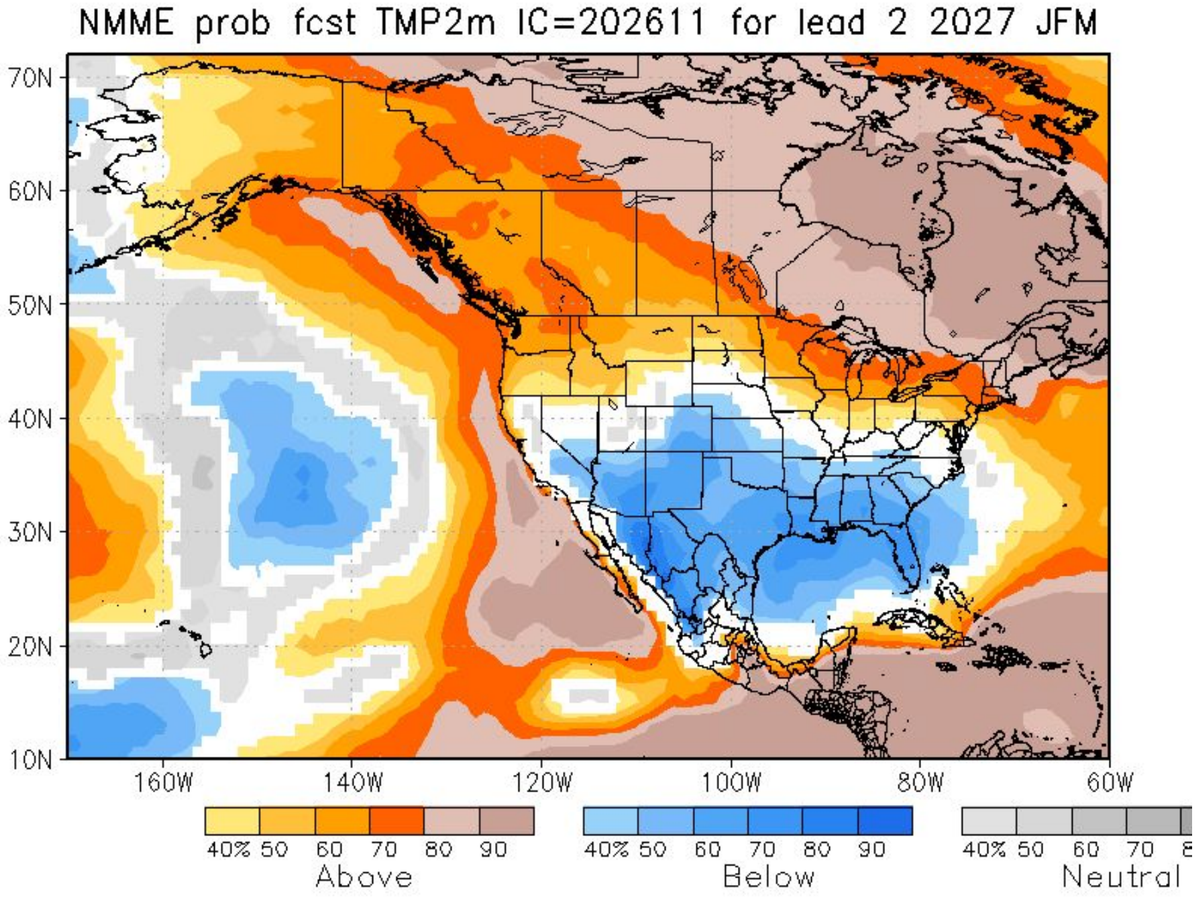
Temperatures more of a mixed bag, slight lean warmer to the north, otherwise, no favored outcome.

At this point 7/7 climate models lean wet for winter



Outlooks: Jan-Feb-Mar (NMME)



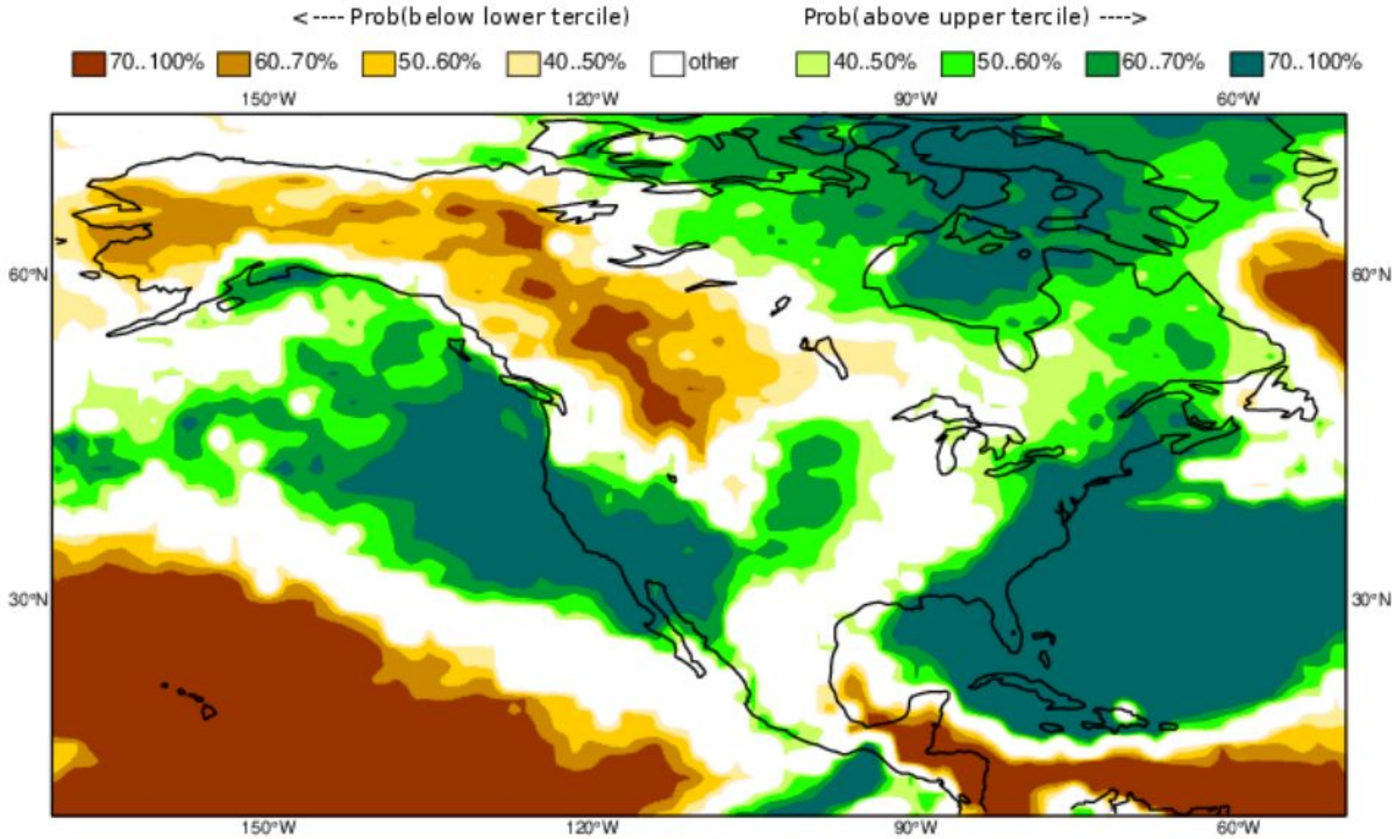


- 100% of climate ensembles still lean wet
- No favored outcome with temps (3/7 colder, 3/7 warmer, 1/7 neutral)

ECMWF Seasonal Forecasts

ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/11/26, climate period is 1993-2016
Ensemble size = 51, climate size = 600

