

November 7, 2023

Regular

Meeting

Item #7a. -

Winter

Seasonal

Outlook

Presentation



NWS Reno 2023-24 Winter Outlook

After another “once in a career” year, what’s next?

weather.gov/reno

Weather Forecast Office

Reno, NV

Tuesday, November 7

775-673-8100



Dawn Johnson

Warning Coordination

Meteorologist

National Weather Service

Reno, Nevada

dawn.johnson@noaa.gov



2022-23: The Year That Kept on Giving

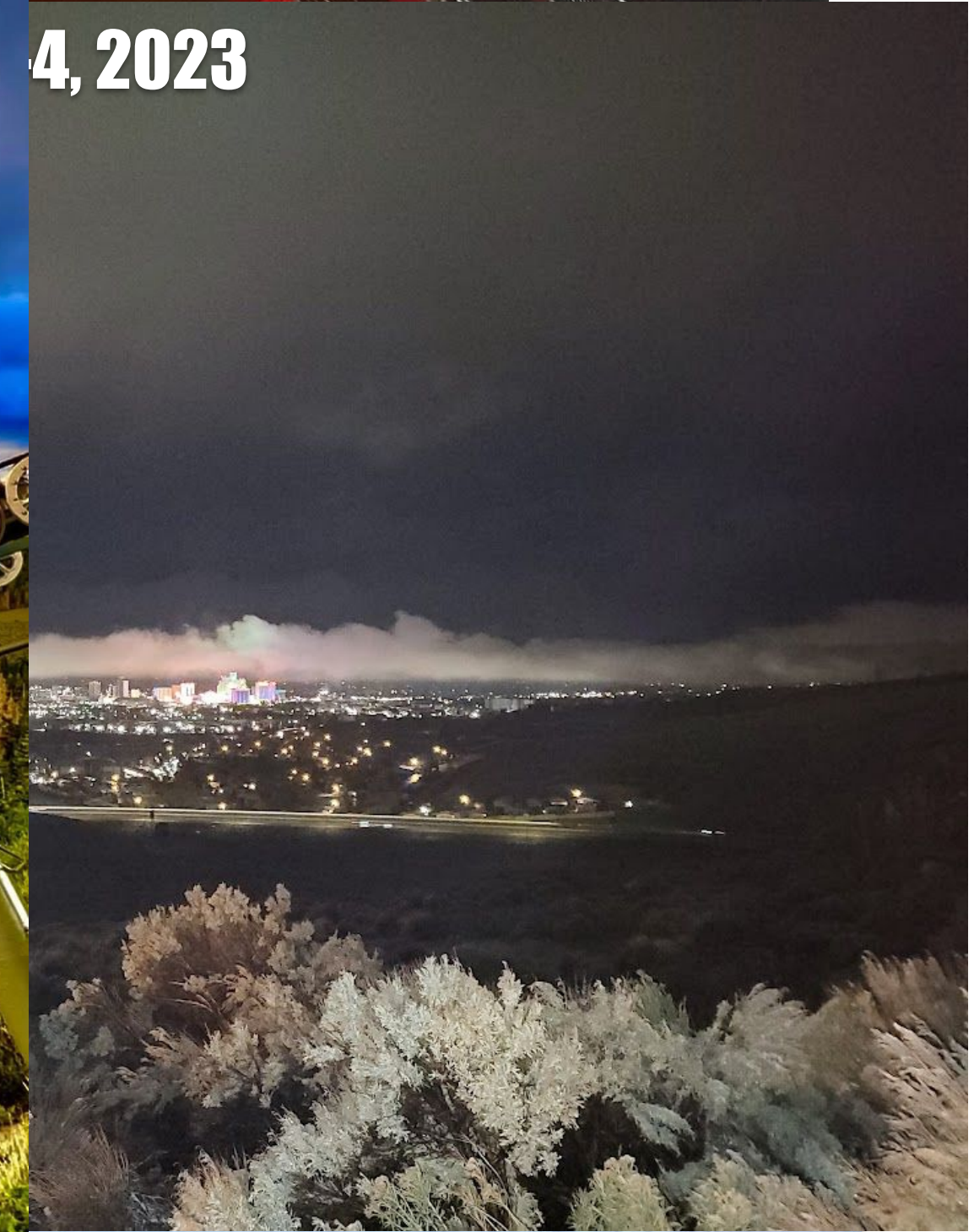
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Snowy bamboo launch in R



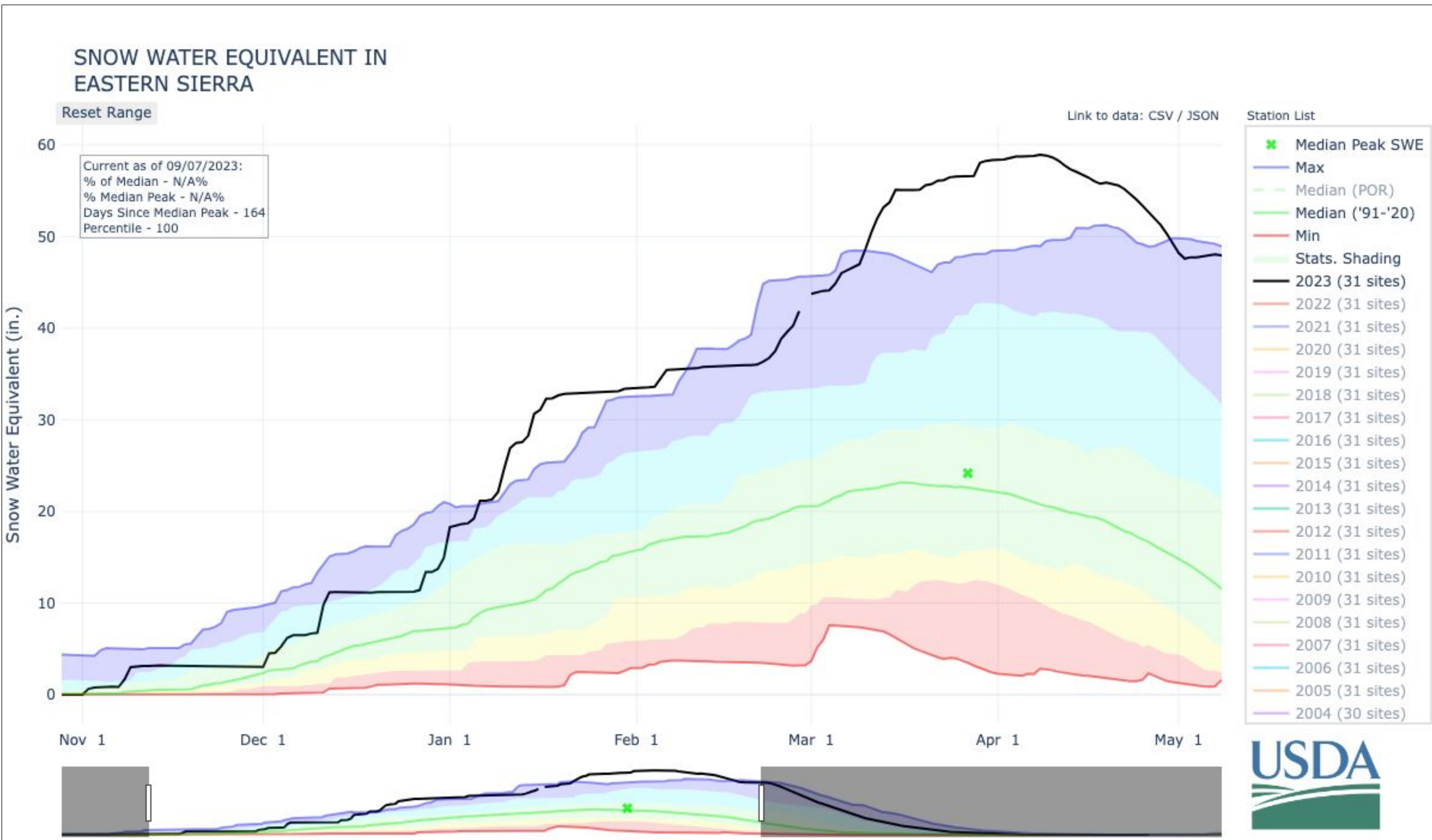
Photo: June Mountain Ski



4, 2023



Historic for Snow Water Equivalent E. Sierra





...and a Hurricane

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Pic: Clark County Gov
Mt Charleston, NV

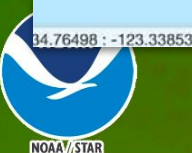
0.01
0.02
0.78
0.67
0.0

0.26

0:00 / 0:41

	HIGH: At Least 70%		SLGT: At Least 15%
	MDT: At Least 40%		MRGL: At Least 5%

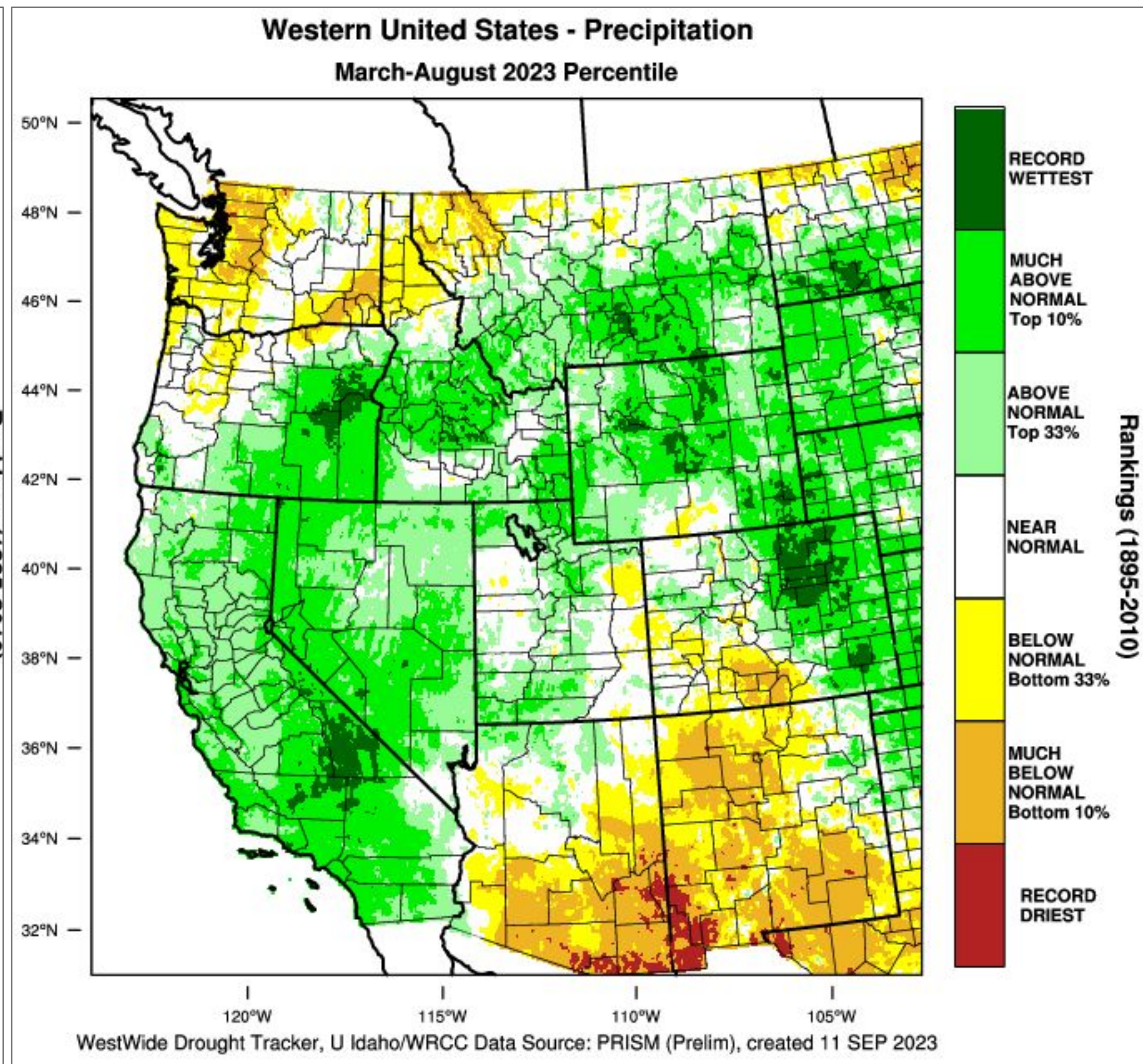
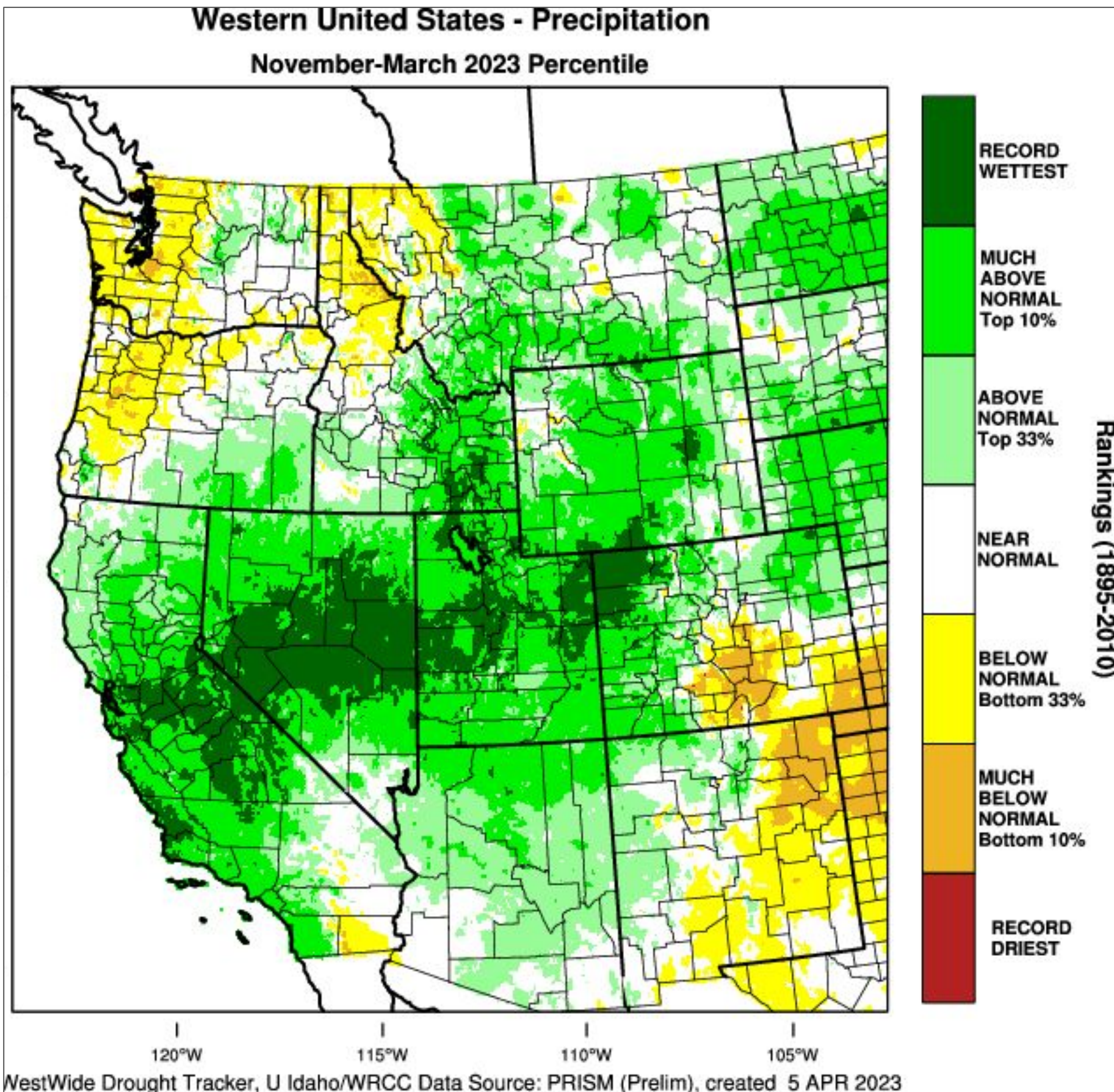
ESRI, HER





Abnormally Wet Winter, Spring, Summer

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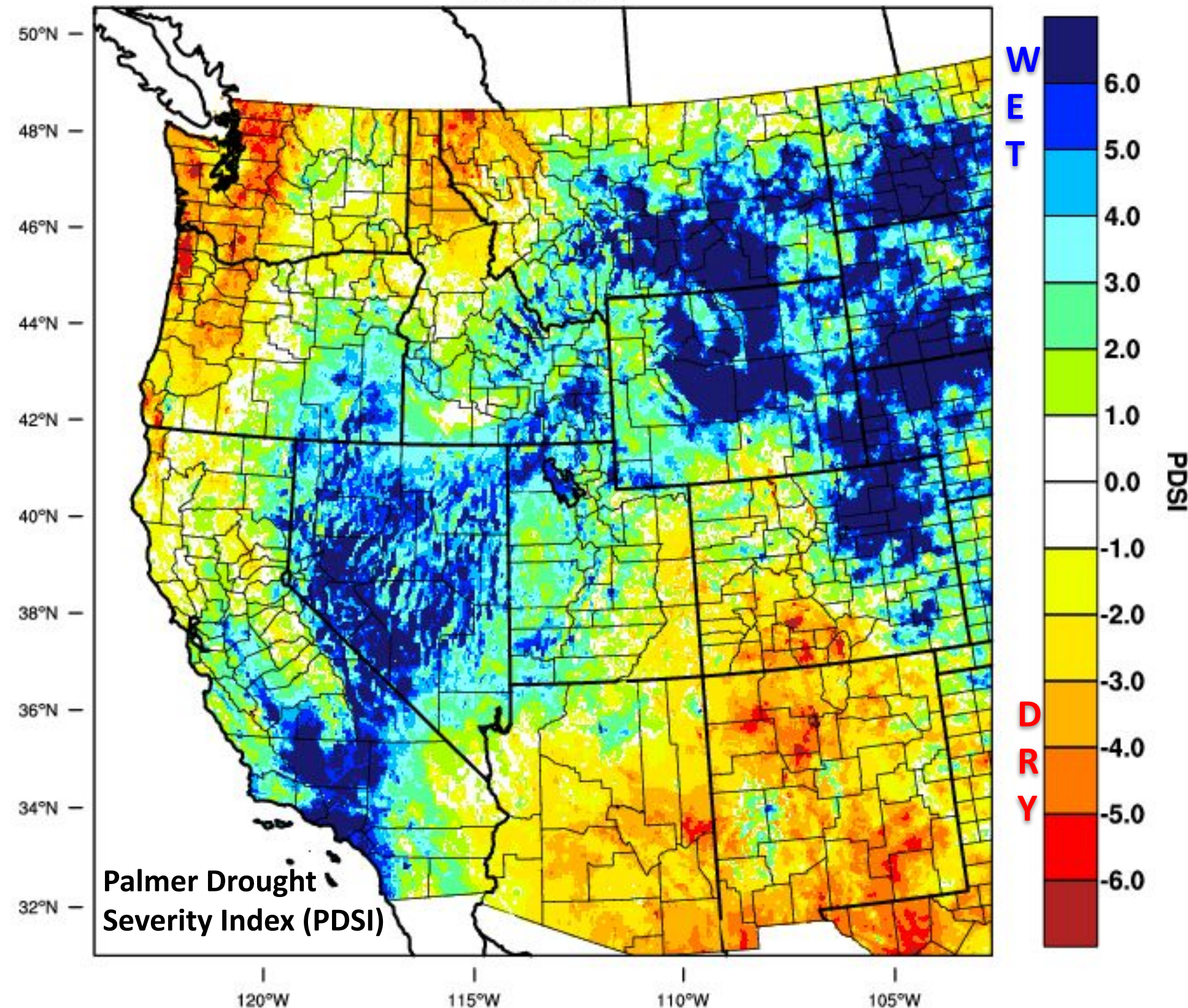