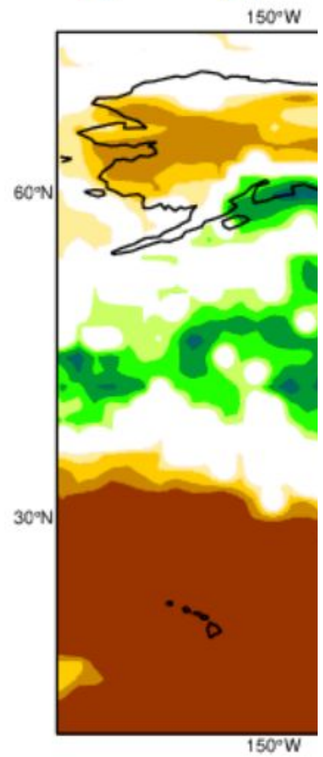
System 5
DJF 2026/27



ECMWF Seasonal Forecasts

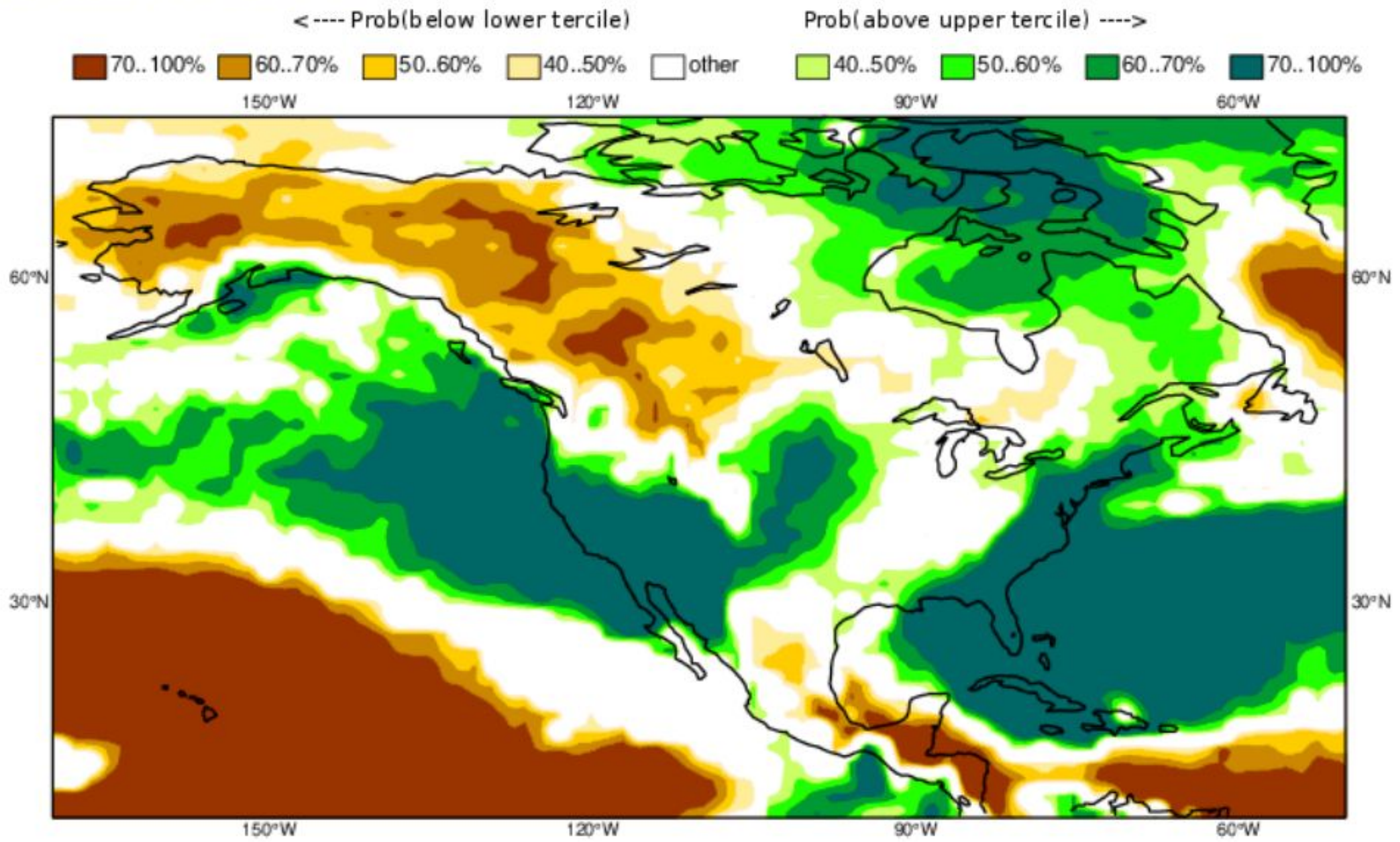
ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/11/26, climate
Ensemble size = 51, climate size

System 5
DJF 2026/27



ECMWF Seasonal Forecast
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Forecast start is 01/11/26, climate period is 1993-2016
Ensemble size = 51, climate size = 600

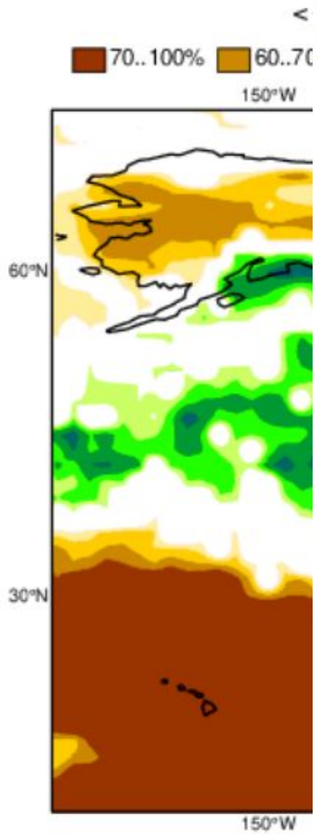
System 5
JFM 2027



ECMWF Seasonal Forecasts

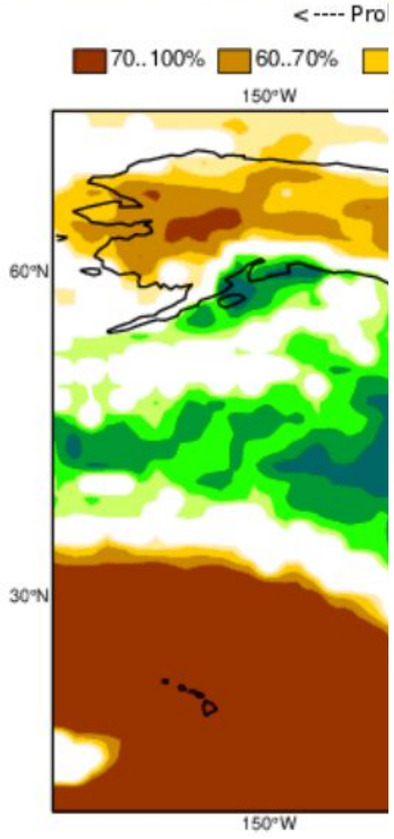
ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/11/26, climate
Ensemble size = 51, climate size

System 5
DJF 2026/27



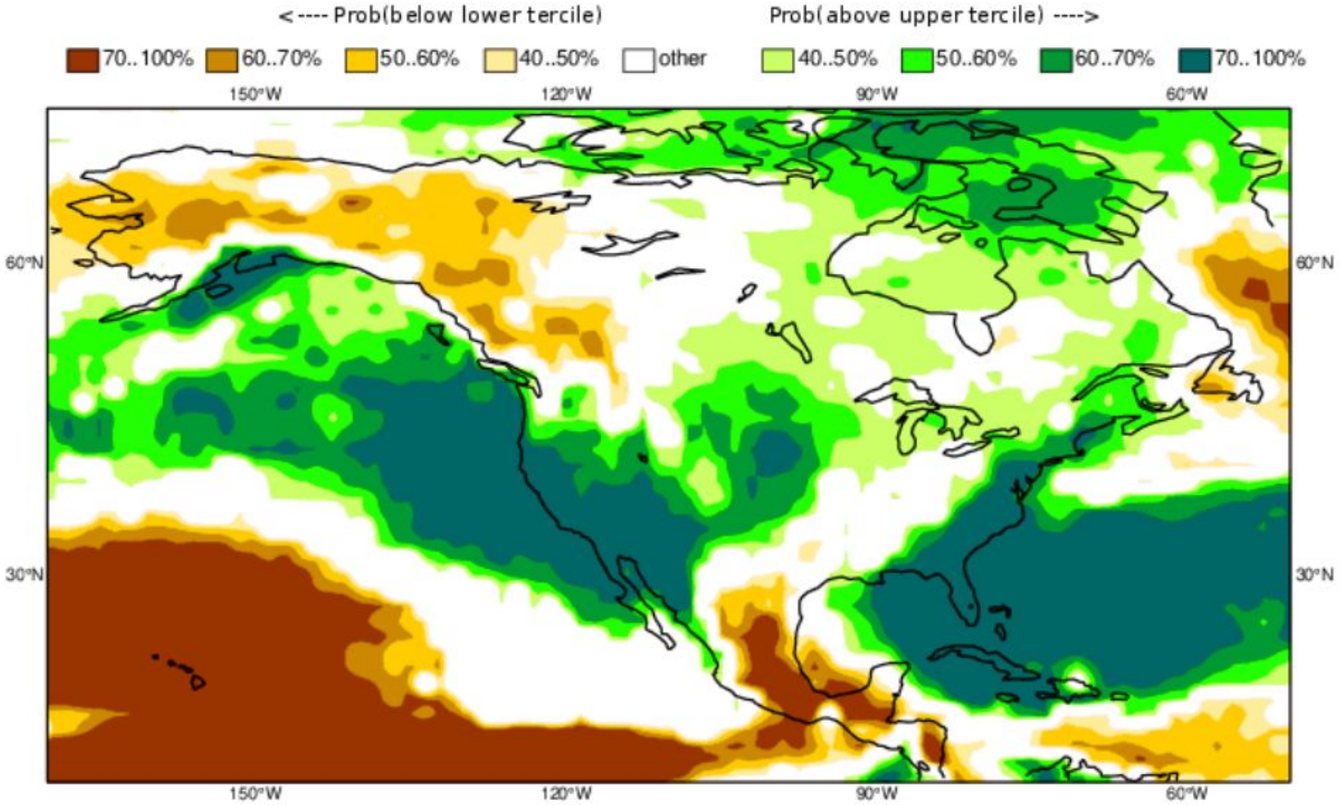
ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/11/26, climate period is 1993-2016
Ensemble size = 51, climate size = 600

System 5
JFM 2027



ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/11/26, climate period is 1993-2016
Ensemble size = 51, climate size = 600

System 5
FMA 2027

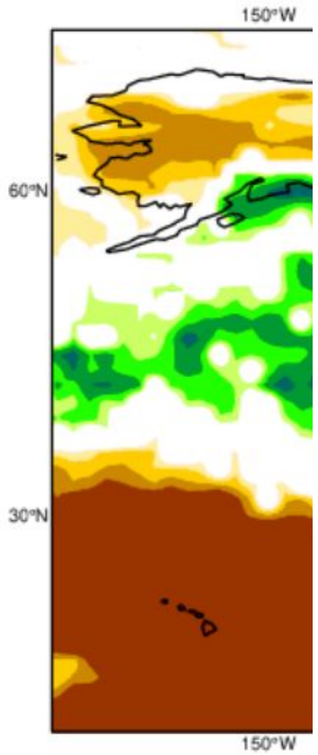


ECMWF Seasonal Forecasts

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Reno, NV
Monday, November 9

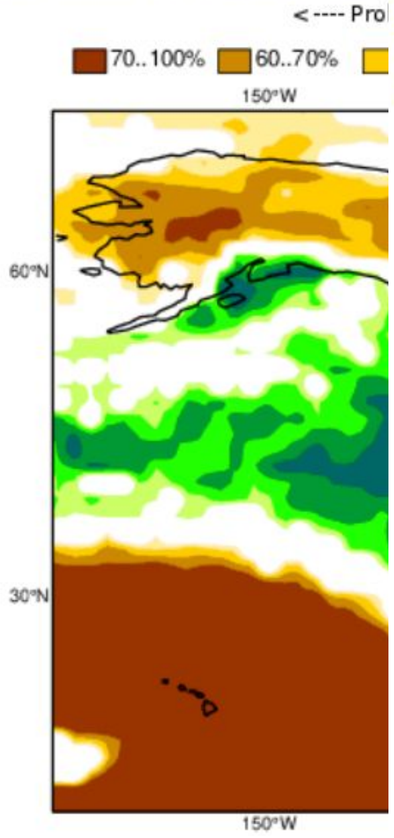
ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/11/26, climate
Ensemble size = 51, climate size

System 5
DJF 2026/27



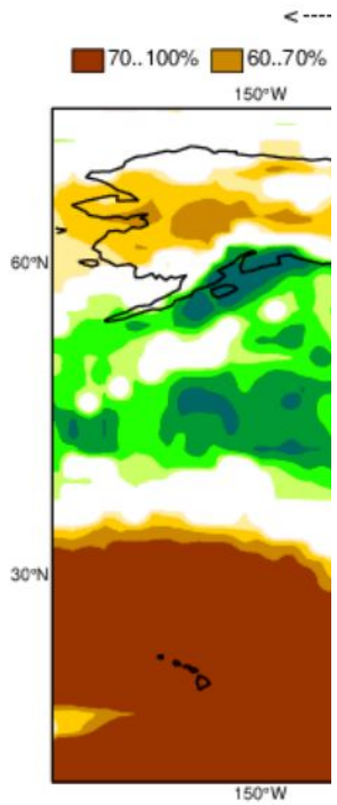
ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/11/26, climate period is 1993-2016
Ensemble size = 51, climate size = 600

System 5
JFM 2027



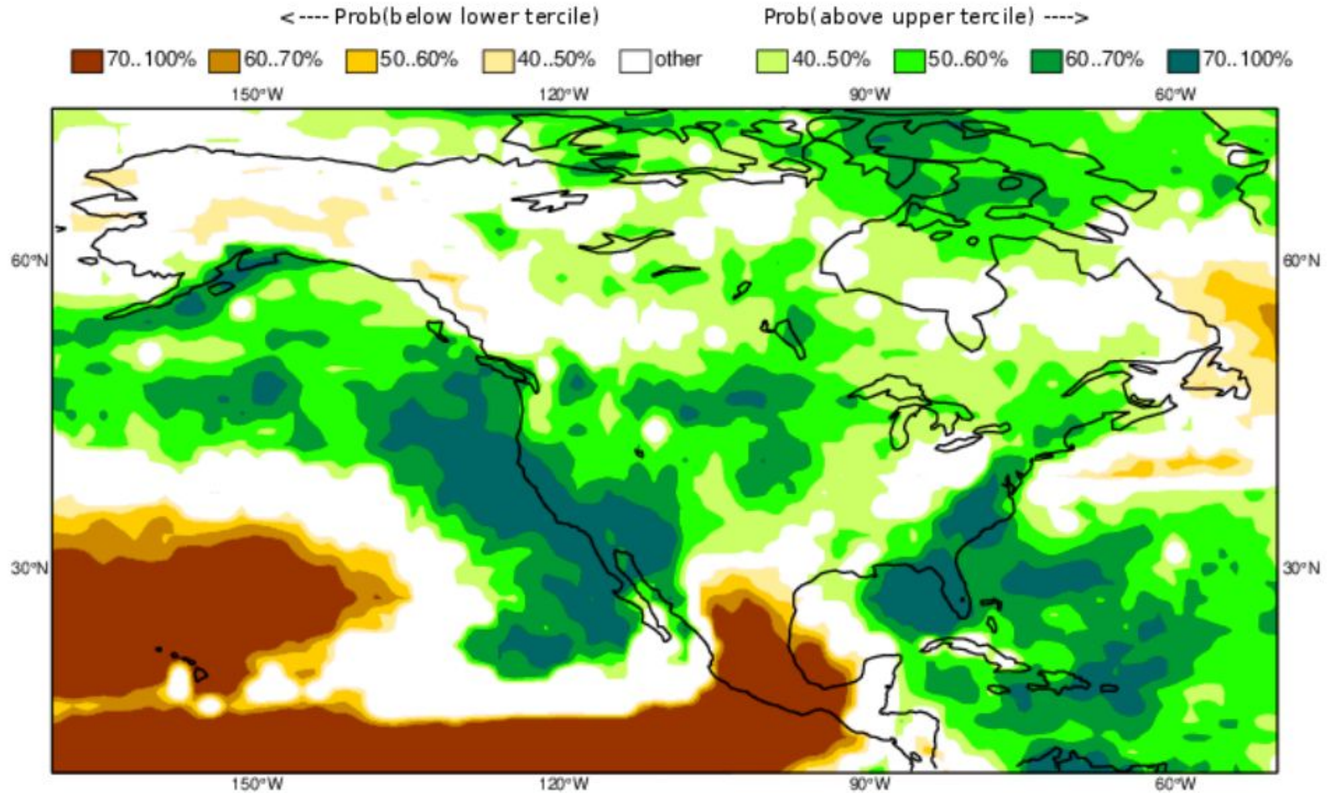
ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/11/26, climate period is 1993-2016
Ensemble size = 51, climate size = 6