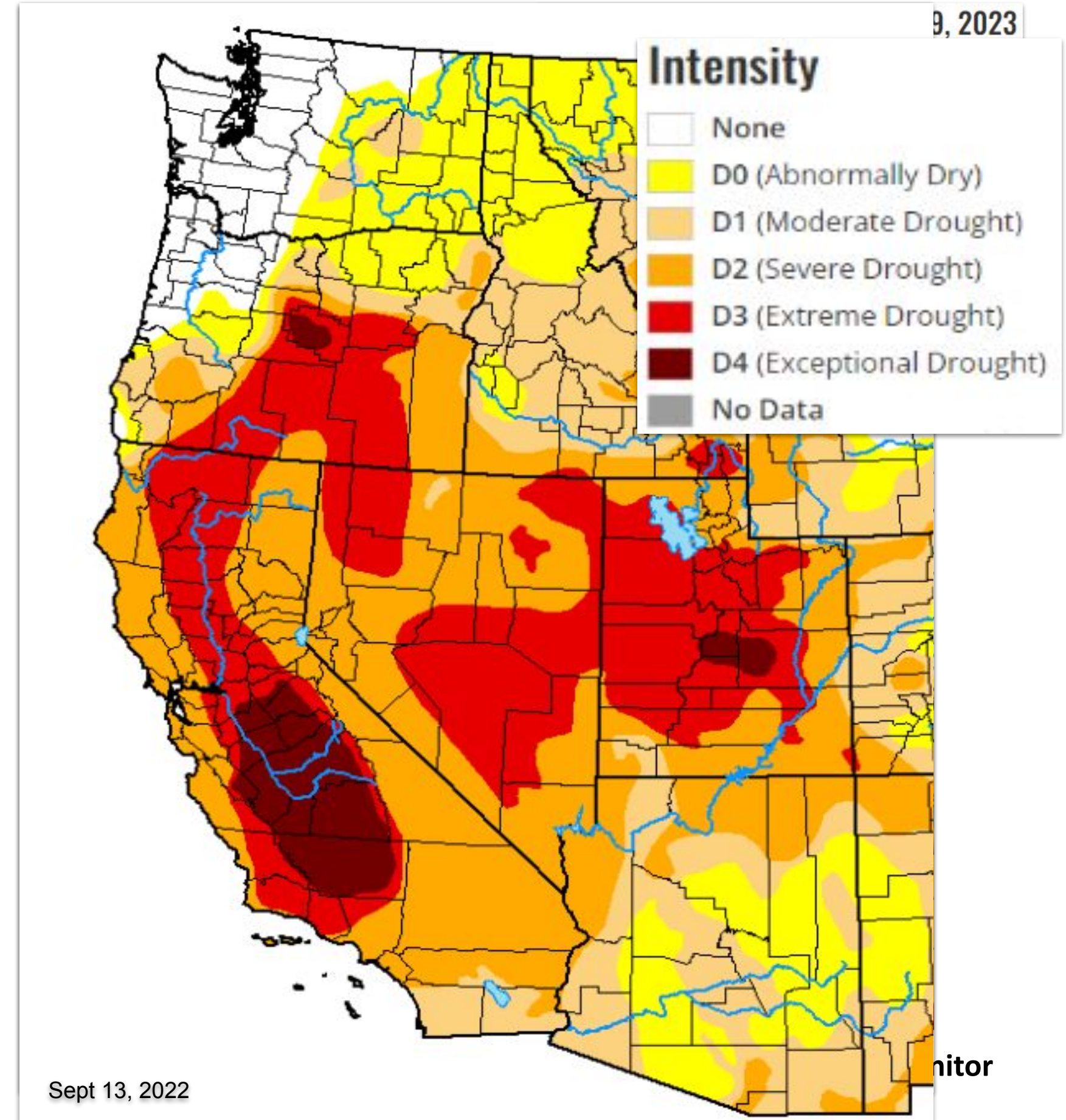
Drought - Nothing to See Here

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Western United States - PDSI
October 2023



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 NOV 2023

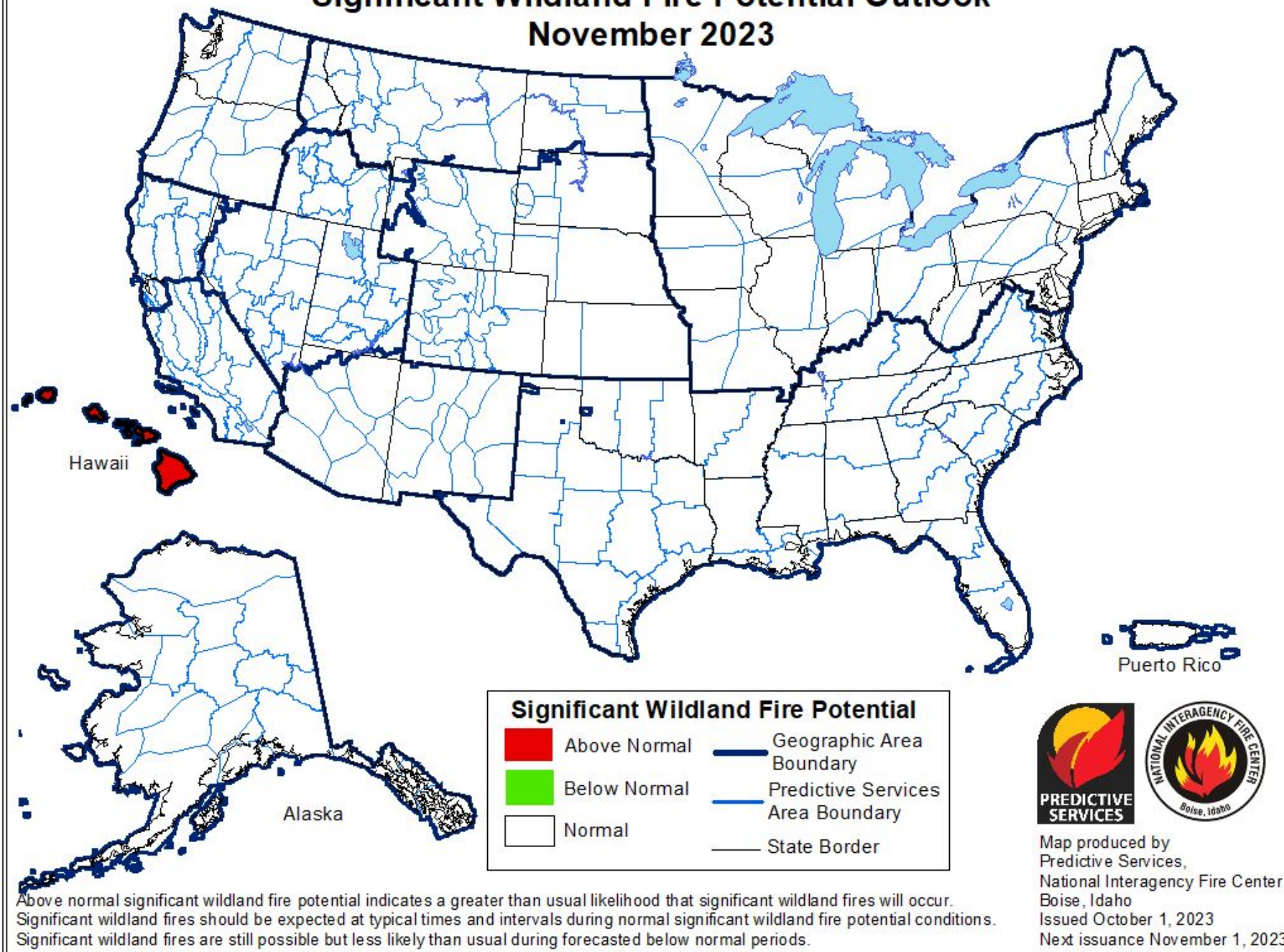




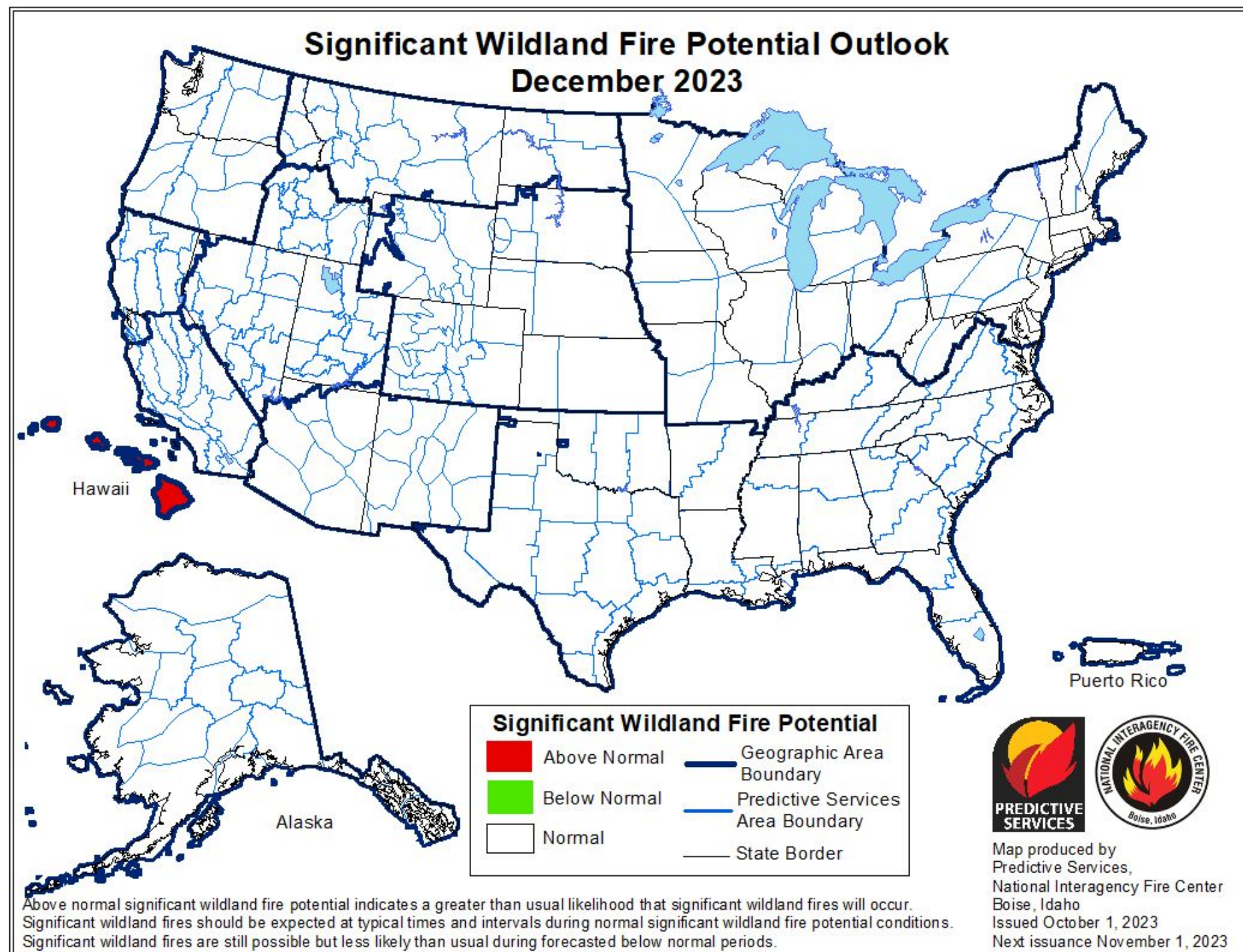
Fire Concerns Fall into Winter

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Significant Wildland Fire Potential Outlook November 2023



Significant Wildland Fire Potential Outlook December 2023

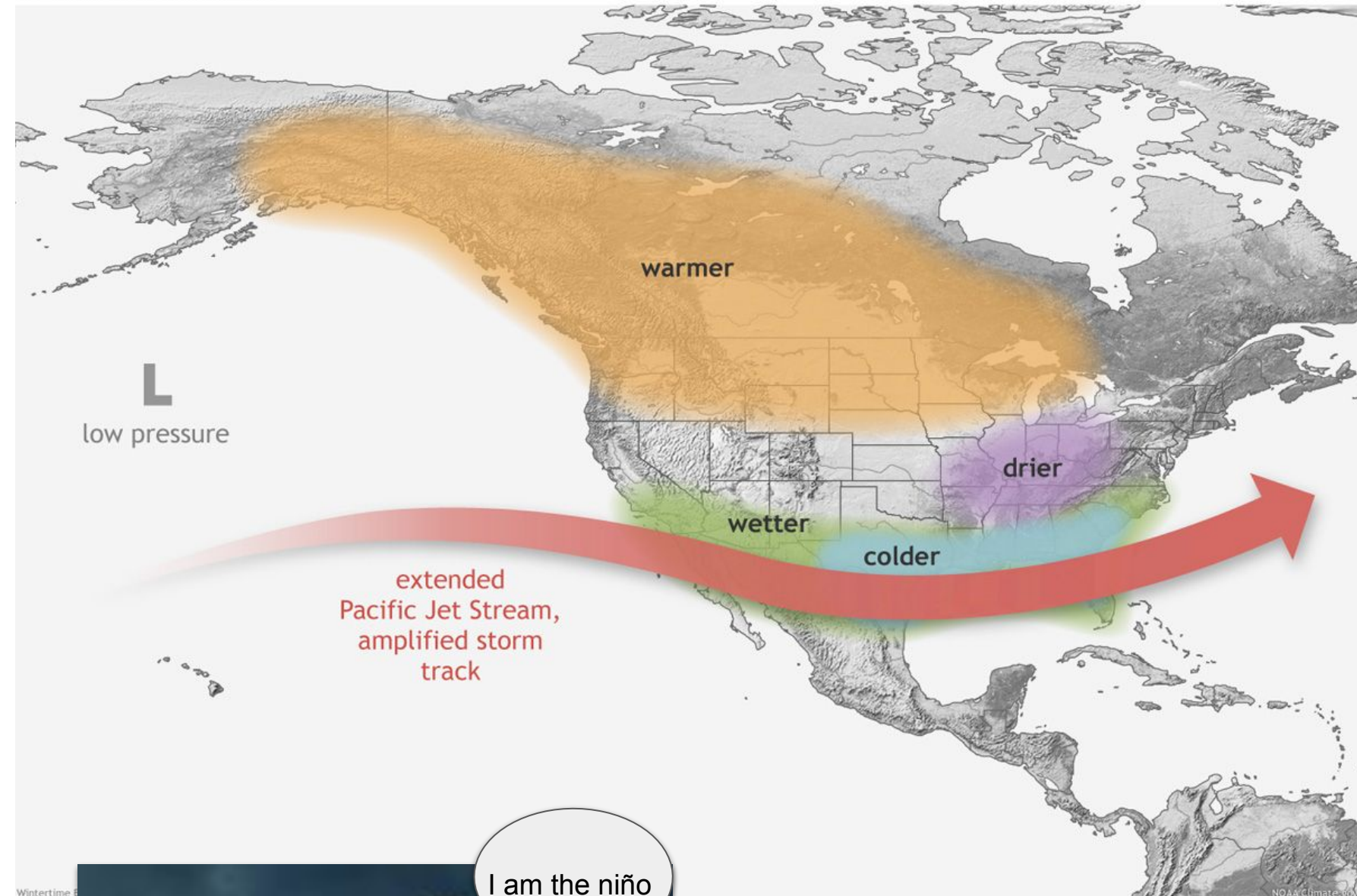




El Niño vs La Niña...Here we go again

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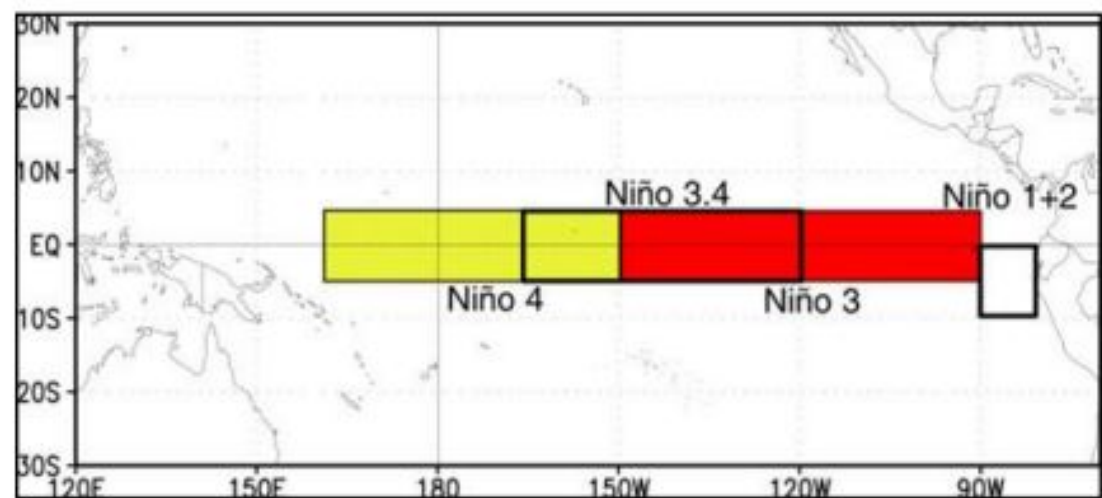
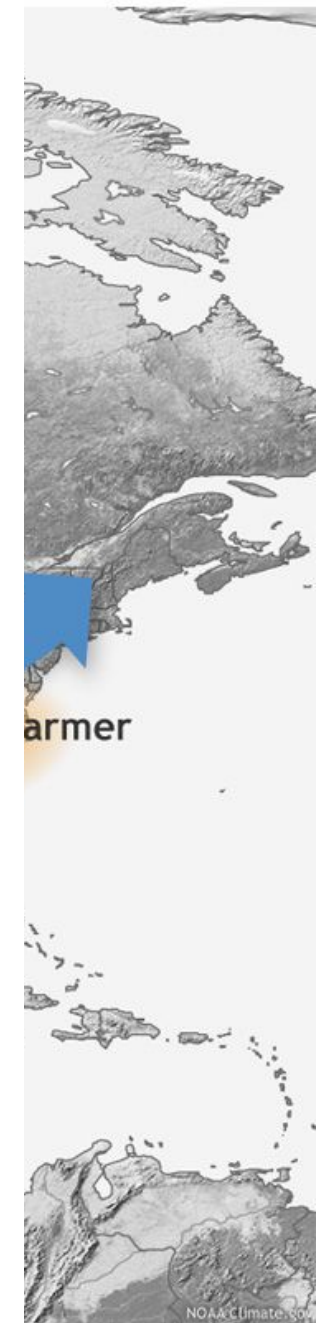
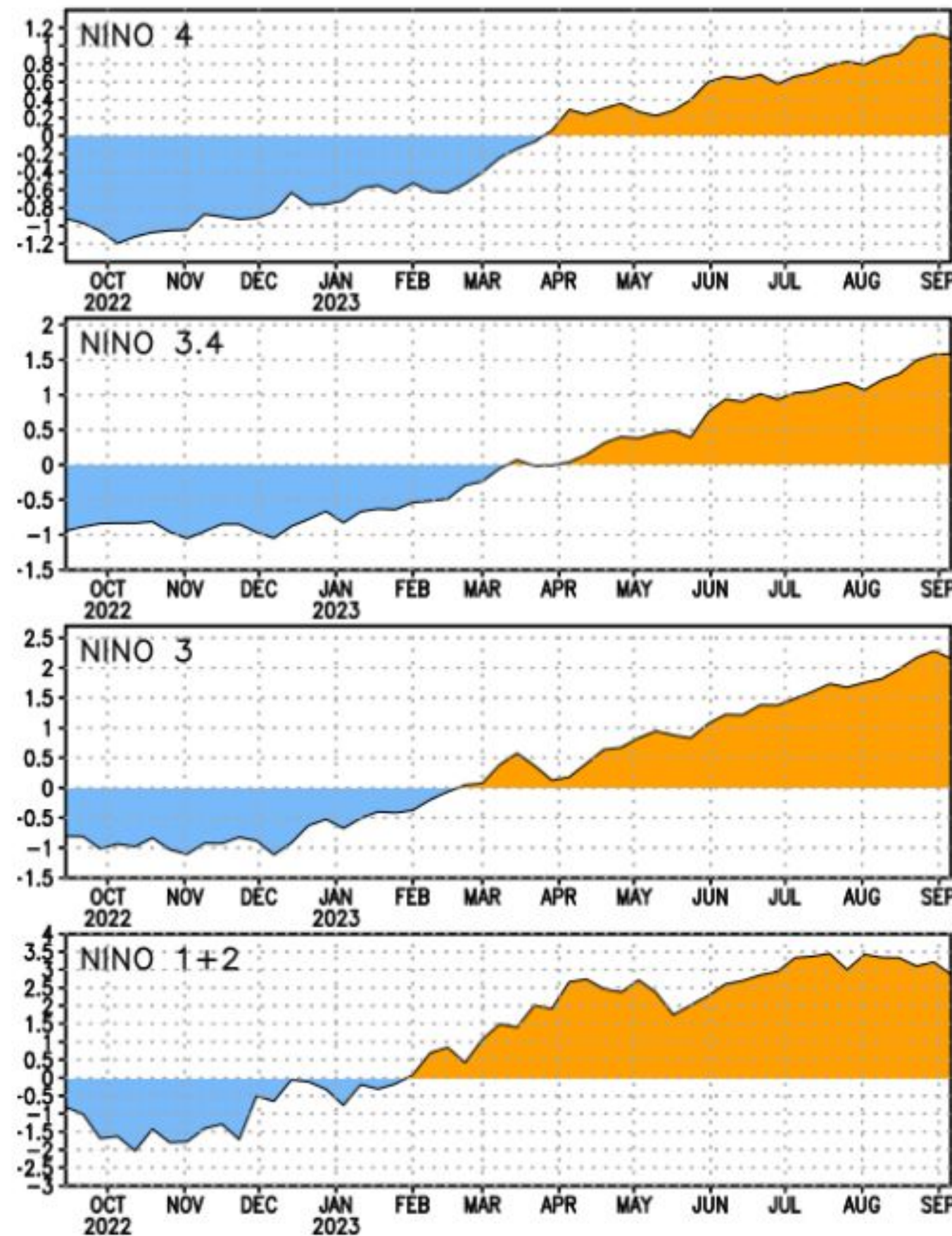
TYPICAL EL NIÑO WINTERS