System 5
FMA 2027



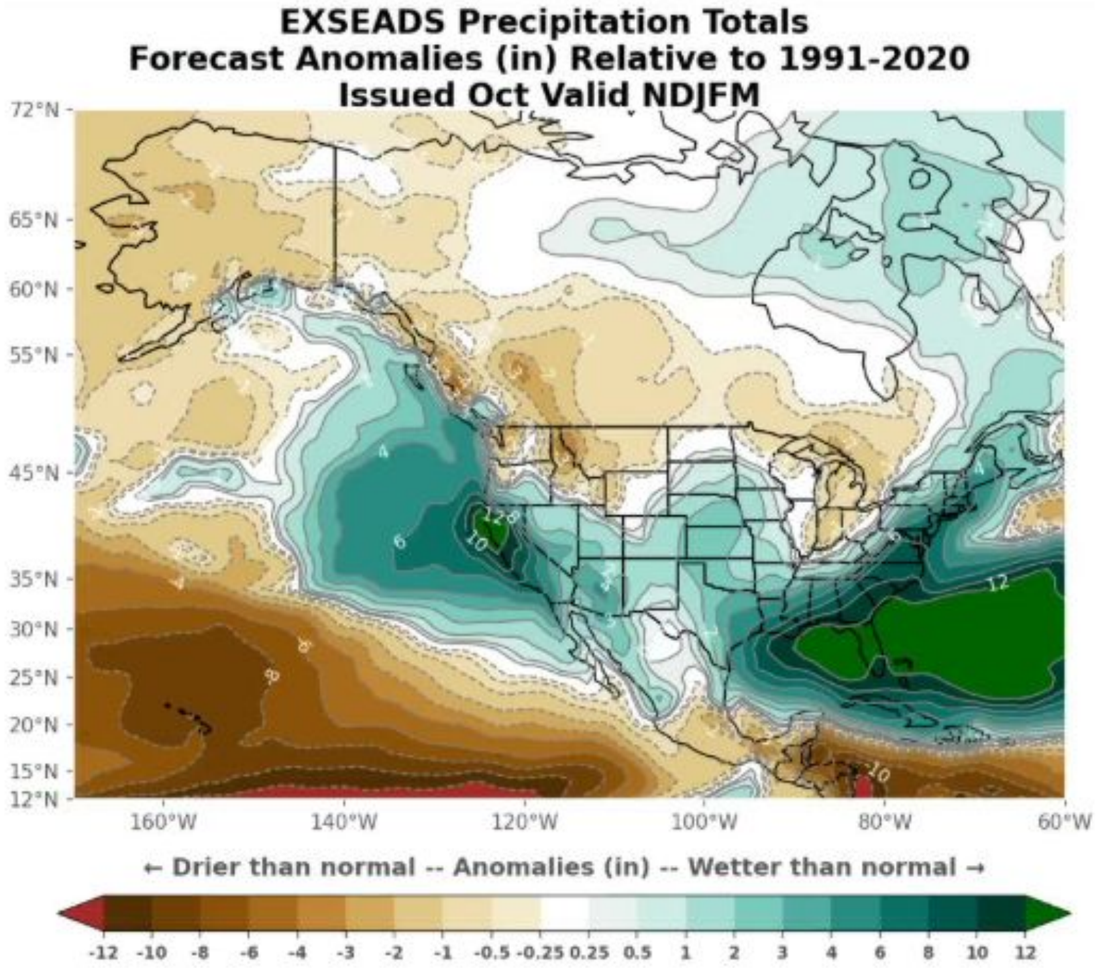
ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/11/26, climate period is 1993-2016
Ensemble size = 51, climate size = 600

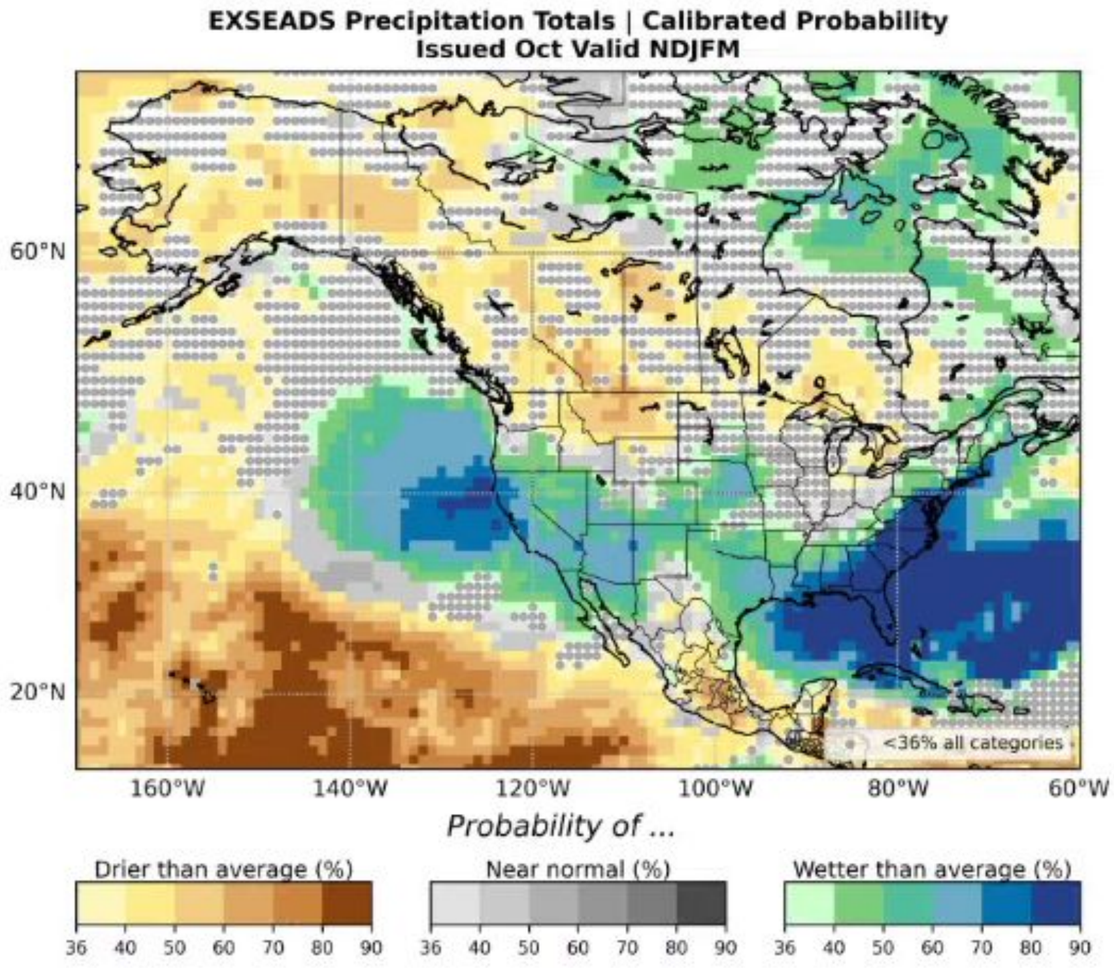
System 5
MAM 2027



Experimental Seasonal Outlook WPC

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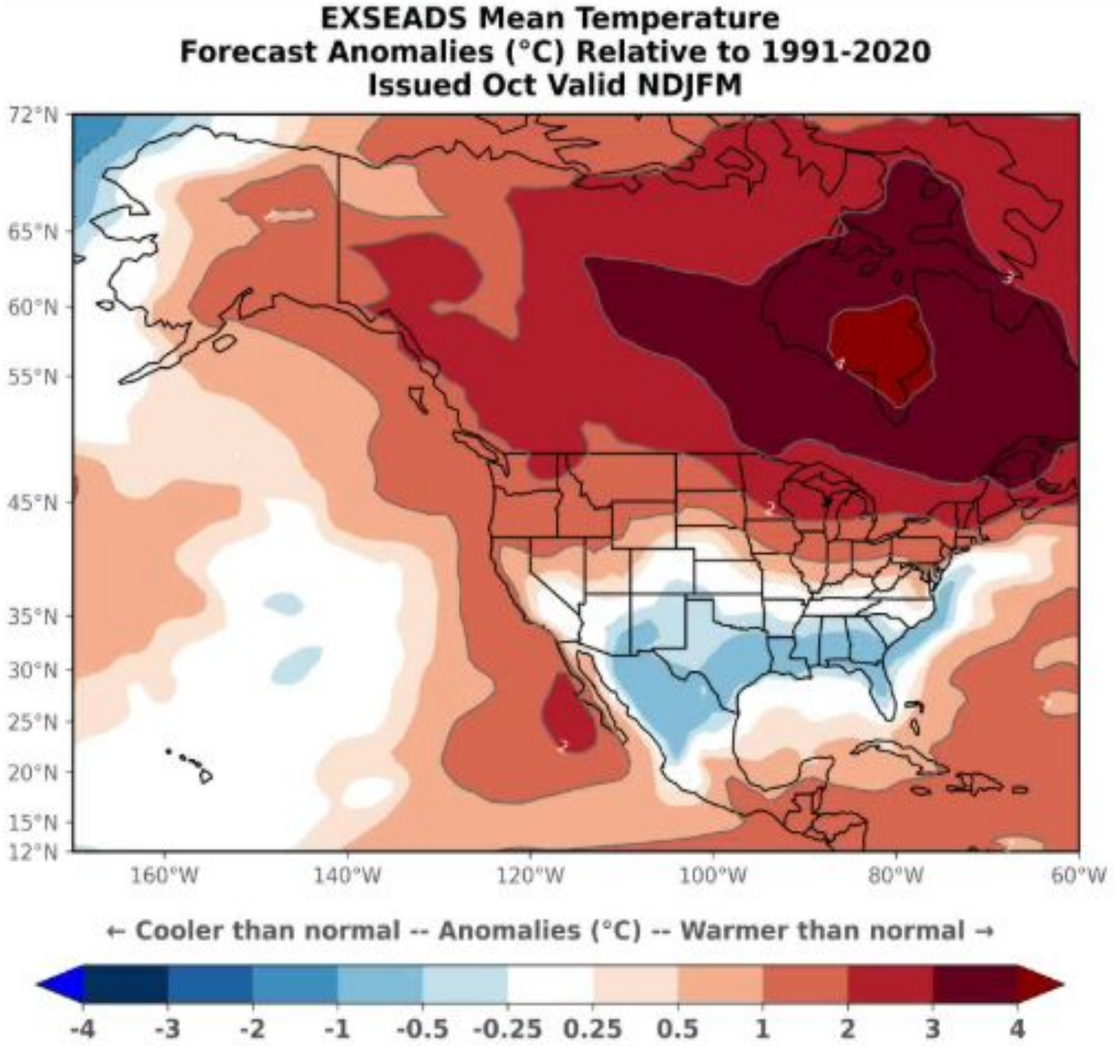
Slower start, ramping up core of winter into early spring.

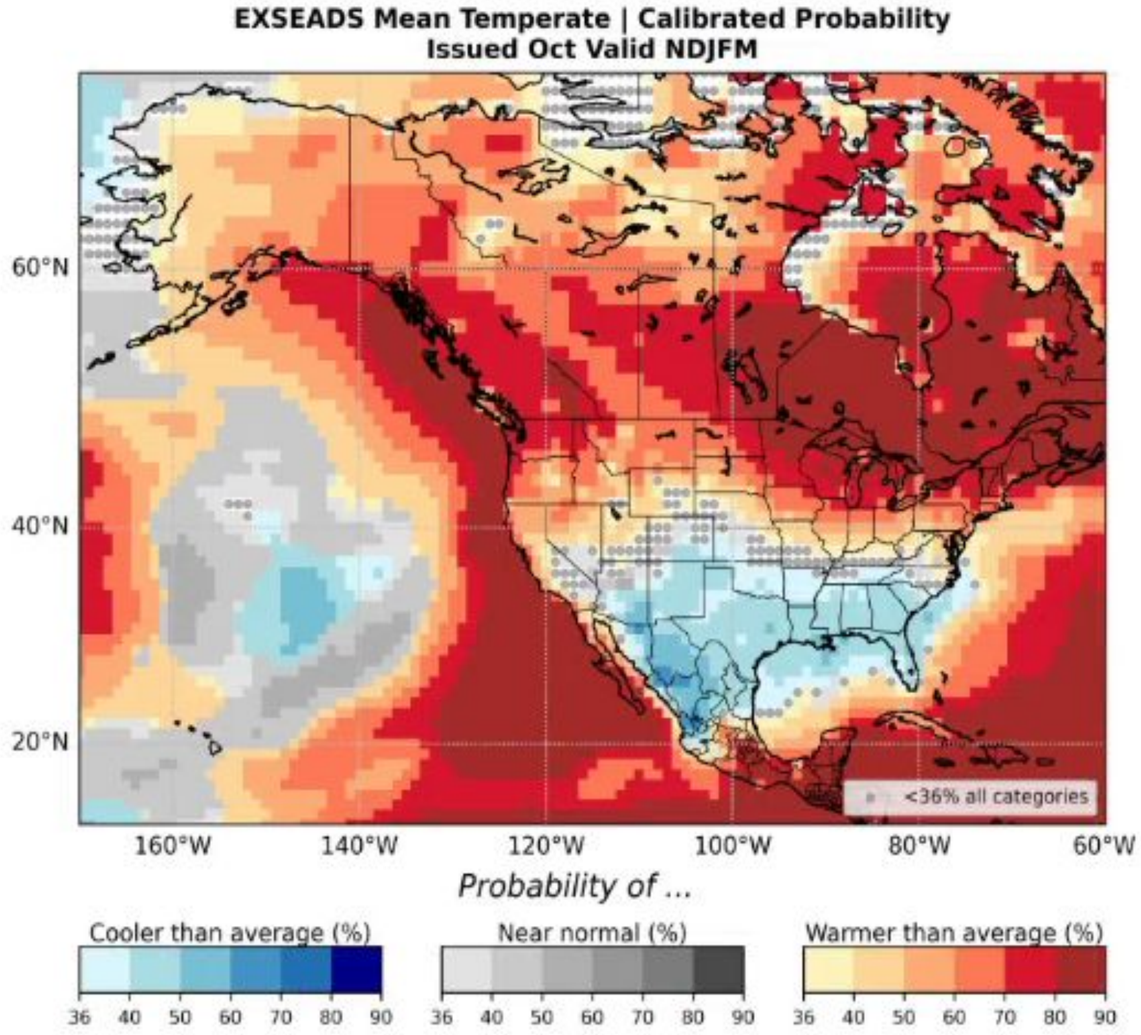
Note: The magnitude of the percent chance does not reflect the intensity of the anomaly. It's the confidence level of the ensemble members in the direction of the anomaly.