TYPICAL LA NIÑA



SST Anomalies

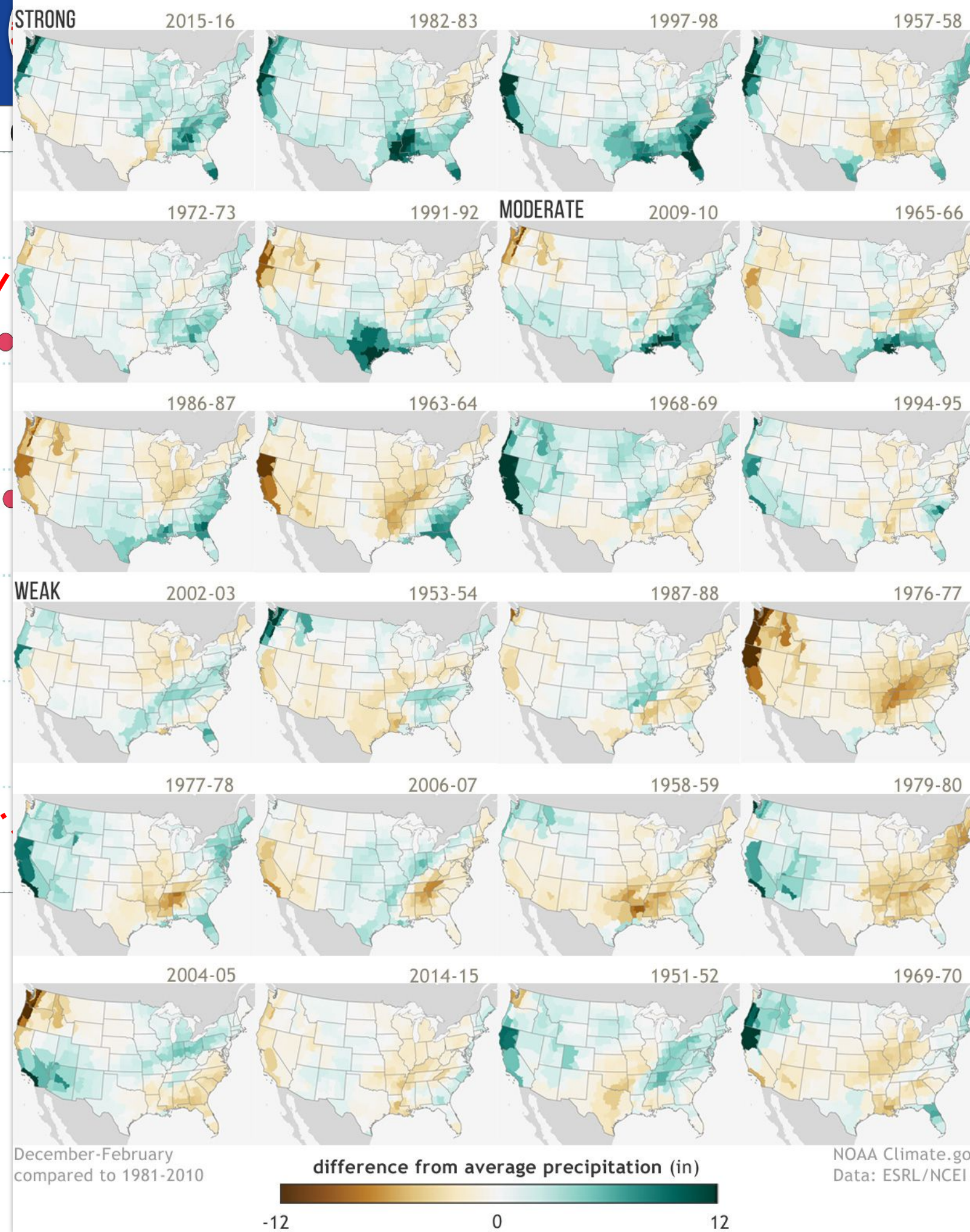
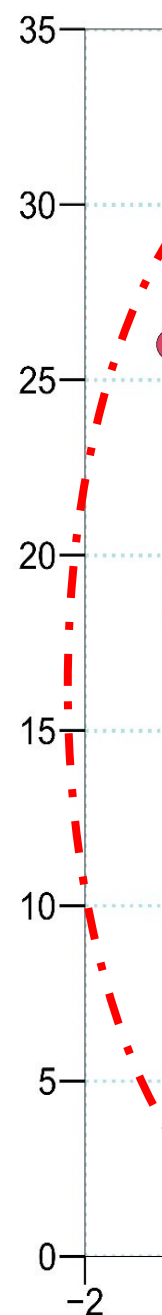


Wintertime La Niña pattern

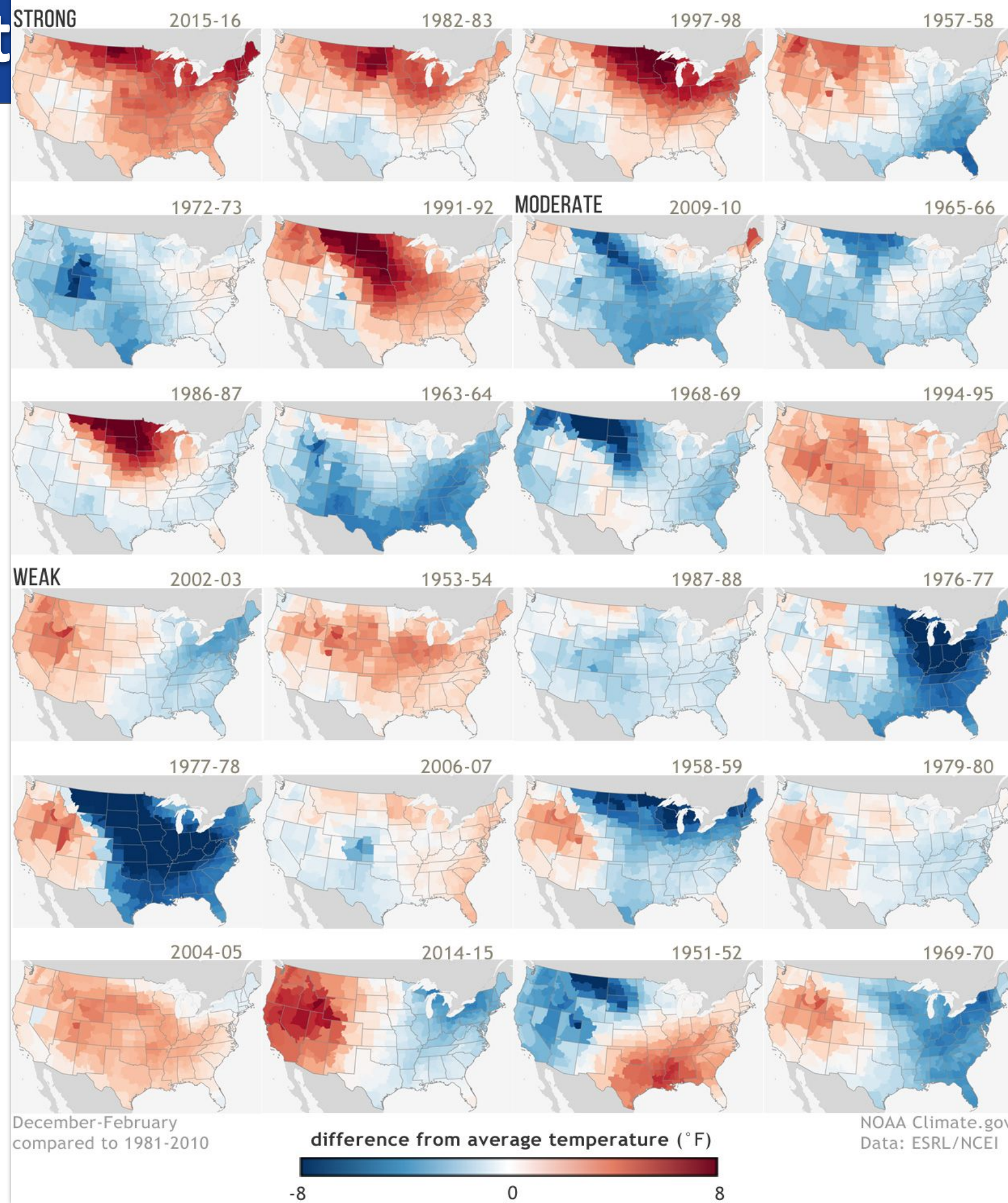


U.S. winter precipitation during every El Niño since 1950

October-March Precipitation (inches)



U.S. winter temperature during every El Niño since 1950



Office
no, NV
ber 7

23
o = 6.84
al = 6.66
.60
a = 6.32

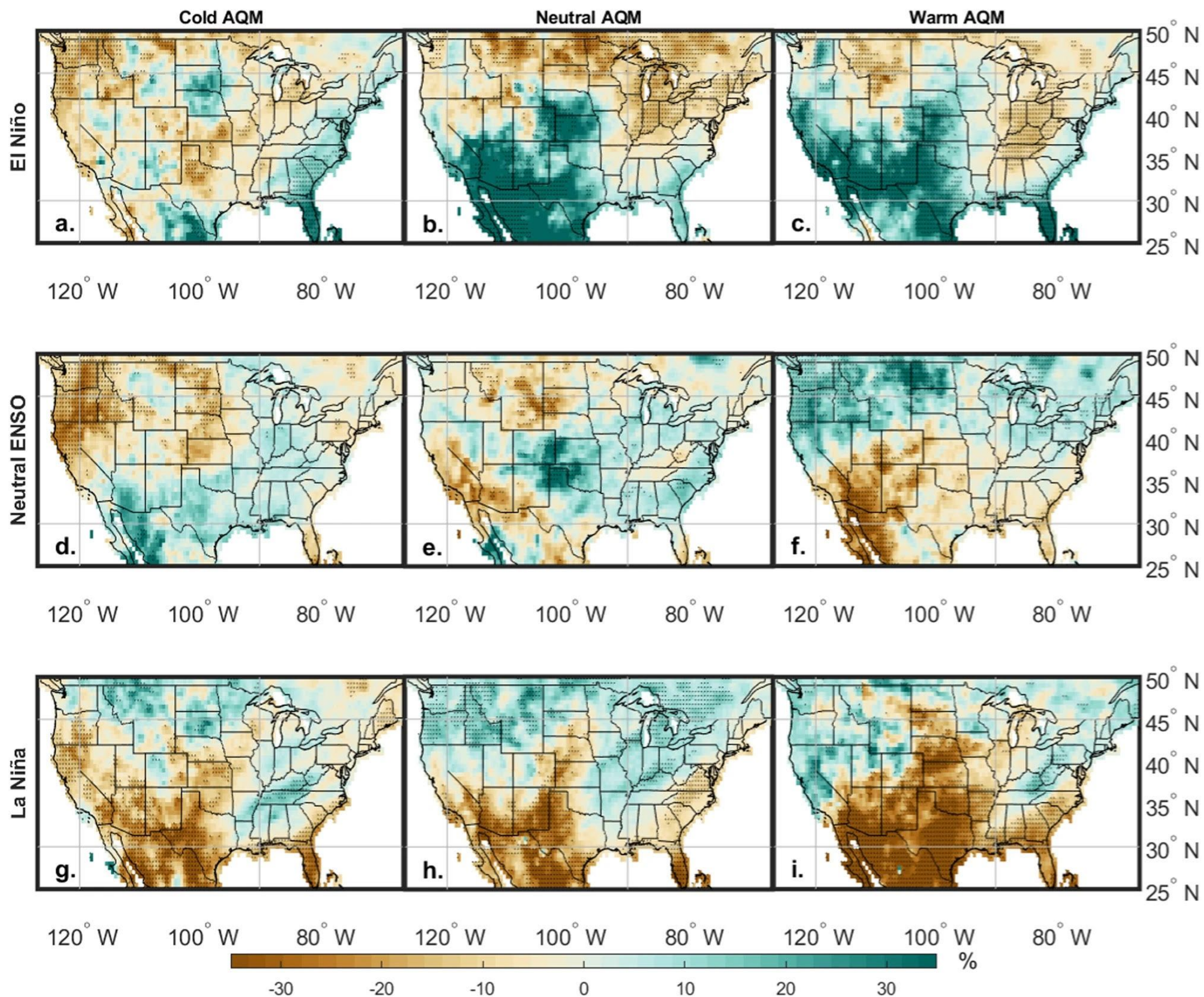


**New research: Atlantic-Pacific
Influence on Western U.S. Water**

ENSO's Atlantic "Sibling"

**AQM of sea surface temperature
variability appears to have a link
with ENSO phases.**

**Warm AQM phases tend to be
wetter in the west in any ENSO
phase.**

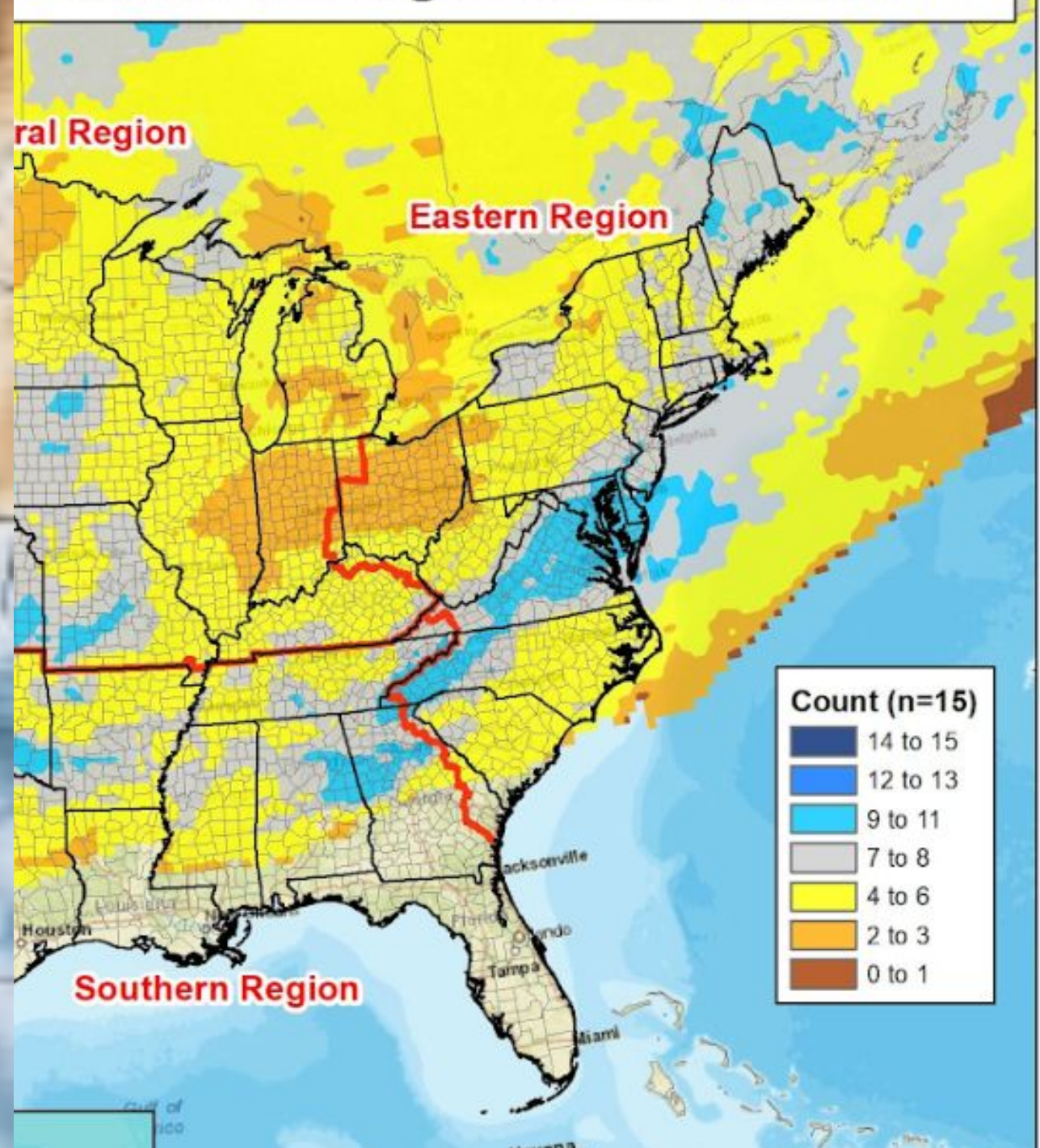


Percent of Average Snowfall

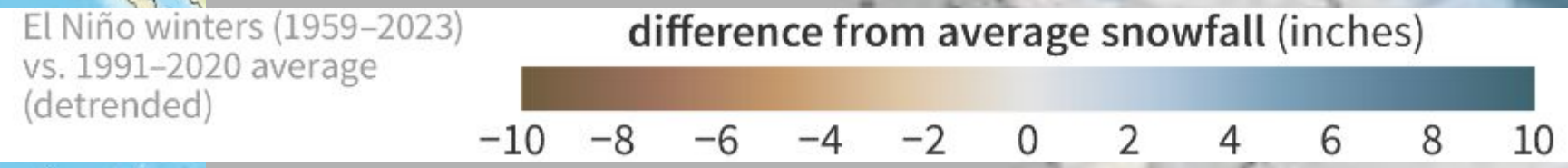


Source: ECMWF ERA5. Based on ONI with a moderate to strong El Niño strength During Dec-Feb. Uses 30-year trailing climo. 1940-present. n=15.
Map by Brian Brettschneider

Count of Above Normal Snow Winters During Mod/Str El Ninos



Source: ECMWF ERA5. Period of record is 1941-2023. All years use centered climatology.
Map by Brian Brettschneider



El Niño winters (1959-2023) vs. 1991-2020 average (detrended)

NOAA Climate.gov
Data: ERA5

Alaska Region Pacific Region



Analog Years - Rapid La Niña to El Niño Transition

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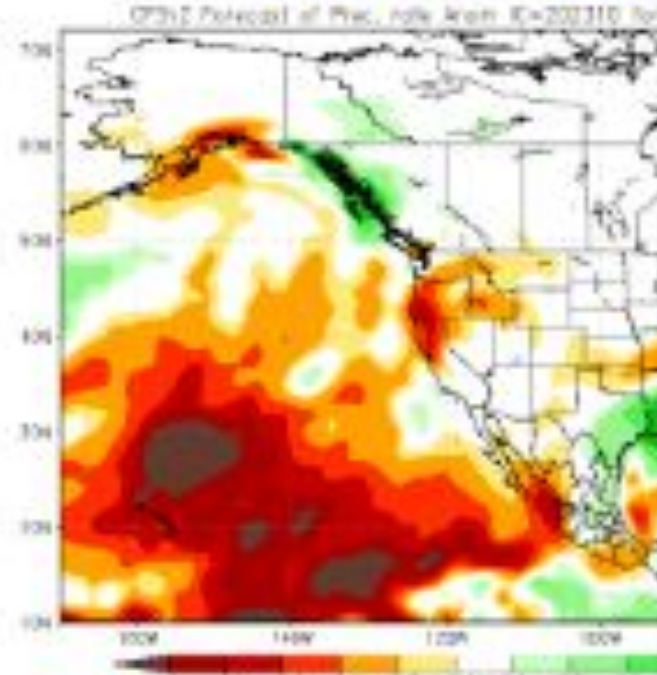
	Reno	Tahoe City	Bishop	Susanville
2018-2019	Very Wet	Very Wet	Very Wet	Very Wet
2009-2010	Slightly Wet	Near Normal	Near Normal	Slightly Dry
2006-2007	Very Dry	Very Dry	Extremely Dry	Very Dry
1976-1977	Very Dry	Extremely Dry	Very Dry	Very Dry
1972-1973	Slightly Wet	Near Normal	Slightly Wet	Near Normal



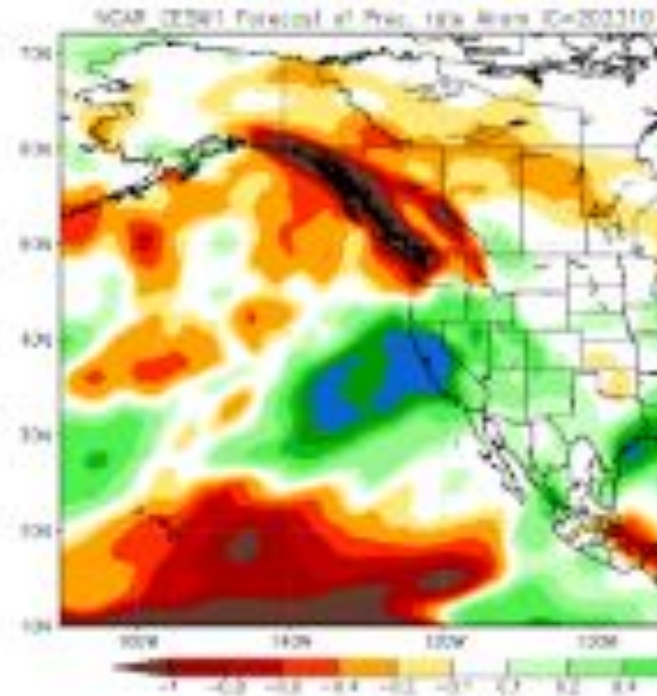
Winter 2023-24: Back to Back Wet Years?

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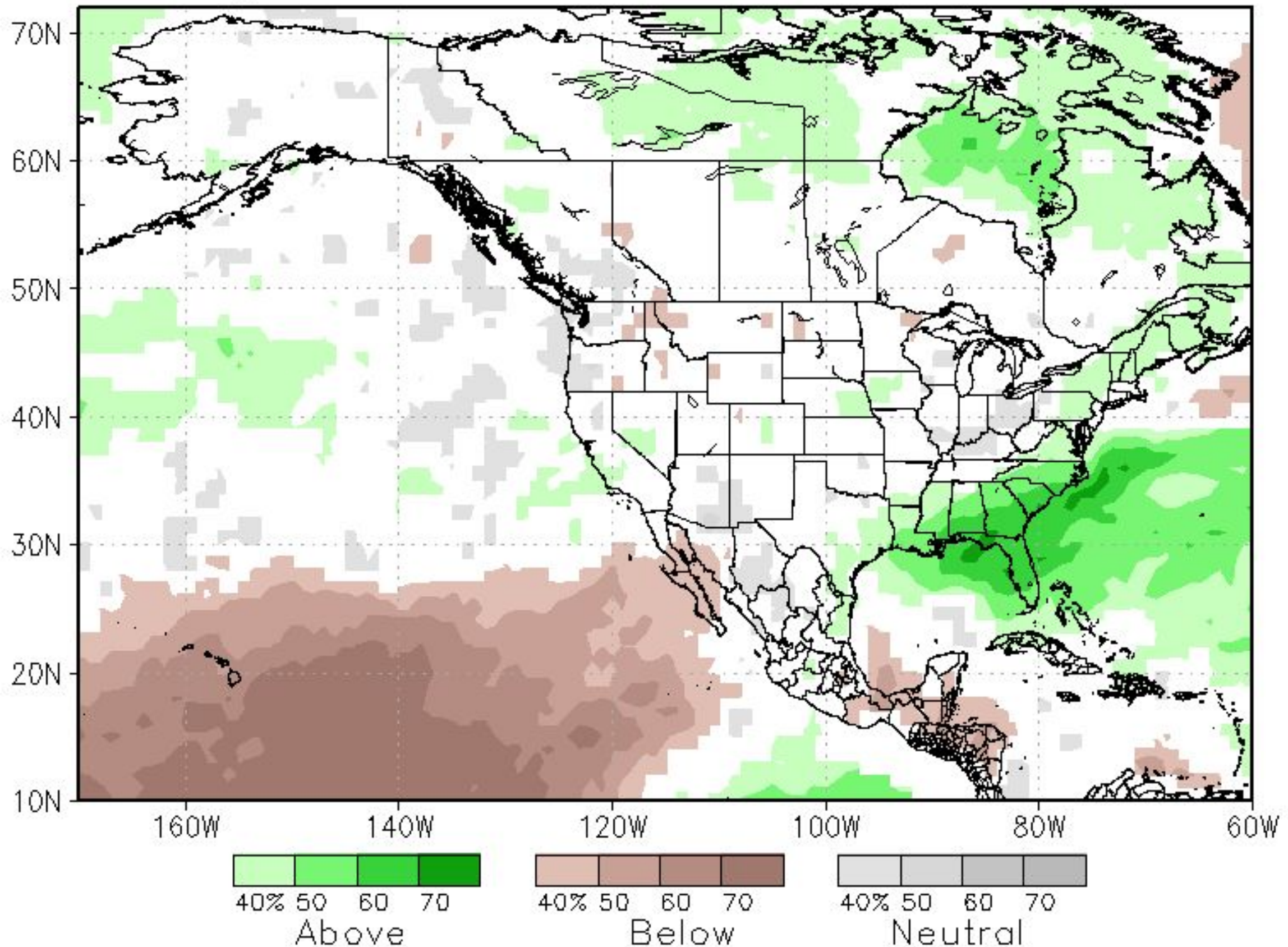
NCEP CFSv2



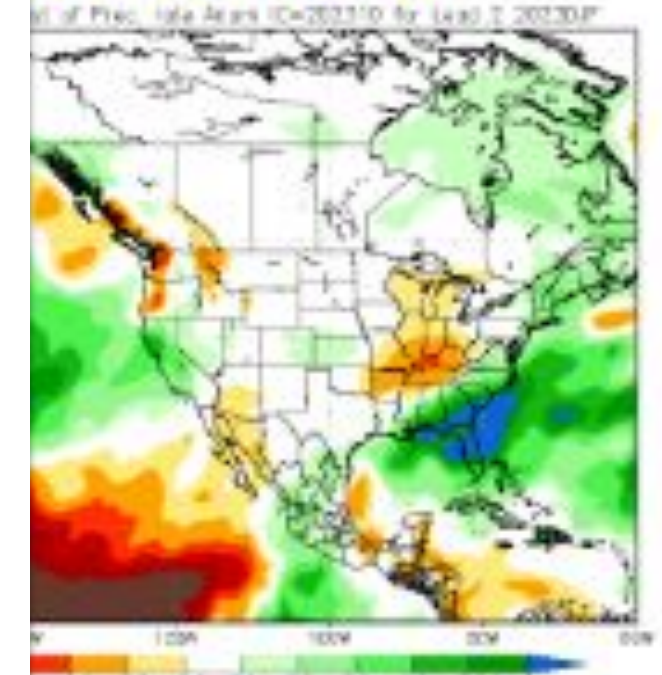
NCAR CESM



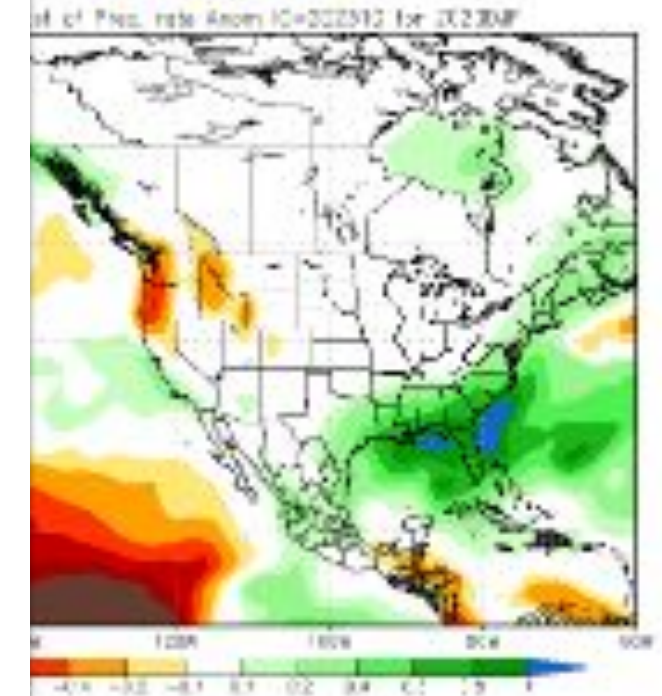
NMME prob fcst Prate IC=202310 for lead 2 2023 DJF



FDL SPEAR



IMME





CPC Outlooks - Near Term

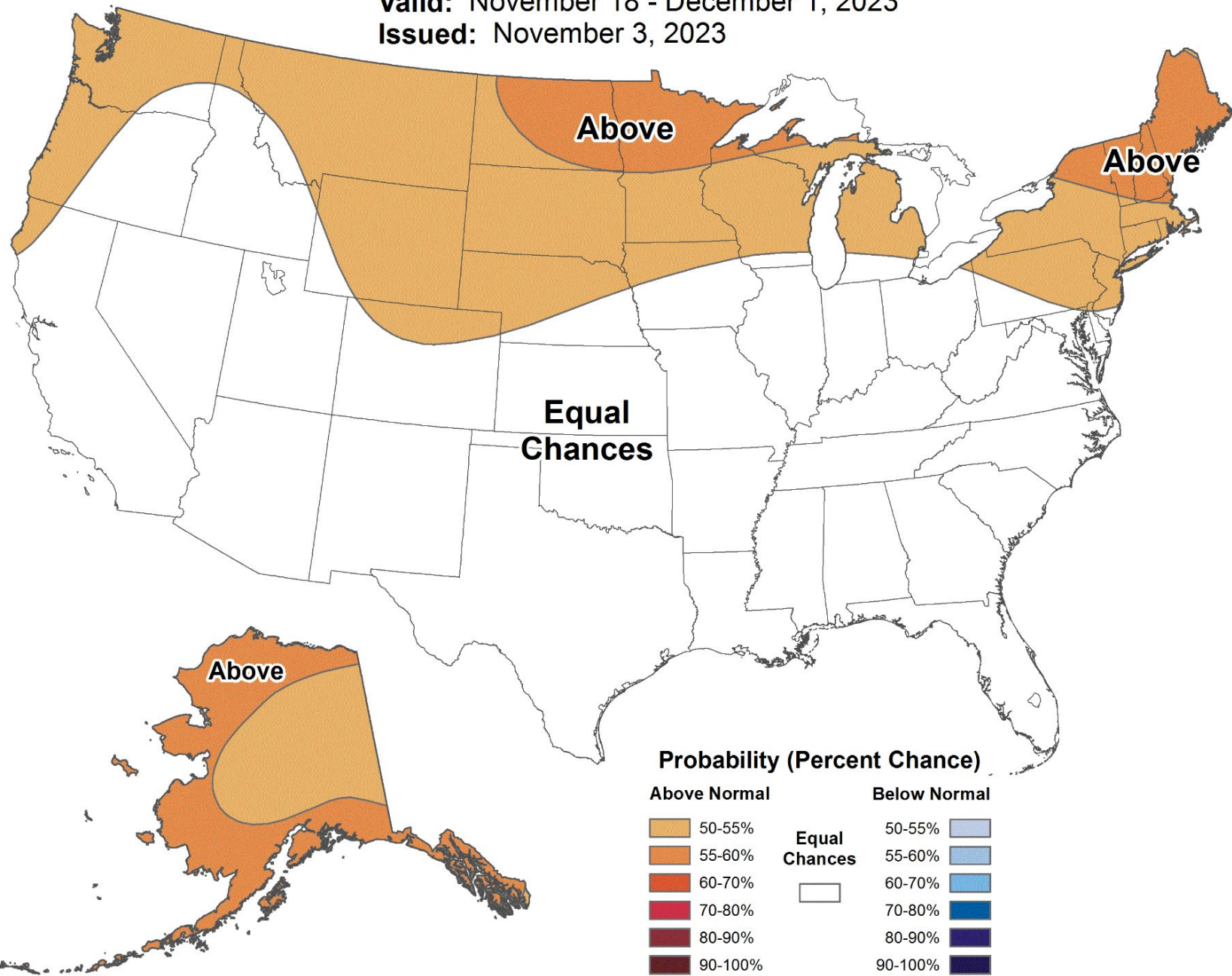
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Weeks 3-4 Temperature Outlook



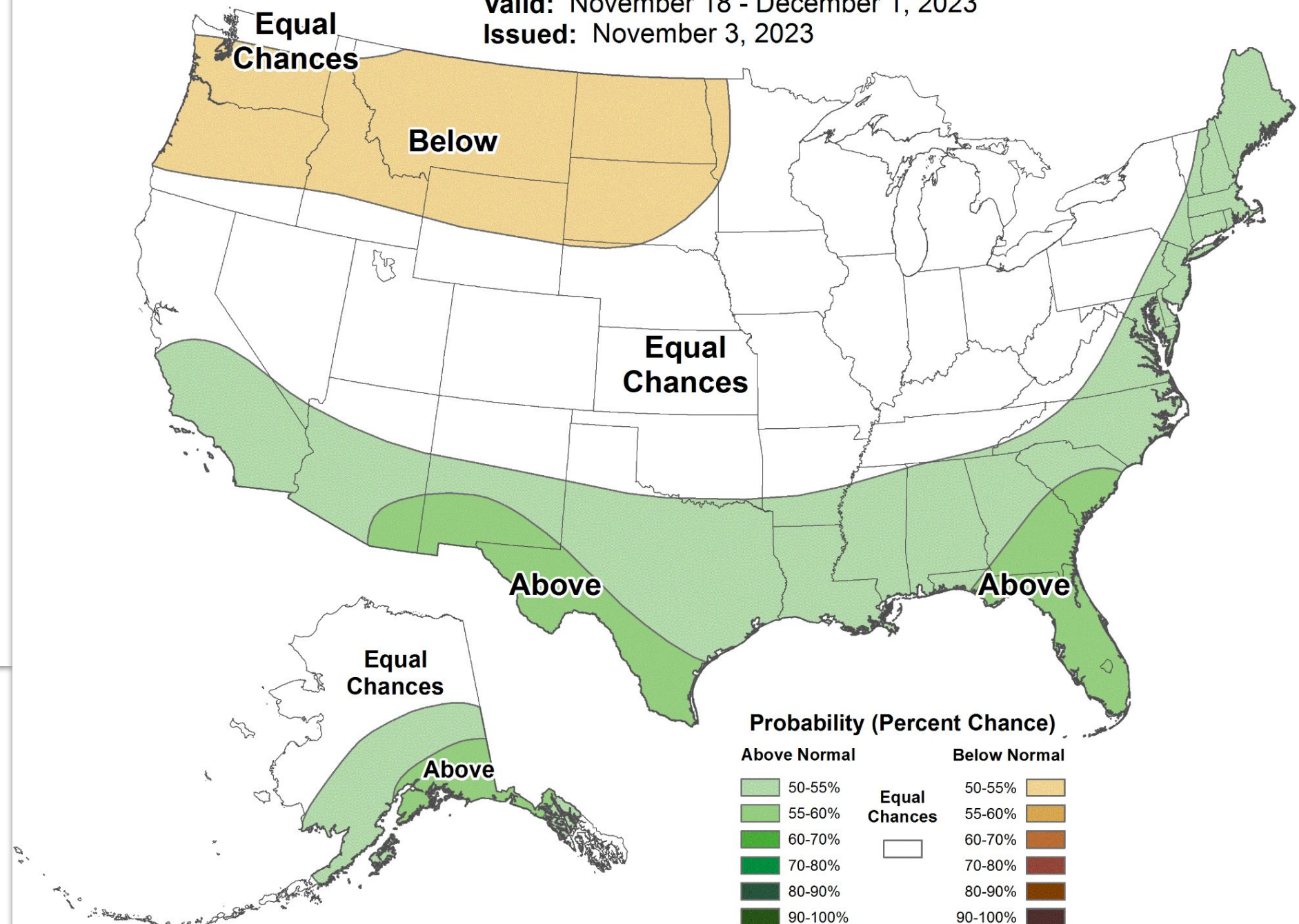
Valid: November 18 - December 1, 2023
Issued: November 3, 2023



Weeks 3-4 Precipitation Outlook



Valid: November 18 - December 1, 2023
Issued: November 3, 2023





Early Winter: November-January

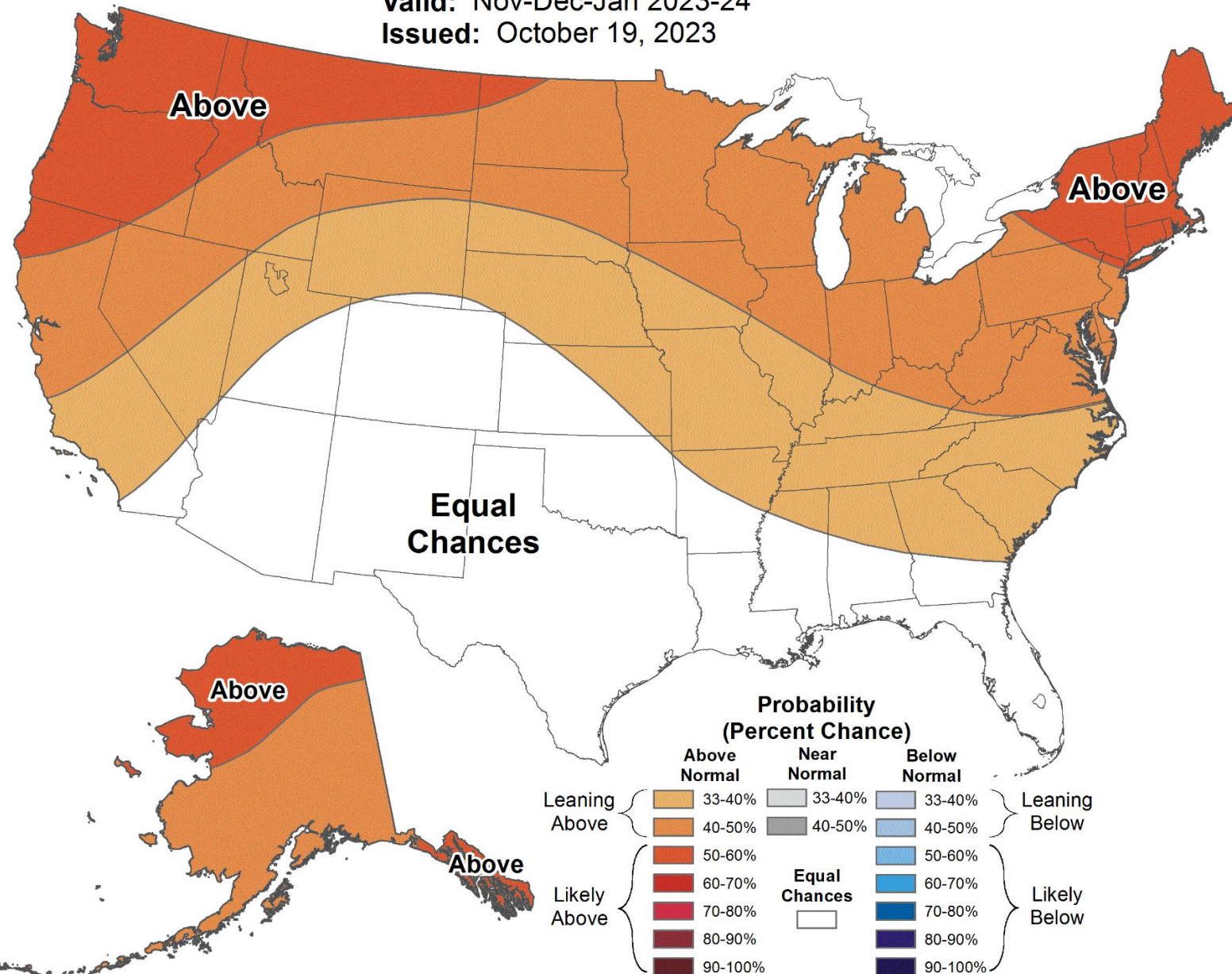
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Seasonal Temperature Outlook