Source: Extended Seasonal Decision Support Forecast from the Weather Prediction Center

Experimental Seasonal Outlook WPC

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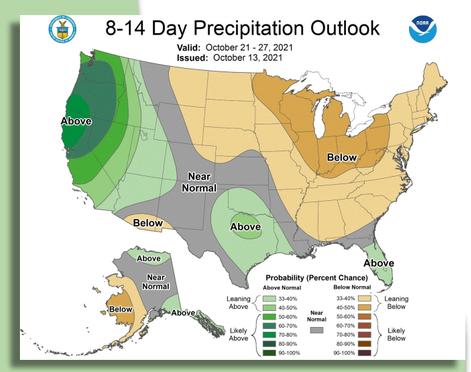


Source: Extended Seasonal Decision Support Forecast from the Weather Prediction Center

Predictability Spectrum

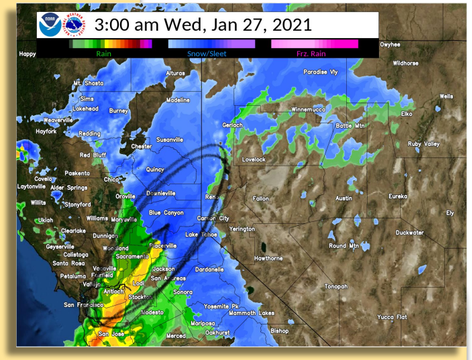
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7–14 Days



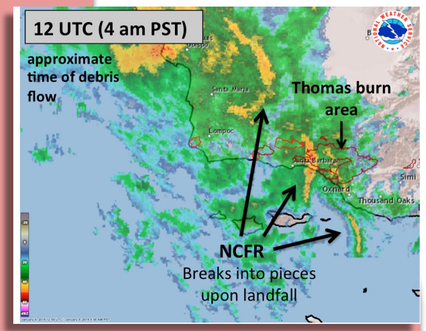
- Broad trends: wetter vs drier
- Heavily probabilistic outlooks (e.g. lean wet).
- Seeing some skill in 3-4 week forecasts.

2–7 Days



- The type of storm we may be dealing with becomes clearer
  - Examples: Flood vs Blizzard
  - Spillover or Strong Winds

6–48 Hours



- Small scale, but highly impactful features
  - Rapid snow level drops
  - Lake effect snow bands
  - Thunderstorms (better details)

NWS Alerts Refresher

WATCH VS WARNING VS ADVISORY

If No One Takes Action, What's the Point?

A forecast alone has no value.

What decisions do you need to make? What are your risk tolerance thresholds? Does low probability, high risk have a meaning?

Goodbye deterministic, hello probabilistic! Sharing the full information spectrum to help you make actionable decisions.







Probabilistic Precipitation Portal (PPP)

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Quantitative Precipitation Forecast
Includes rainfall, plus the liquid equivalent of any frozen precipitation where applicable

Snowfall Forecast
Includes sleet accumulation, but excludes ice

Ice Forecast
Includes ice accumulation from freezing rain, and excludes sleet

SCENARIOS

Expected Amount
Official National Weather Service forecast

High End Amount
1 in 10 chance (10%) of higher amounts

Low End Amount
9 in 10 chance (90%) of higher amounts

ADDITIONAL PERCENTILES

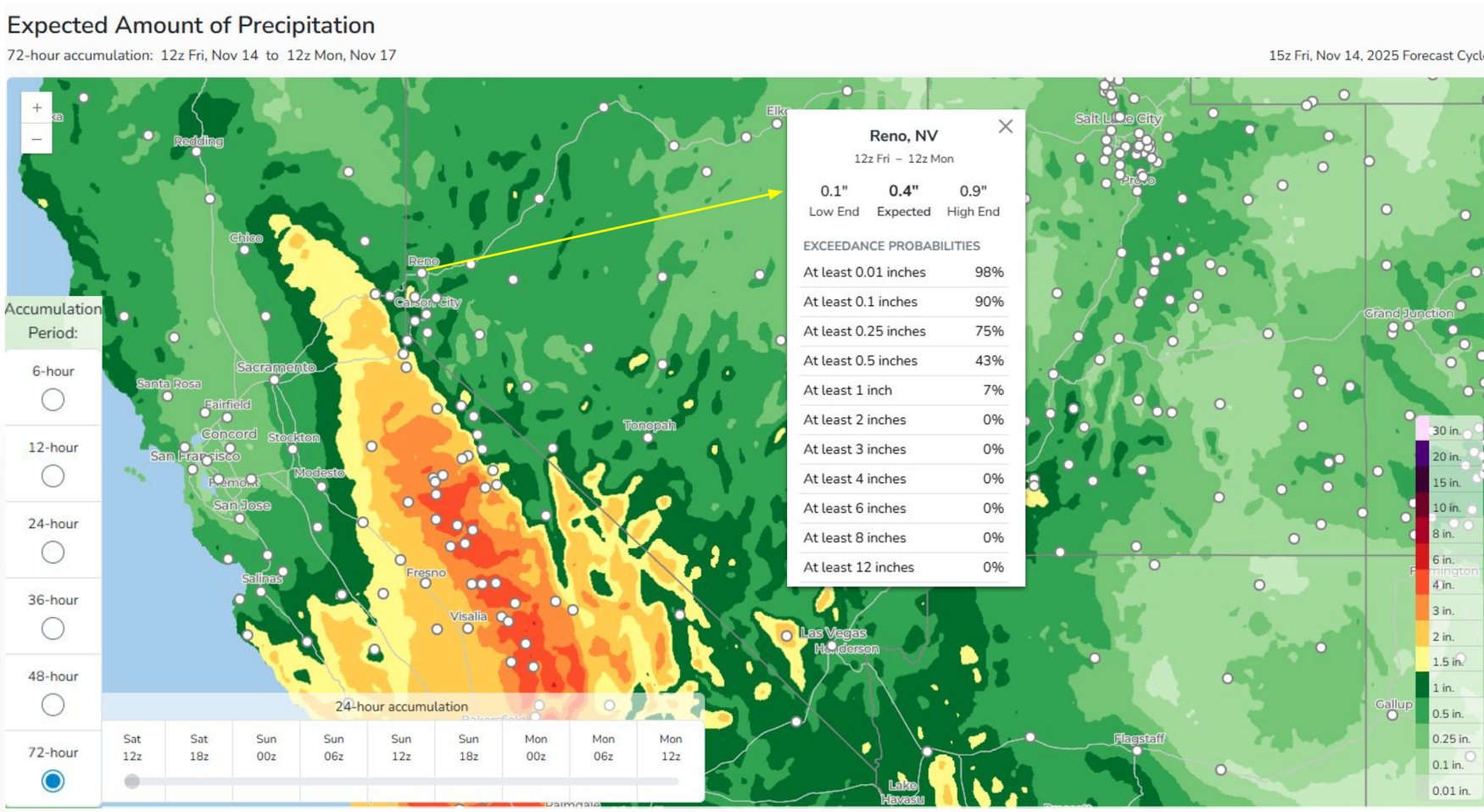
25th Percentile
75% chance of higher amounts

50th Percentile
50% chance of higher amounts

75th Percentile
25% chance of higher amounts

EXCEEDANCE PROBABILITIES

- At least 0.01 inches
- At least 0.1 inches
- At least 0.25 inches
- At least 0.5 inches
- At least 1 inch
- At least 2 inches
- At least 3 inches
- At least 4 inches
- At least 6 inches
- At least 8 inches
- At least 12 inches