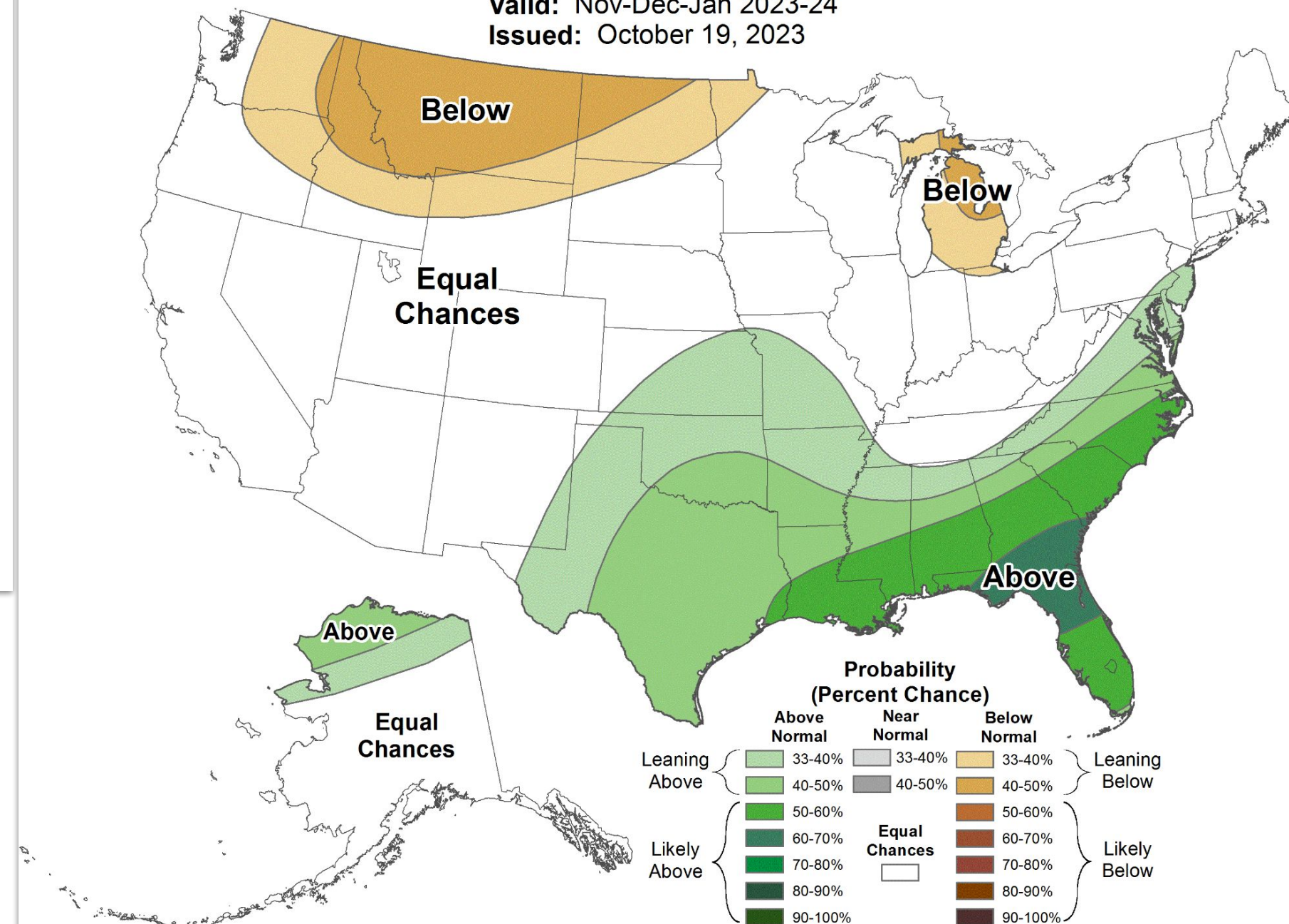
Valid: Nov-Dec-Jan 2023-24
Issued: October 19, 2023



Seasonal Precipitation Outlook



Valid: Nov-Dec-Jan 2023-24
Issued: October 19, 2023





Main Course Outlook: Dec-Jan-Feb

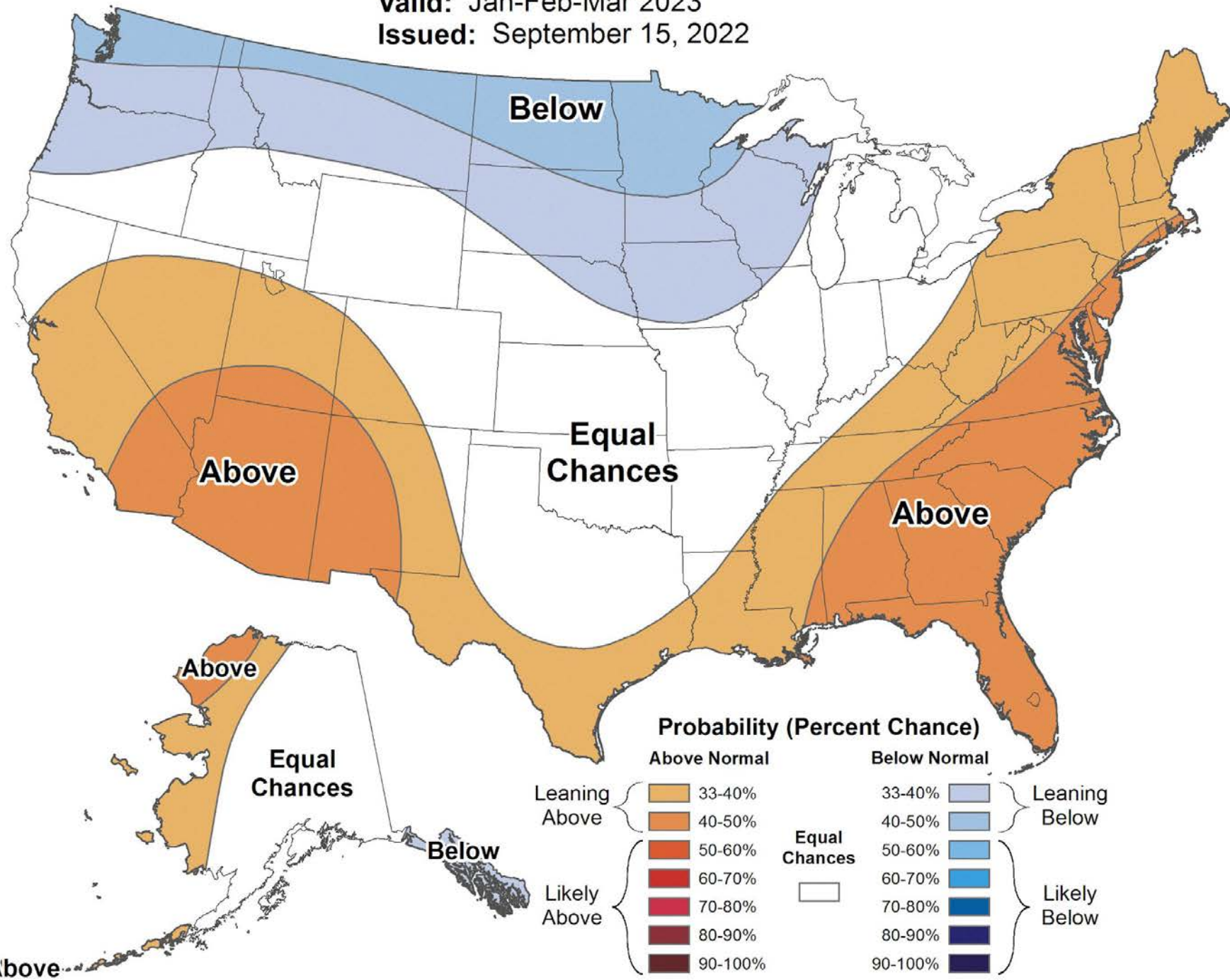
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Seasonal Temperature Outlook



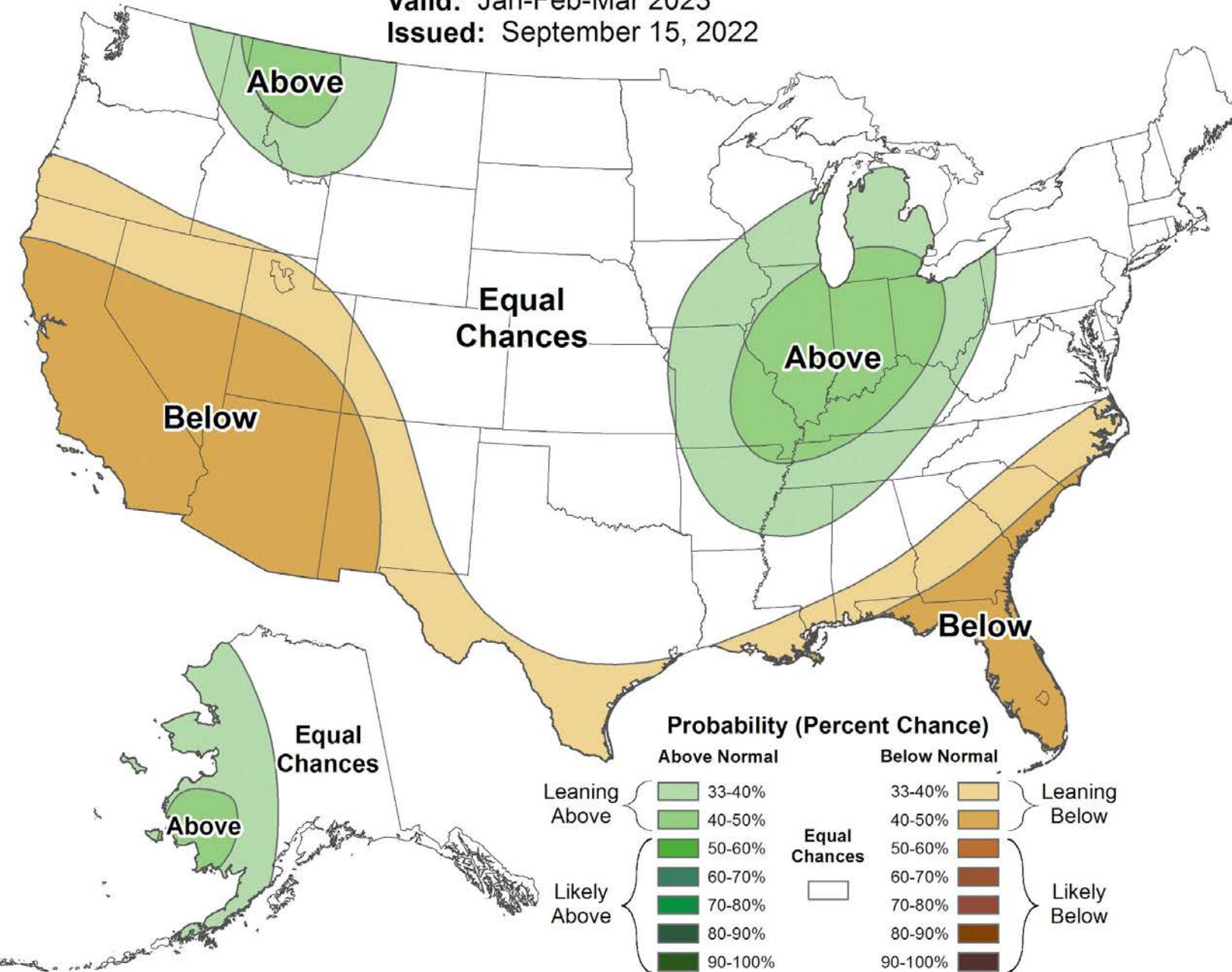
Valid: Jan-Feb-Mar 2023
Issued: September 15, 2022



Seasonal Precipitation Outlook



Valid: Jan-Feb-Mar 2023
Issued: September 15, 2022





So What Does All This Mean??

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- Really, anything remains on the table at this point.
- Same logic applies to snowpack and 2024 water supply.
- We're heading into this winter in a good spot, but if we get into long dry stretches, during the typical wet periods, things may quickly change.
- Flooding not as likely given past history, but you never know...
 - Plus – the ground is wetter and reservoirs are starting fuller
- We can still have: big snow storms, floods, cold spells, inside sliders, and wind storms even in a “drier than normal winter”.
- Large wildfires are not a huge concern at this point given the antecedent conditions, but we have seen grass fires carry recently.

Ultimate value of any weather forecast...

...was it accurate enough to make a good decision



Expectation

Travel over I-80 in a winter storm...what could go wrong?

Incident: 00028 **Type:** Traffic Hazard **Location:** Sr89 / Sage Hen Rd **Loc Desc:** NB JSO **Lat/Lon:** [39.446457 -120.214411](#) Close

Detail Information

11:28 AM	13	[22] [Appended, 11:29:09] [1] EMPLOYEE CALLED TO ADVS JACKKNIFE BIG RIG
11:18 AM	12	[21] 1039 FIVE STAR, WILL 1023 TRUCKEE
11:17 AM	11	[20] WILL TRY TO PLOW/CHAIN GET VEHS GOING
11:17 AM	10	[18] TOW WILL NOT BE ABLE TO ACCESS
11:09 AM	9	[17] 1097, TWO BIG RIGS STUCK
11:03 AM	8	[15] 1039 FIVE STAR HD 530-389-9400
11:03 AM	7	[14] PER KVCT ADVS OTHER SEMIS AND VEHS NOW BACKING UP
11:03 AM	6	[13] PER KVCT ADVS DRIVER IS OUT OF TRUCK W/ FLIP FLOPS REFUSING TO CHAIN UP
11:01 AM	5	[10] 80-25A SEE IF WE HAVE A HD TOW CLOSER
10:57 AM	4	[8] [Rotation Request Comment] 1039 CAL NEVADA TOW 866 359 3725
10:55 AM	3	[7] LL 1185
10:51 AM	2	[2] BLOCKING LANES
10:51 AM	1	[1] 18 WHEELER SEMI AND SLIDING

Unit Information

11:09 AM	2	Unit At Scene
10:55 AM	1	Unit Assigned



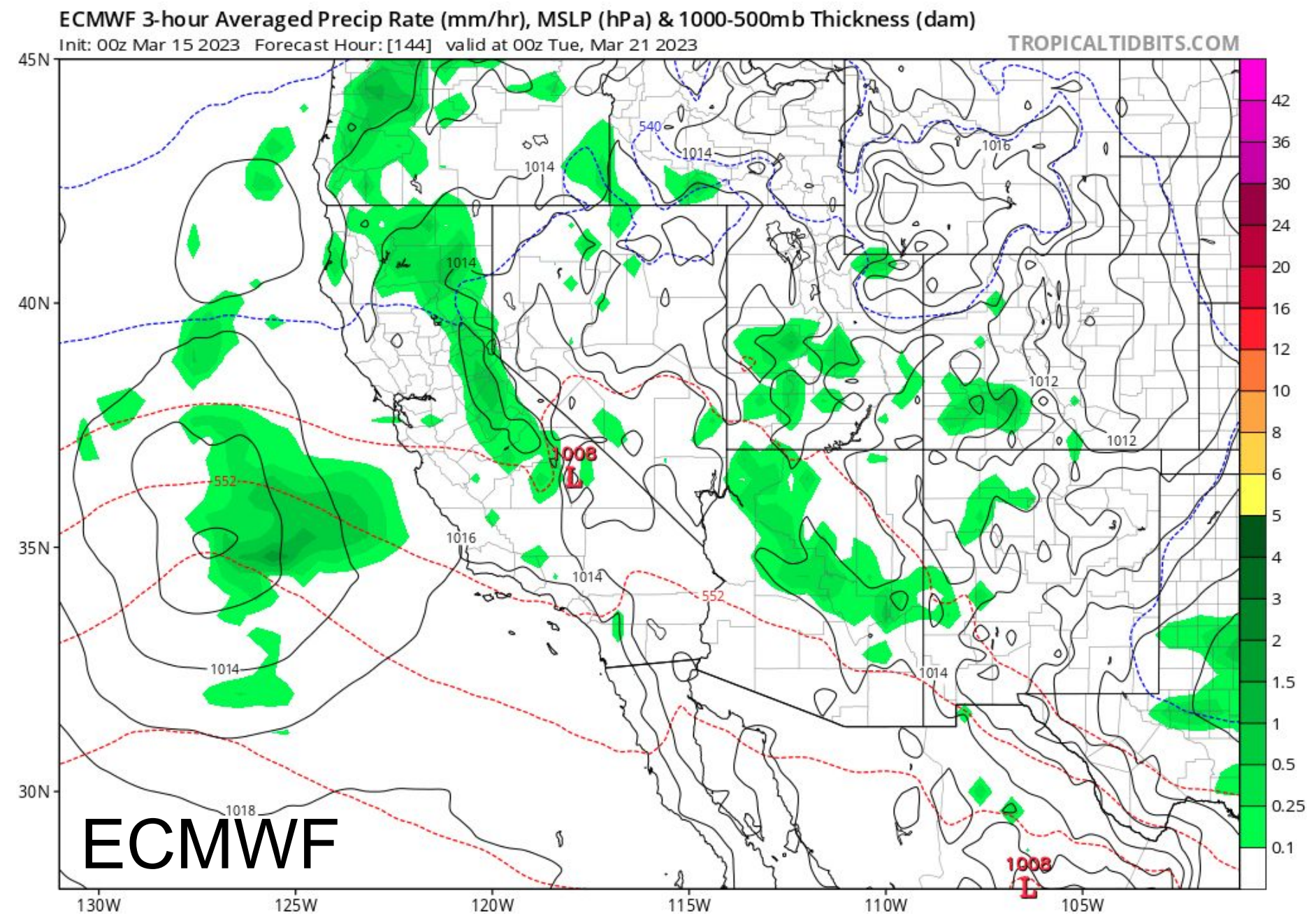
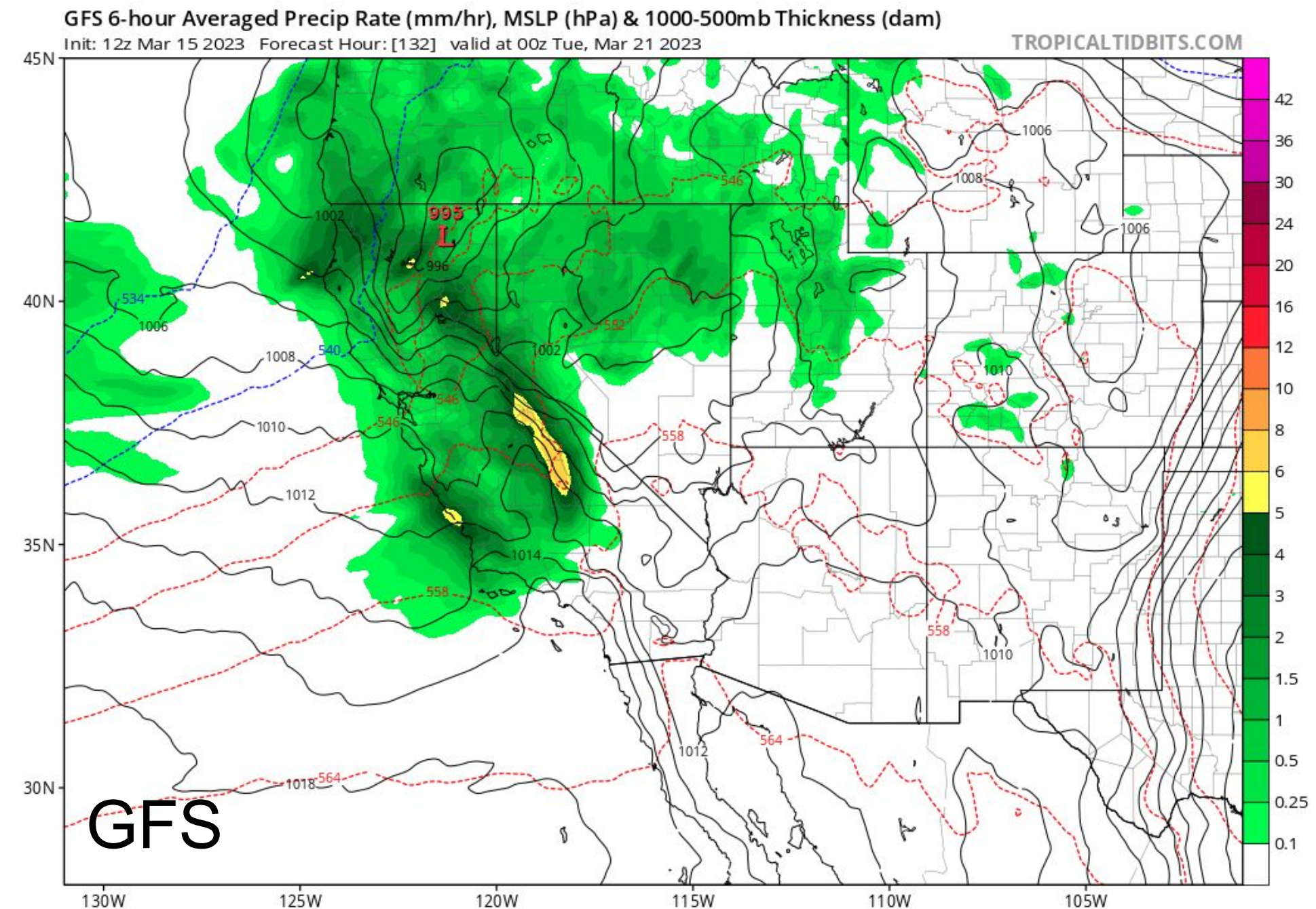
Reality



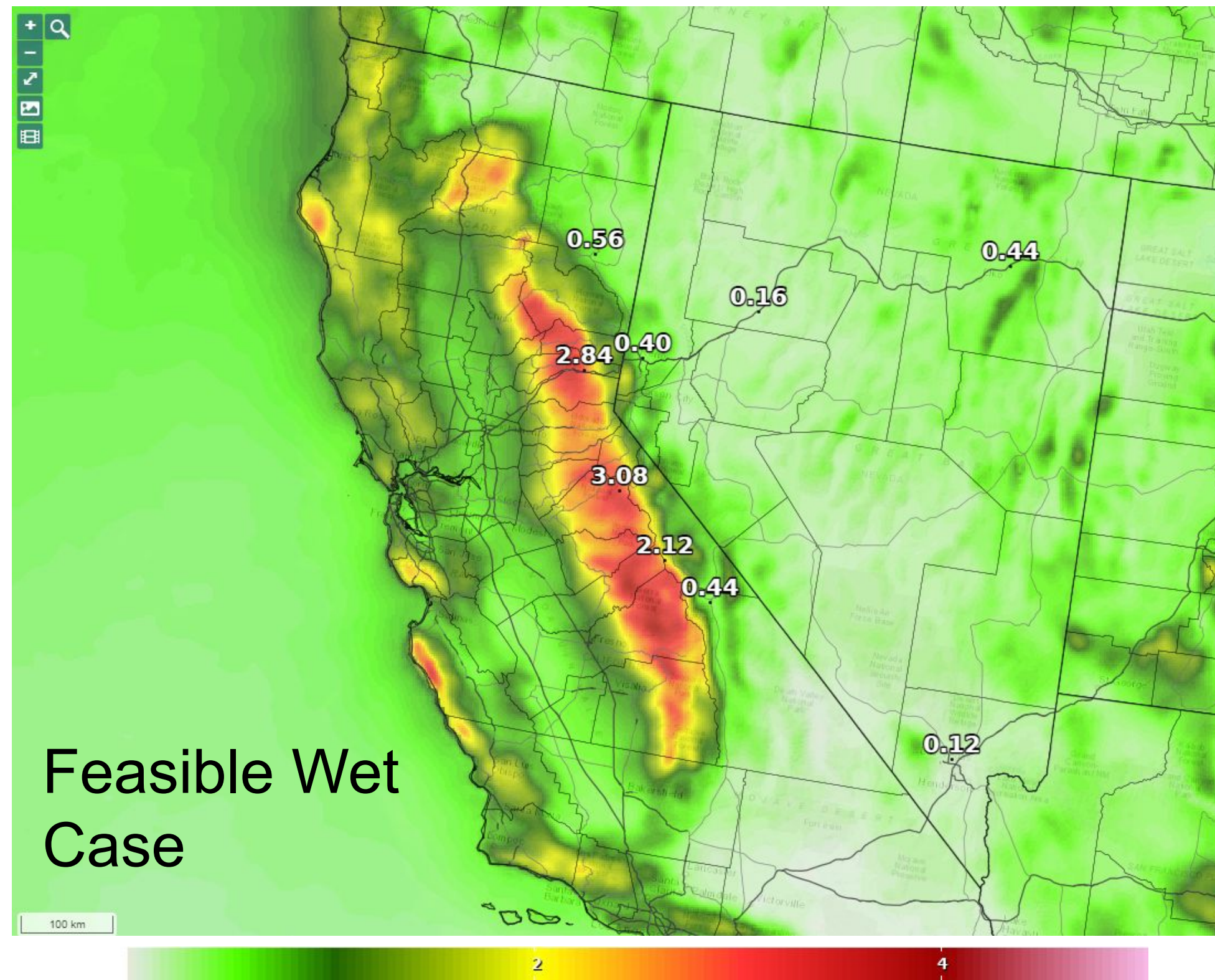
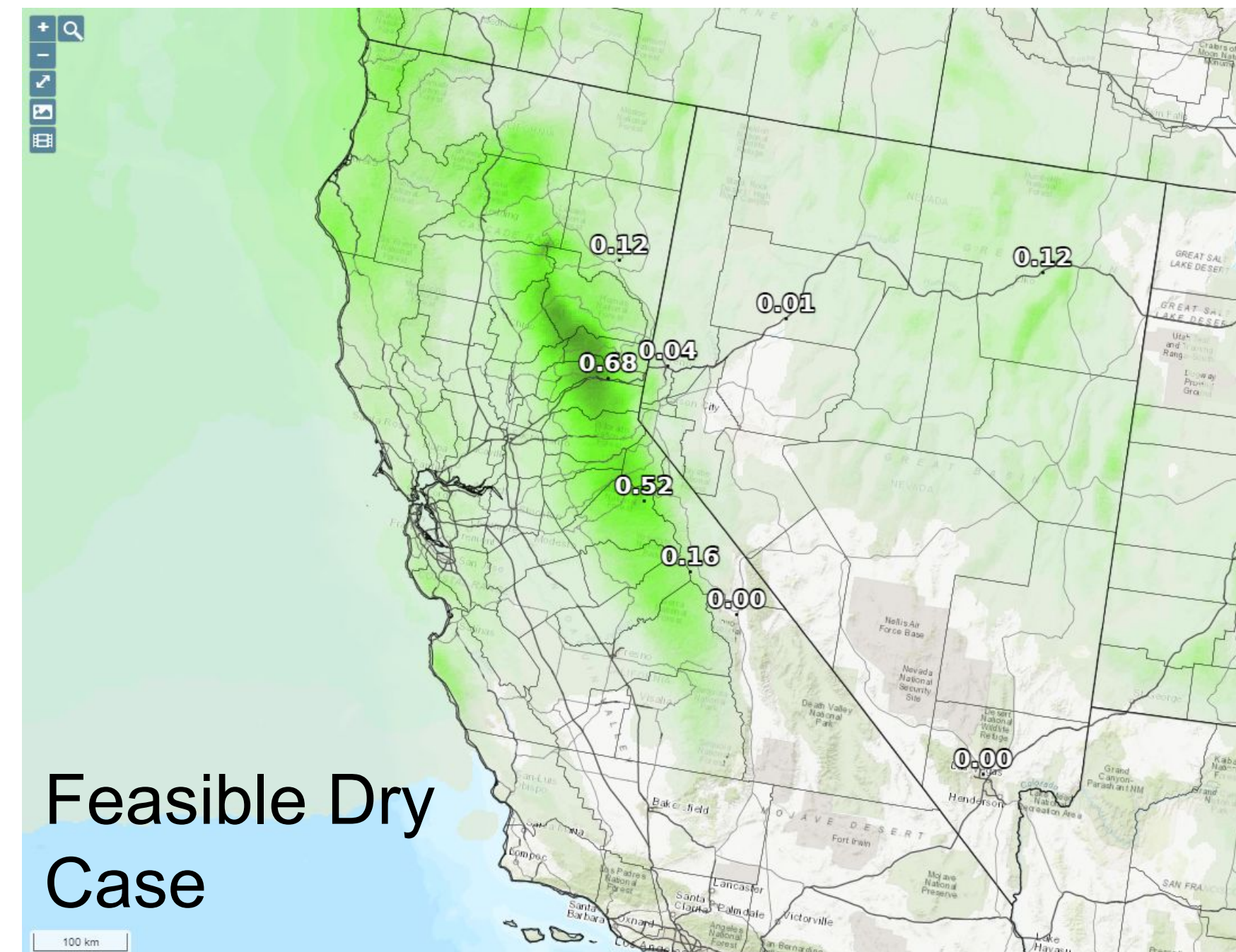
Changing How We Think About Forecasts

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OLD WAY: GFS versus the European.
Who knows which is right? Maybe I
should just go with "my gut" ...



NEW WAY: All the models - blended together. Calibrated scenarios and threshold probabilities of impactful weather.



Scenarios

“Most Likely” vs “Worst Case”
Being Prepared.

Confidence

Forecaster experience & what the models say.
High vs low confidence = different decisions.



Probabilities

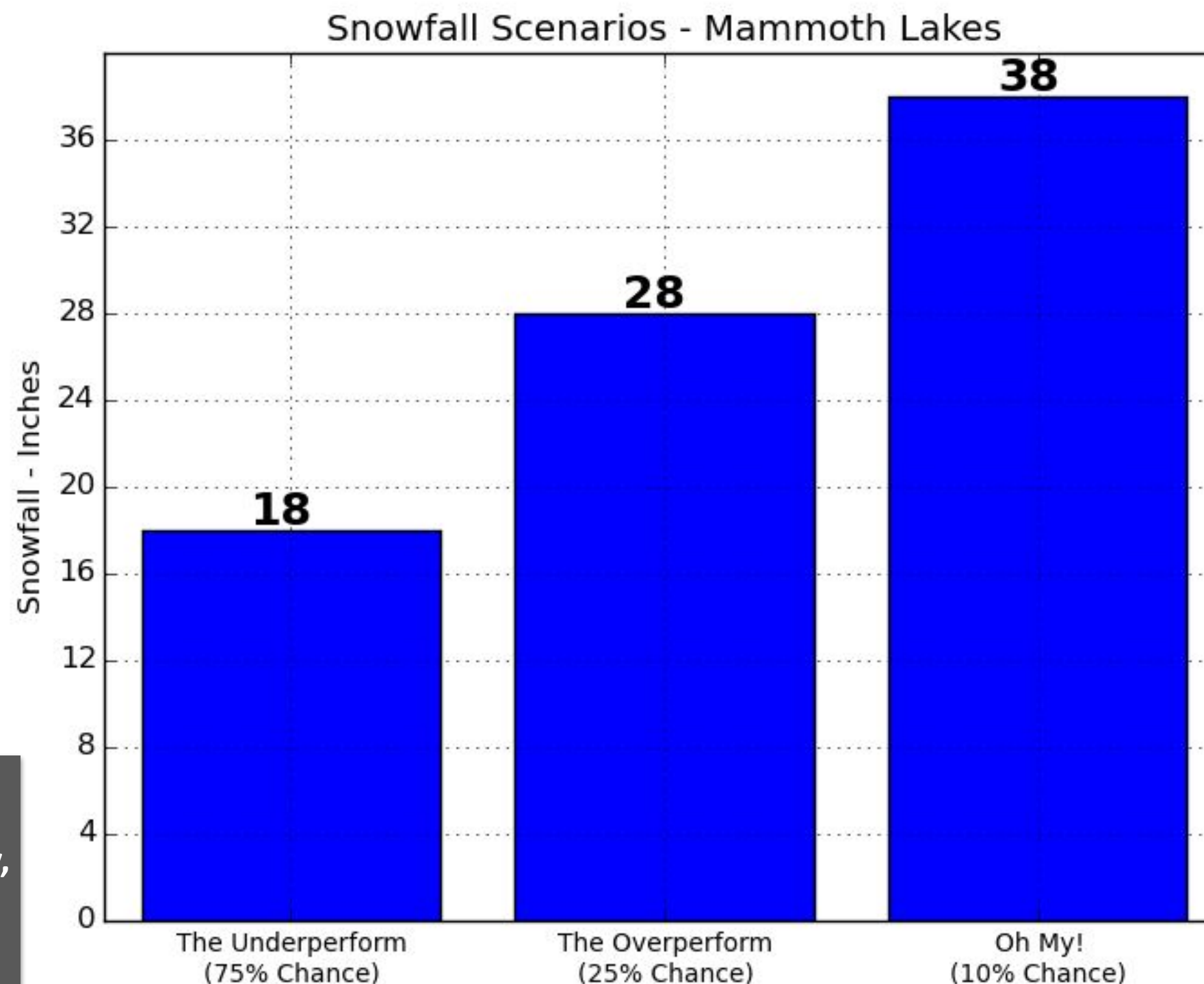
What weather is important to you and how likely is that to happen?

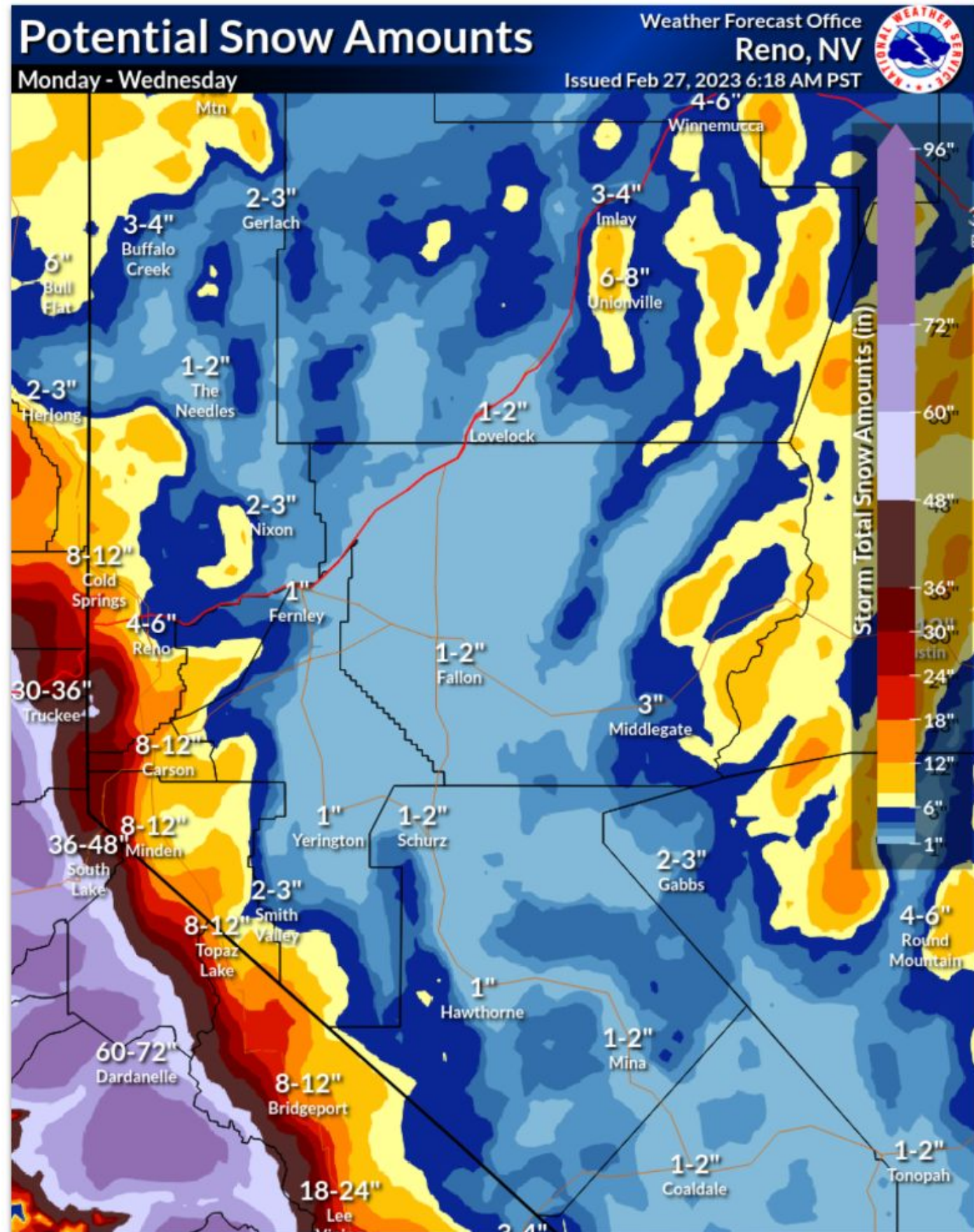


Scenarios

“Most Likely” vs “Worst Case”
Being Prepared.

For each snowfall, a percent chance of exceeding those values is noted. Typically, the official or most-likely forecast will fall in between the under- and over-perform scenarios.

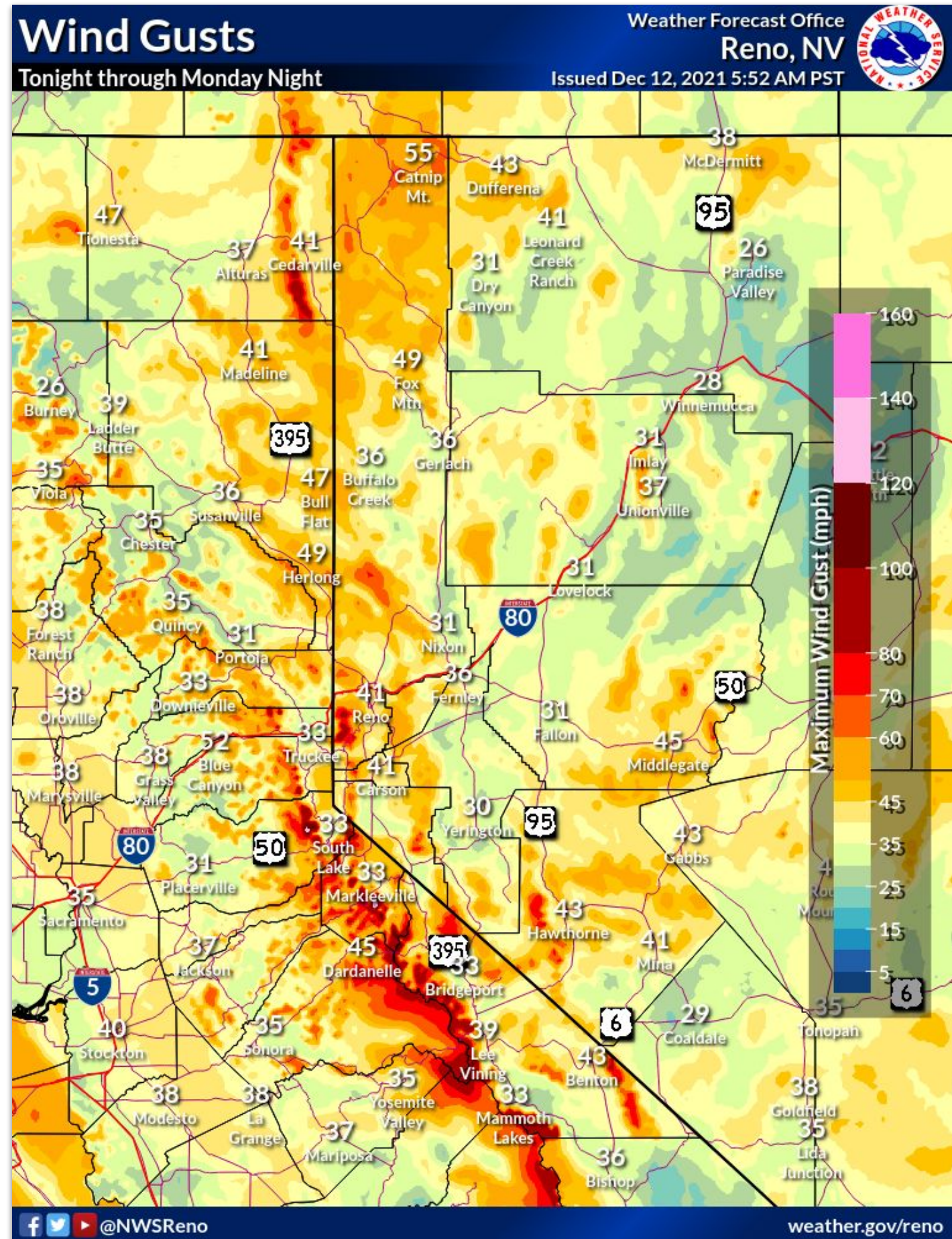




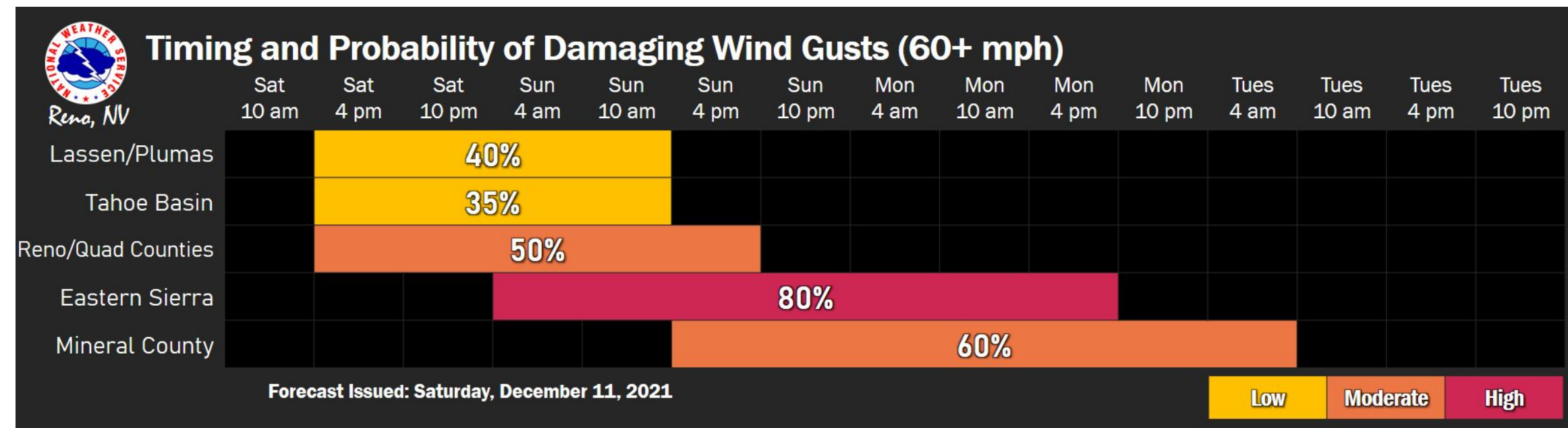
The more impactful storm will bring low elevation snowfall and strong winds Monday into Tuesday for western NV.