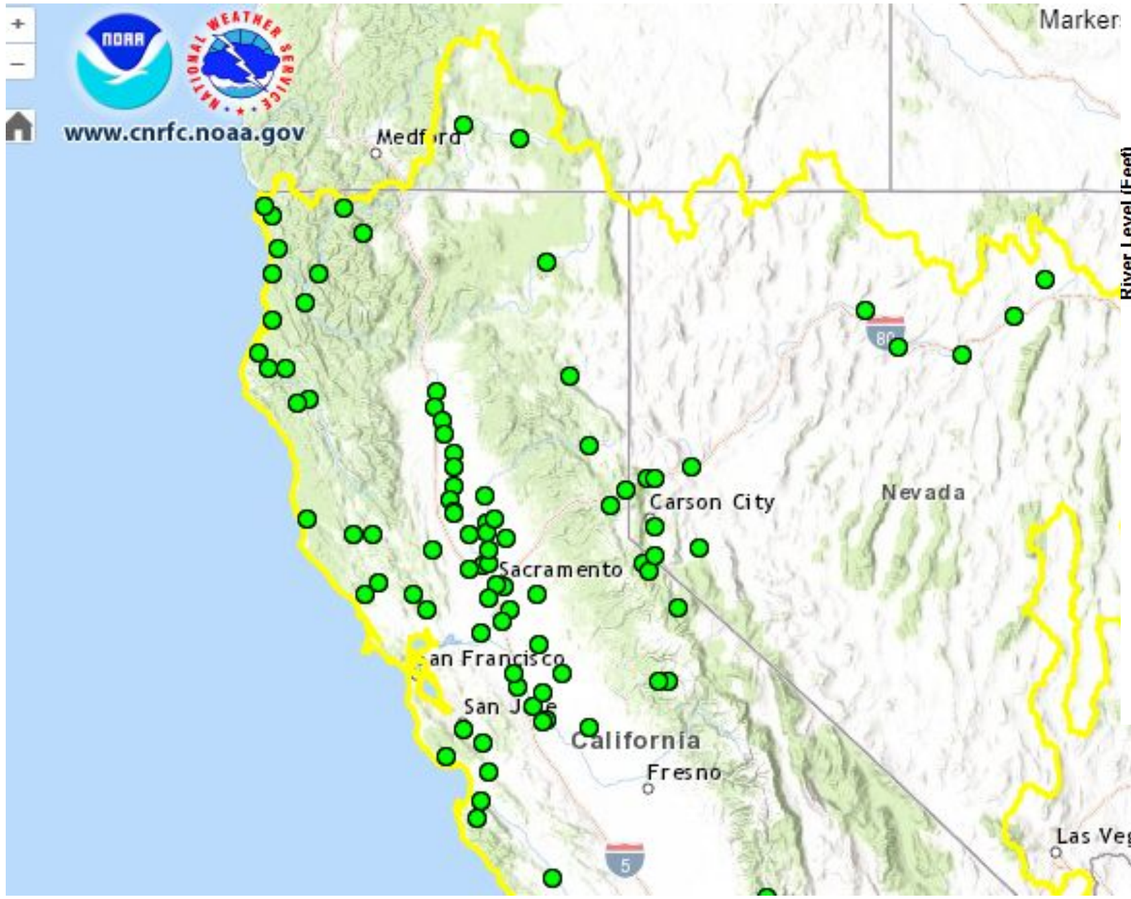


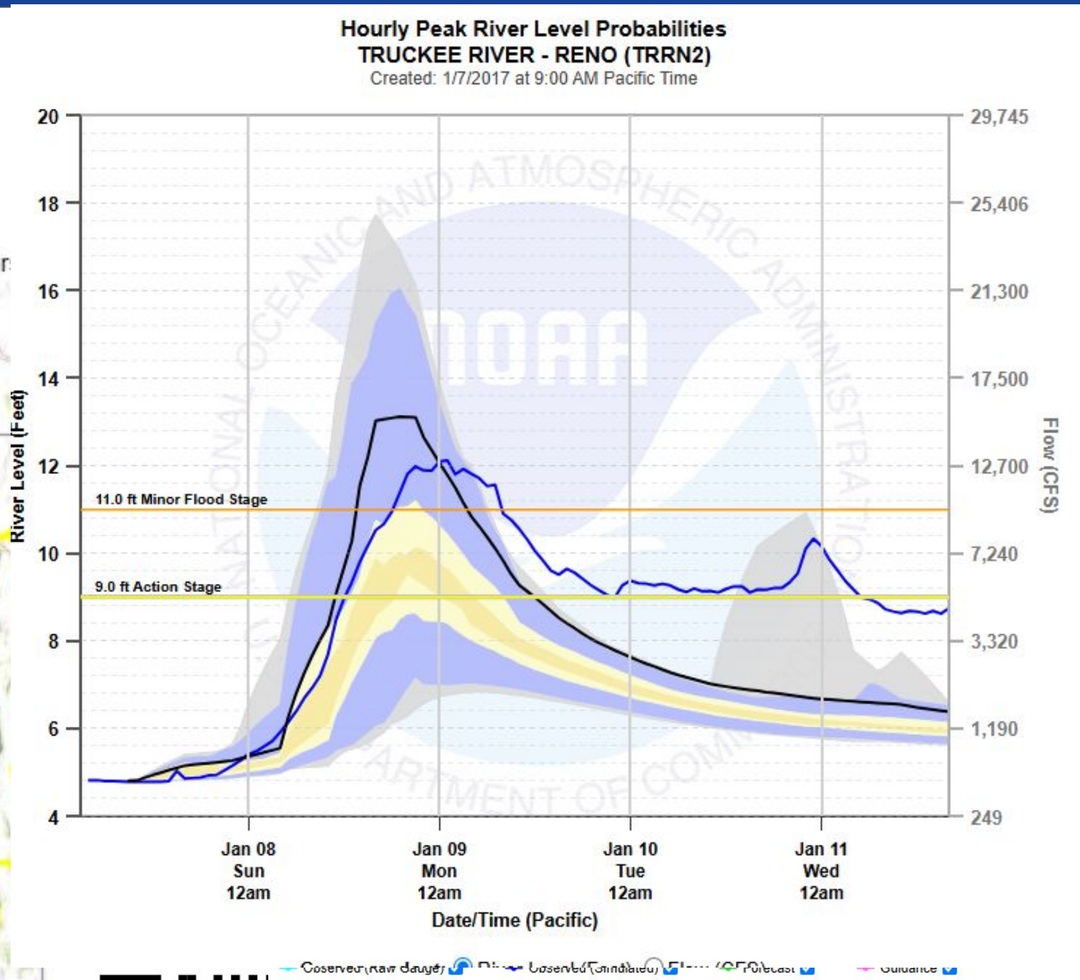
https://www.wpc.ncep.noaa.gov/Prob_Precip

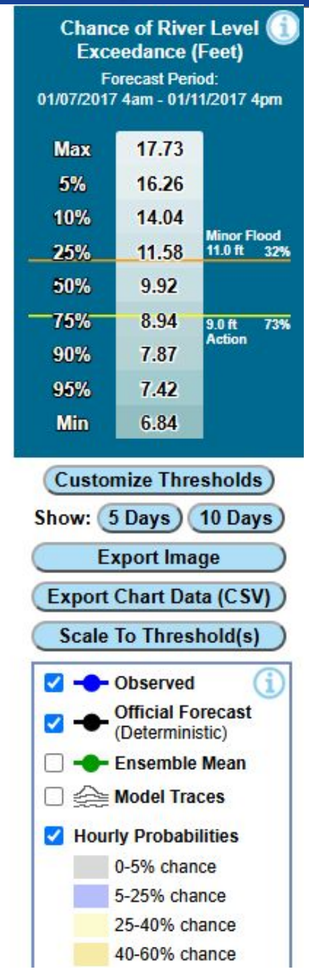
California-Nevada River Forecast Center

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California-Nevada River Forecast Center (CNRFC) provides excellent overview for river conditions and forecasts for points throughout the state.