Commute headaches are a possibility down here.

The main period for snow for western Nevada will be Monday afternoon through Tuesday morning.



Bridging the deterministic “one number” forecast with the probabilistic forecast.



Probabilities

What weather is important to you and how likely is that to happen?

7-14 Days

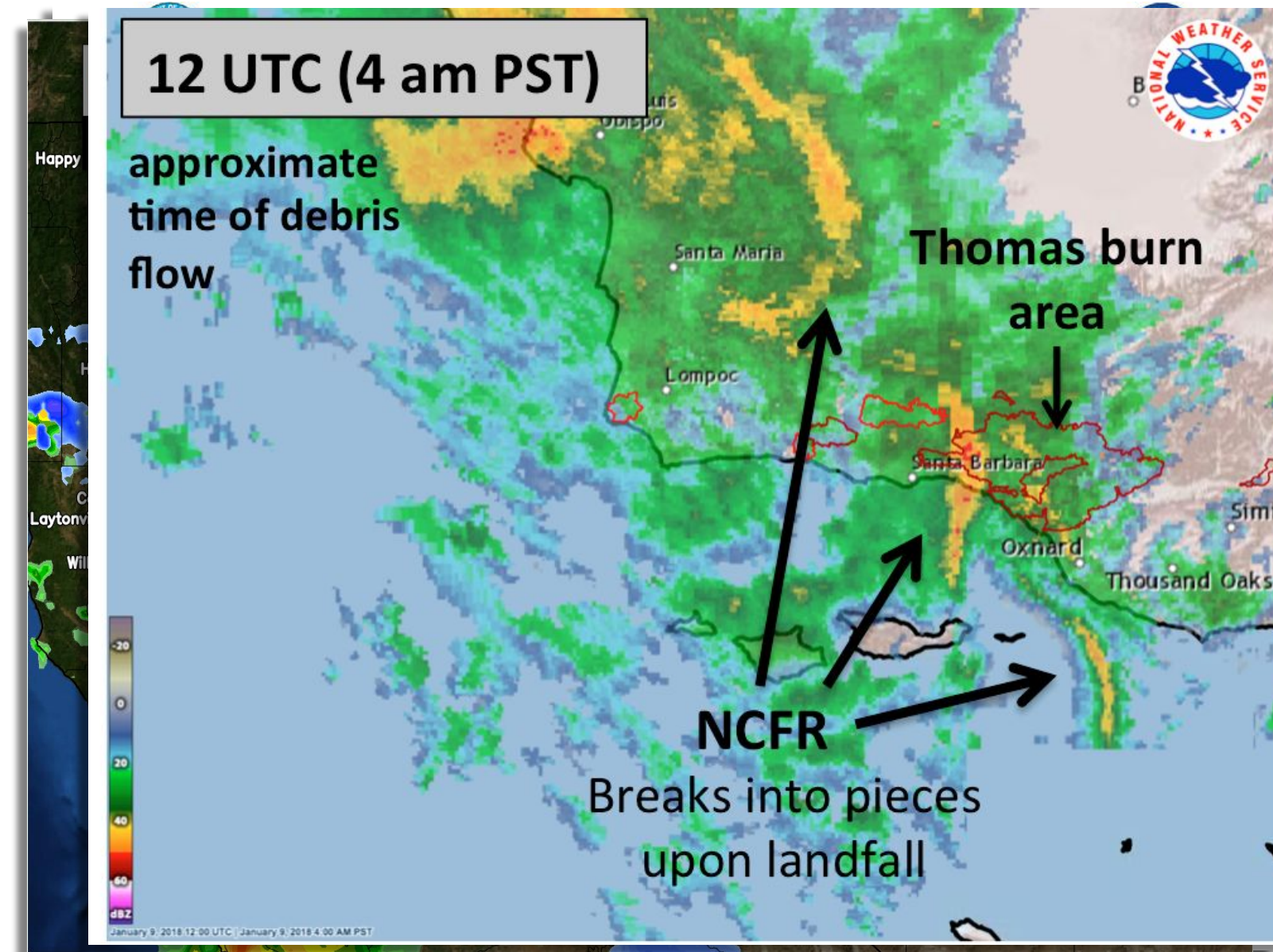
Broad trends: wetter vs drier, heavily probabilistic outlooks (e.g. lean wet).

2-5 Days

What kind of storm: flood vs blizzard vs high wind scenarios become clearer.

6-24 Hours

Small scale but high impact features: rapid snow level drops, inside sliders, cold frontal squall lines.



WATCH VS WARNING

WATCH: We have the ingredients to make tacos.

WARNING: We're having tacos. RIGHT NOW!



TACO WATCH



TACO WARNING

WWW

Watch, W
associate

Idea
Note:
much

Confidence

1 Month

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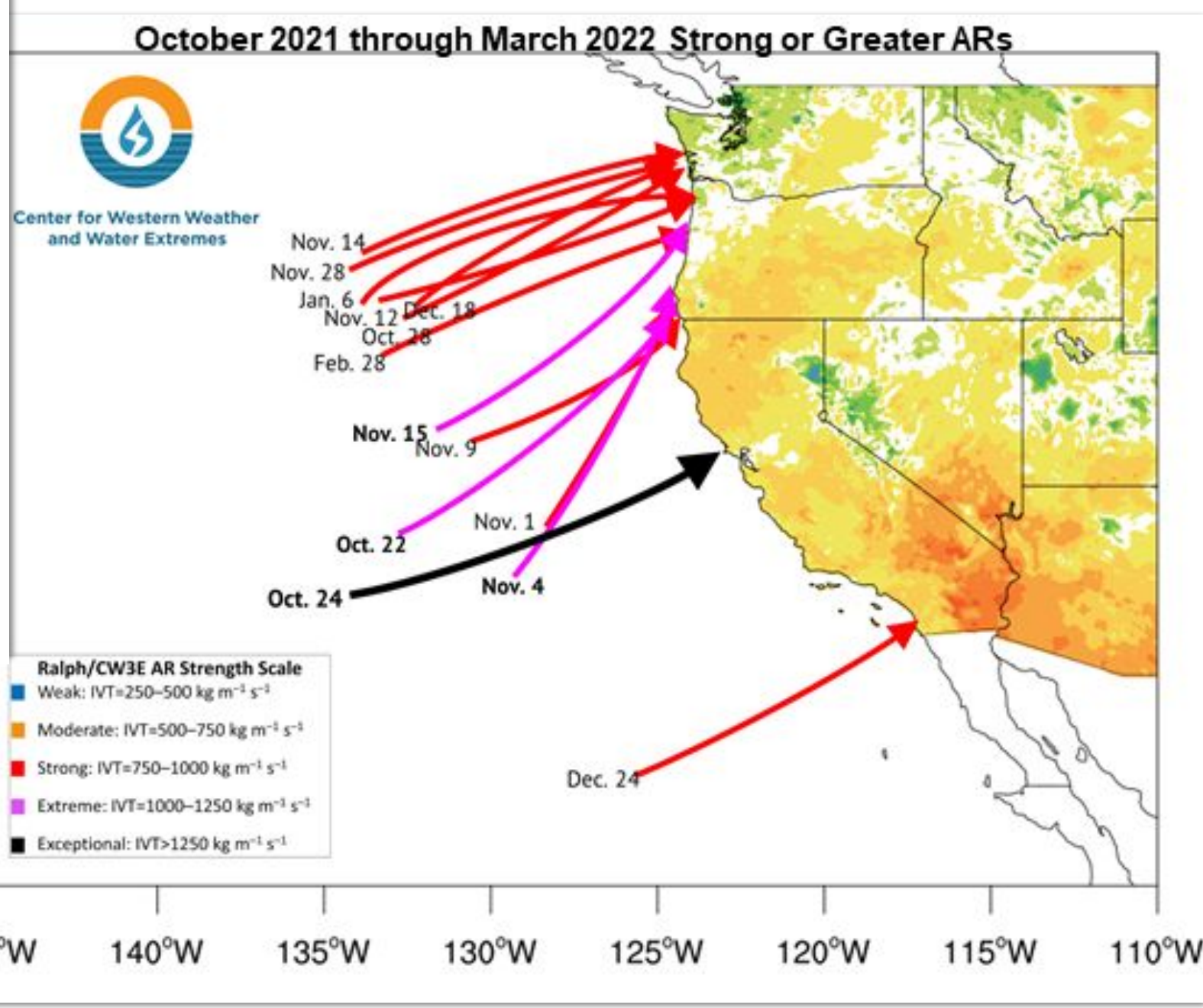
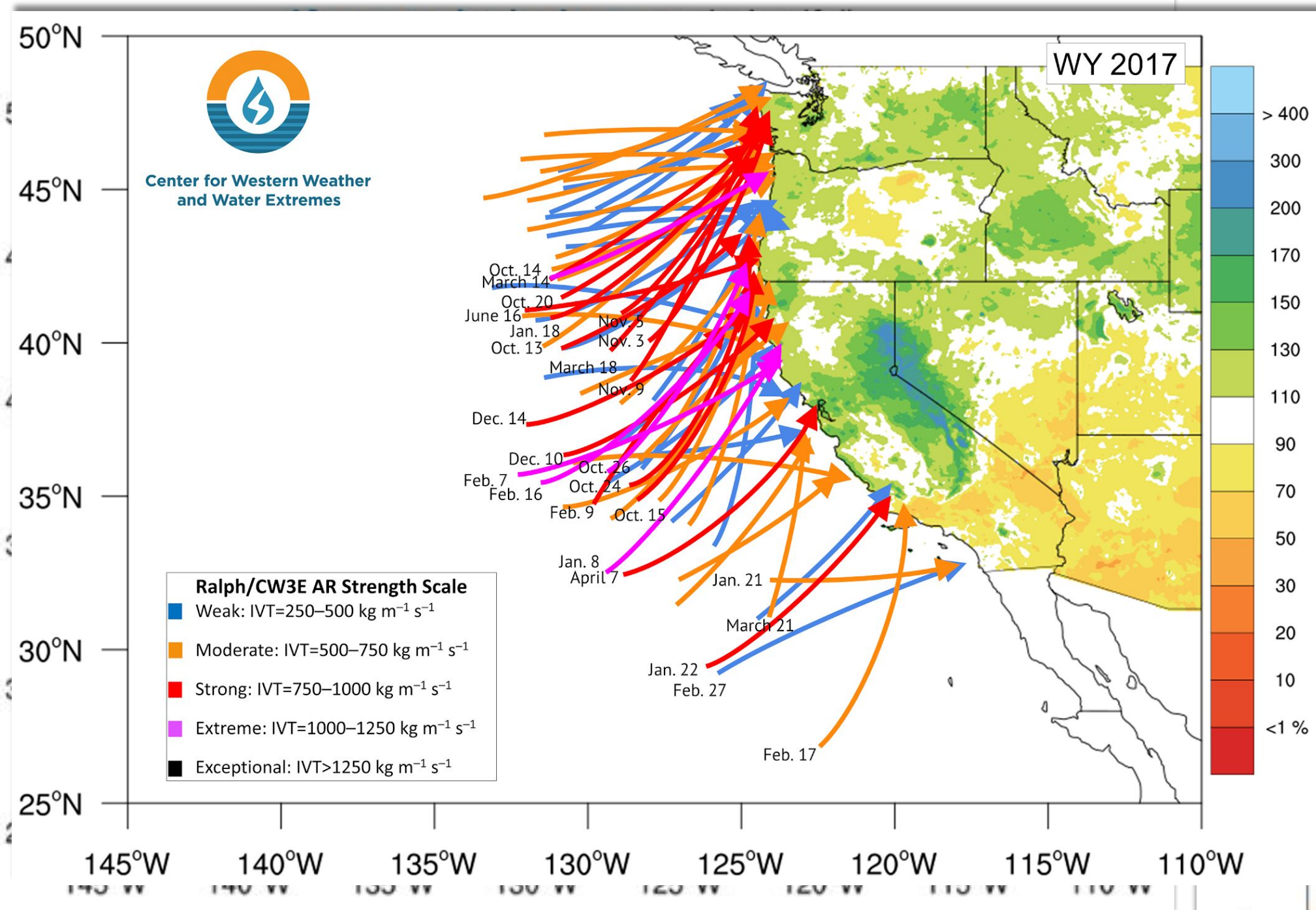
January 2017 – Sparks PD



Truckee CHP



- Giant plumes of moisture crossing the Pacific Ocean. Can usually see these coming 5+ days in advance at a broad scale.
- Most AR's are beneficial - 50% or more of annual precip, snowpack come from just a handful of these events.
- Strong or extreme AR's = hazardous snow, wind, and/or flooding. Often from stalling ARs.
- Rain - snow line elevations are critical but often a source of the largest forecast errors.
- Climate change trends - increased risk of more extreme ARs with heavier precipitation including spillover east of the Sierra.

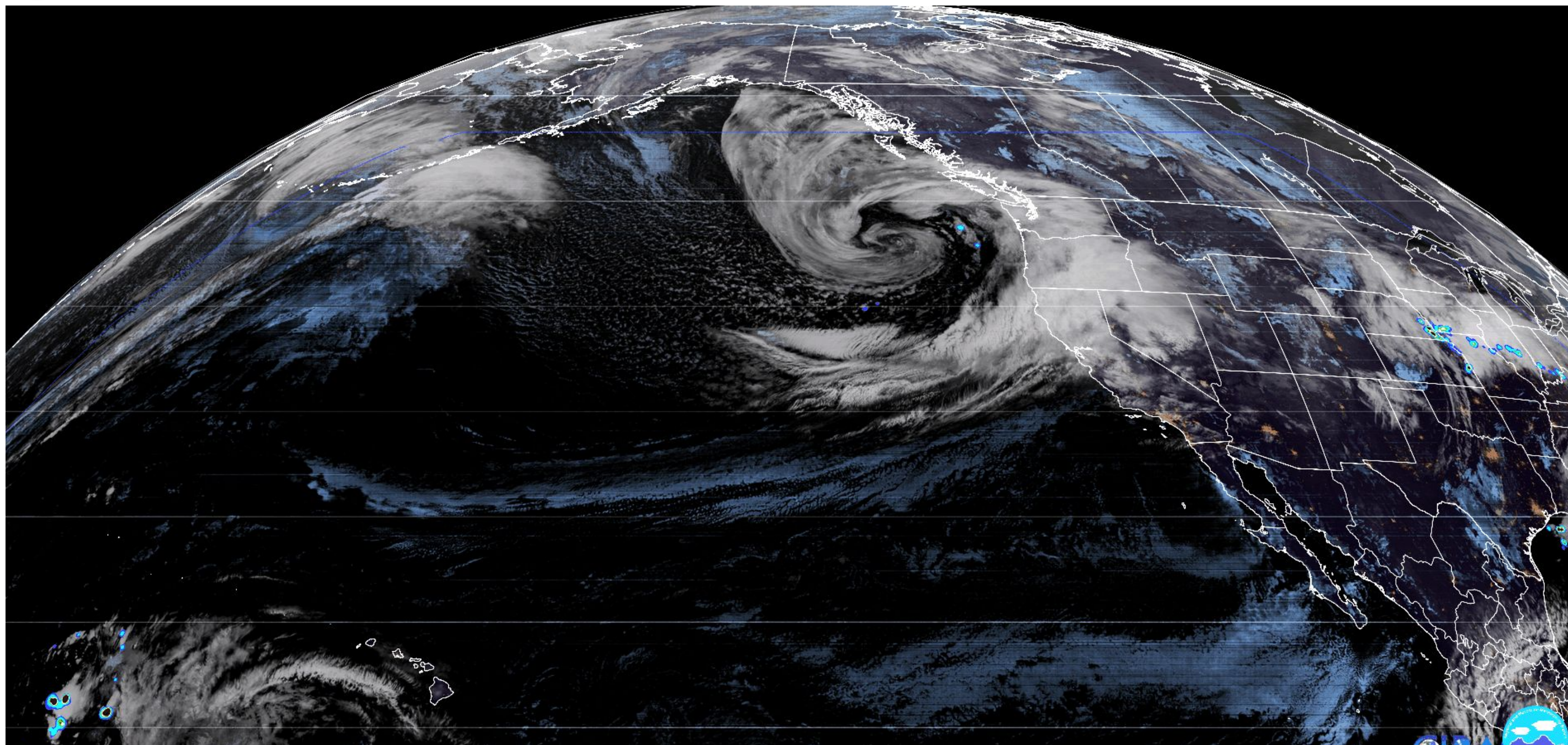


Winter of 2022-23
versus the much drier
winter of 2021-22.



Oct 2021 Atmospheric River - The New Norm?