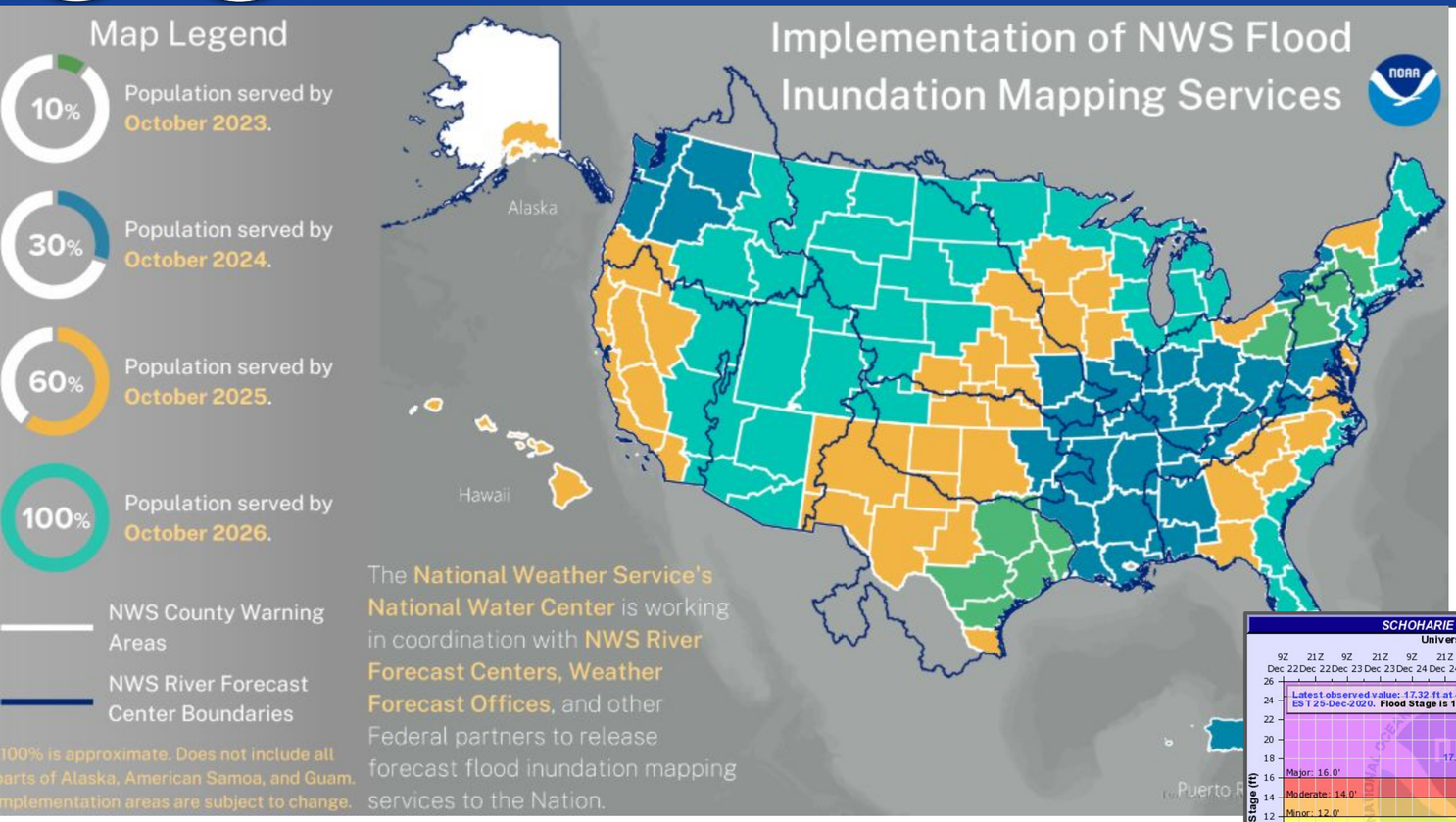




https://www.cnrfc.noaa.gov/

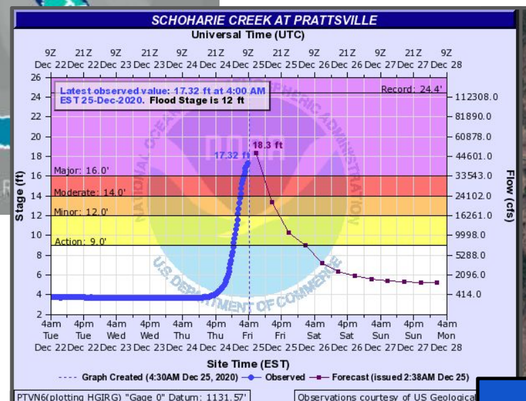
NWS Flood Inundation Services

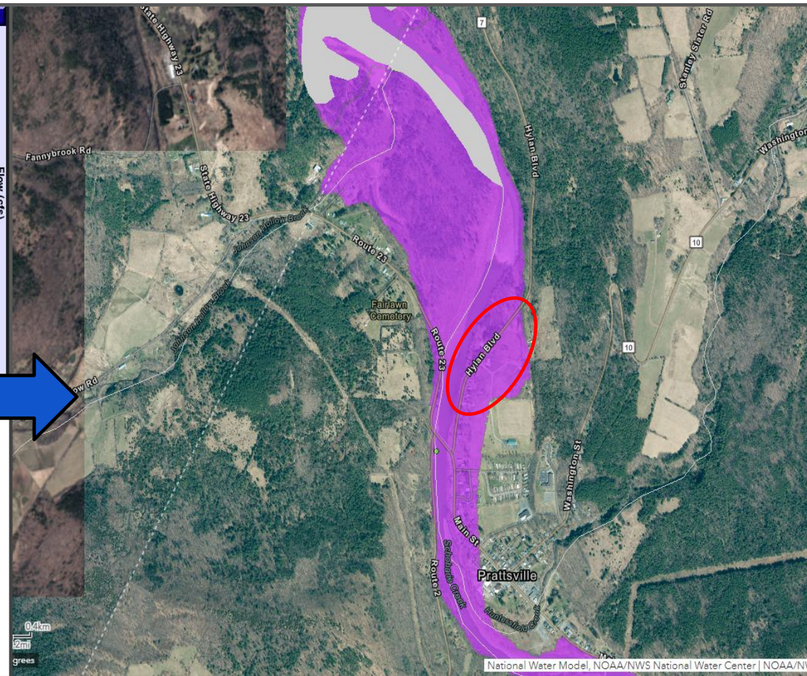
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Did you catch the webinar? If not, we have a recording!

Putting Water on a Map





Now publicly available for all of Conus. Modeling Skill is still lacking in our Region, but undergoing continuous development. Enormous future potential, but not yet ready for decision making in the semi-arid west.

Knowns & Unknowns

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Knowns:

- El Niño is already here and has a high (<90%) likelihood of being very strong.
- This tends to favor wetter conditions in Srn CA/NV, lesser predictability Nrn CA/NV.



Unknowns:

- How many atmospheric rivers (ARs) will impact CA/NV.
- The strength of these ARs.
- How much Sierra spillover?
- Will it rain or snow “X” inches at a specific location & Snow Level.

→ *These are not reliably predictable on a seasonal--level; information becomes more apparent in the weather forecast (5-14 days out). The signals are there for a potentially big winter, though not a guarantee.*

That’s a Wrap. May the Odds Ever Be in Our Favor…

Weather Forecast Office
Reno, NV
Monday, November 9



Dawn Johnson &

Tim Bardsley

Warning Coordination Meteorologist (**WCM**) &

Senior Service Hydrologist (**SSH**)

National Weather Service - Reno

Dawn.Johnson@noaa.gov

Tim.Bardsley@noaa.gov