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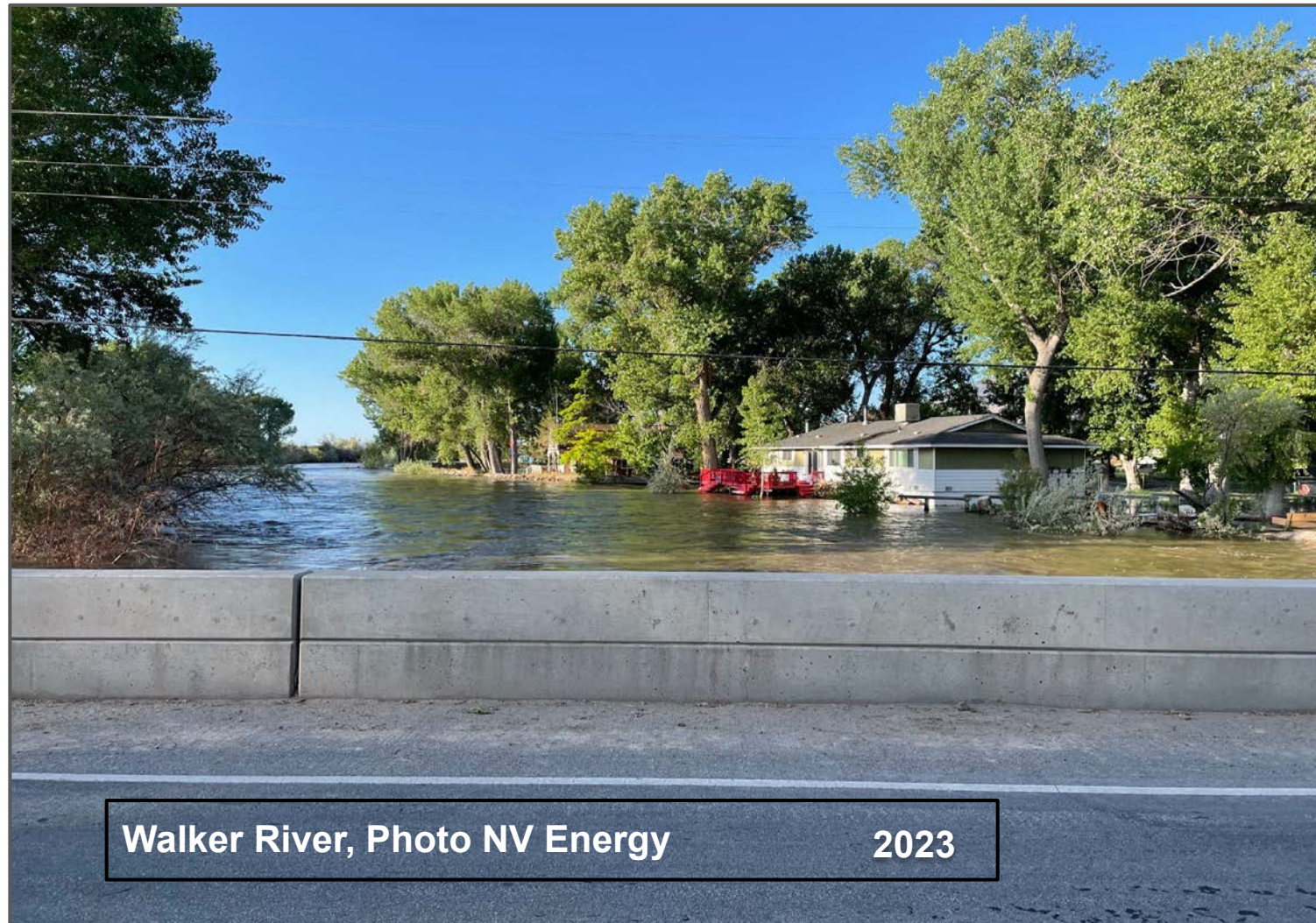


Strongest October atmospheric river to make landfall the last 40 years.

Rain shadow non-existent. Reno 3" of rain in 2 days is 40% of annual average.

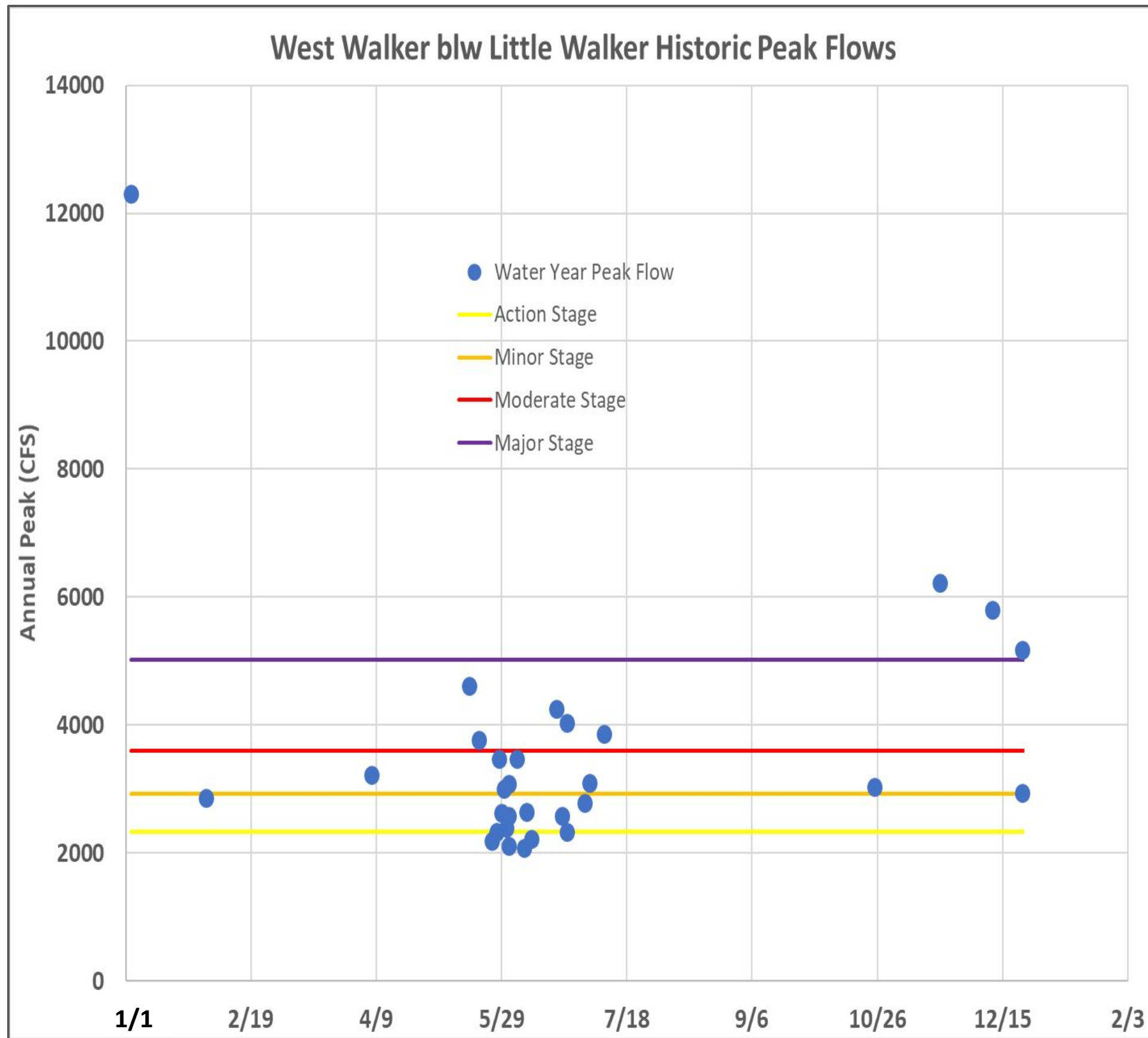
10-15" rain in Sierra caused near-flood spikes in rivers, even with parched ground.

We are SO LUCKY this storm didn't hit in January with snowpack and cold ground.



Both the Carson and Walker Rivers can have impacts from snowmelt flooding on the order of days and even weeks on end. Truckee is more regulated with plenty of storage, lesser risk.

The Carson and Truckee Basins tend to be more responsive to rapid rises with atmospheric rivers.



Southern Cal Edison and LA Department of Water and Power have some flood control storage for Mono Co Streams - reservoirs, pipelines, etc.

Not primary focus of their infrastructure.



Lower Rock Creek Road - Round Valley area. Photo: Inyo Co

Gusts of 199 mph at Ward Mt., 193 mph at Squaw Peak (Sierra Crest) February 20, 2017 at 11:00 pm PST

- ## Downslope
- Mountain wave (jump)
 - Most typical fall low level jet structure
 - Gusts typically
 - Strongest along
 - Maximized adjacent to

Wind Storms

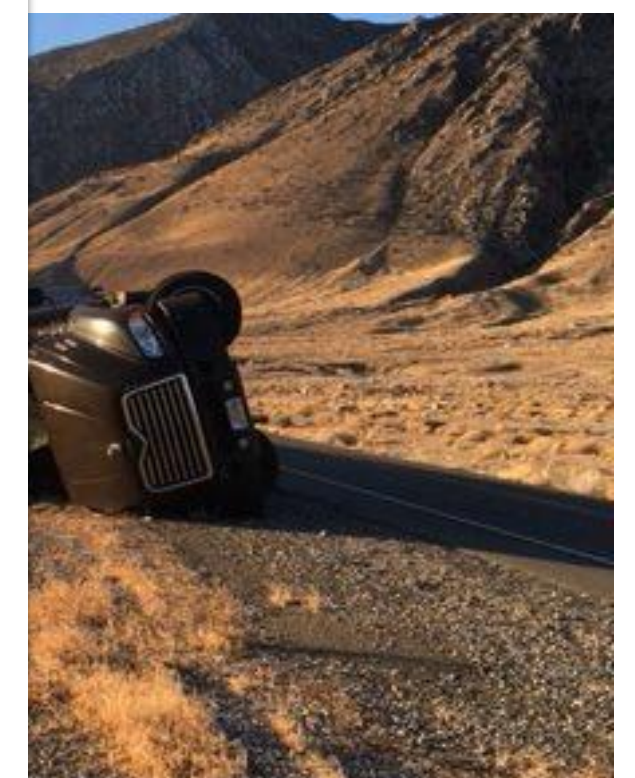
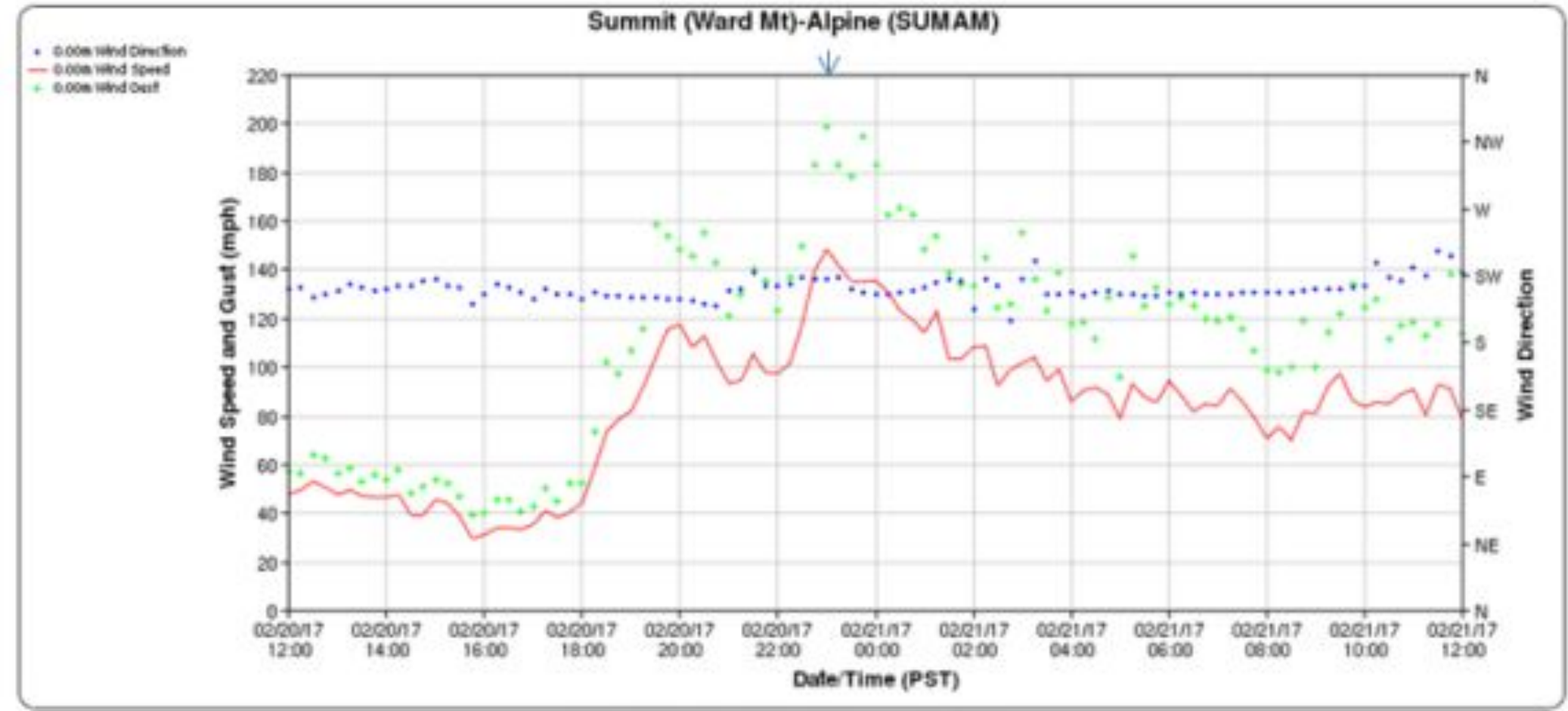
...e/temperature

...g/fall (transition

...mph valleys

...eds between wind

...ions.





East Wind Events

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Reno, NV
Tuesday, November 7



Kirkwood Feb 9, 2020

Science + History

Dec. 1st, 2011 Northeast Wind Event: Devil's Postpile Tree Blowdown

This was an unusually strong northeast wind event that mostly affected Tahoe and Mono County. Devil's Postpile National Monument had a huge blowdown, and there were numerous trees down in South Lake Tahoe.

Past Easterly Wind Events on Mammoth Mountain Summit

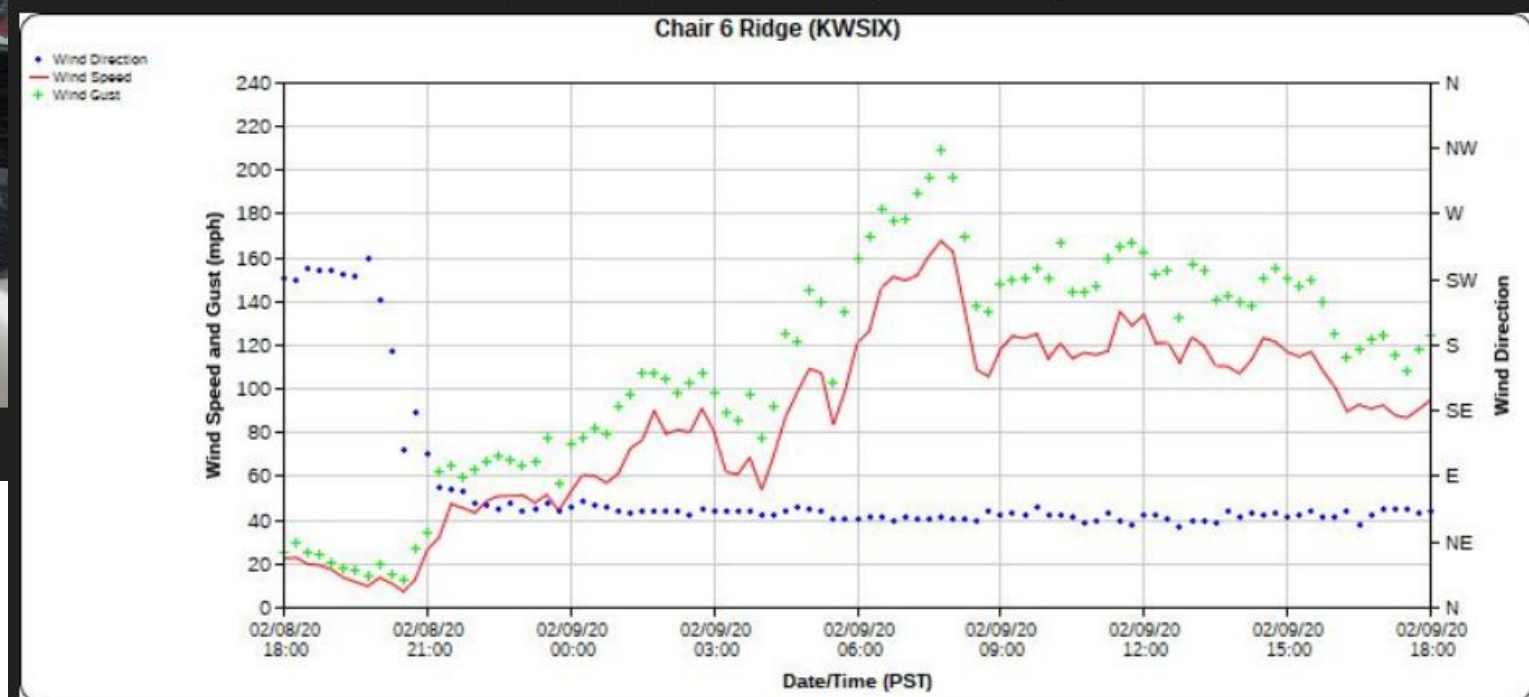
Date	Sustained Wind	Wind Gust
Dec 1, 2011	150 mph	150 mph*
Dec 11, 2007	102 mph	127 mph
Nov 21, 2004	70 mph	120 mph
Oct 28, 2009	92 mph	120 mph
Jan 5, 2007	90 mph	112 mph
Nov 29, 2004	87 mph	110 mph
Oct 13, 2008	90 mph	105 mph

** Equipment at the time was capped at 150 mph. Gusts were estimated at 150-200 mph during this event.*

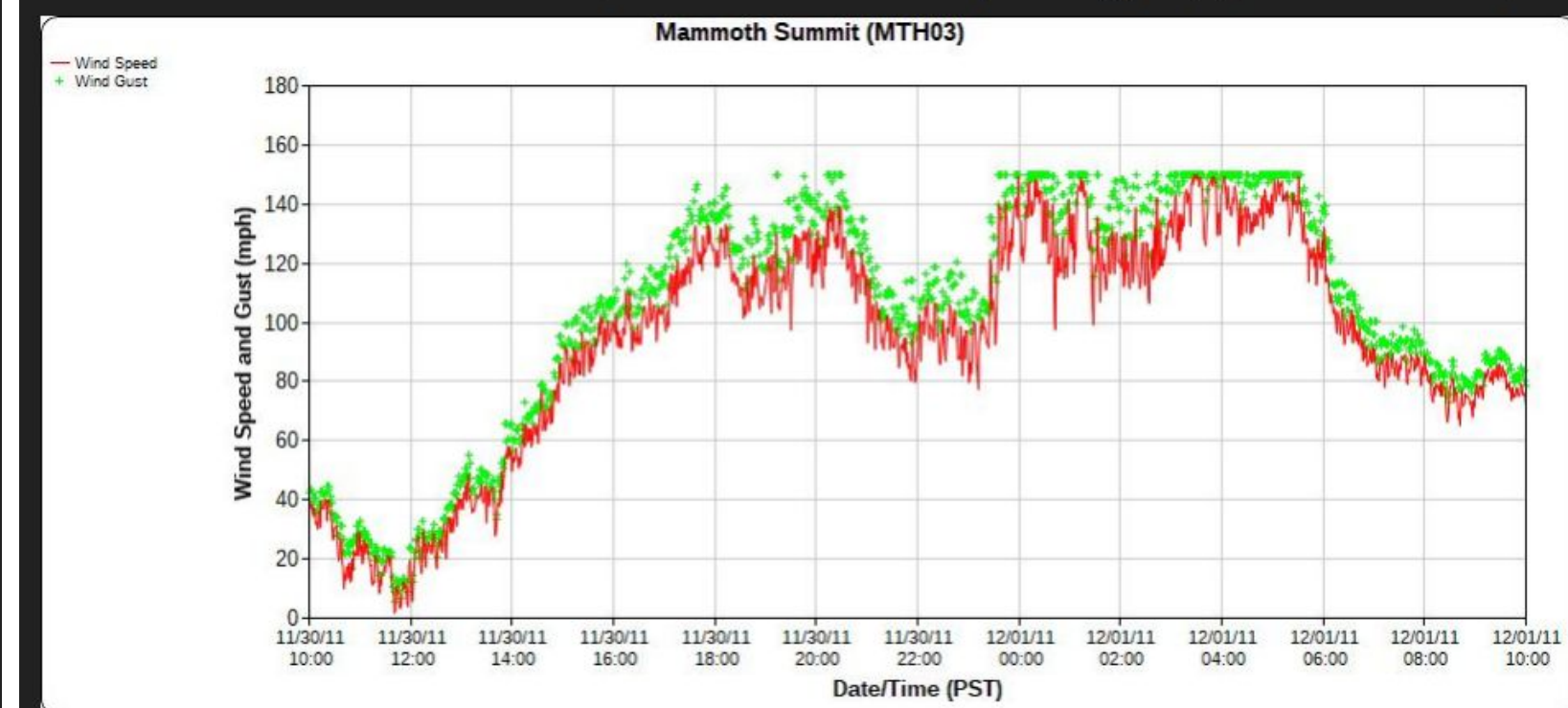


Pictures from Kirkwood

Kirkwood 209 mph (unverified) wind gust



Mammoth Mtn Dec 1, 2011 - Wind reporting capped at 150 mph



Crippling Snow Storm, not over yet

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Biggest snowstorm to hit the Sierra in 6 years has crippled the region.

	Prelim
Mammoth -	24 hr =
Kirkwood -	24 hr =
Squaw Valley -	24 hr =
Sugar Bowl -	24 hr =



Due to the pow
storm re



Reno
Forec



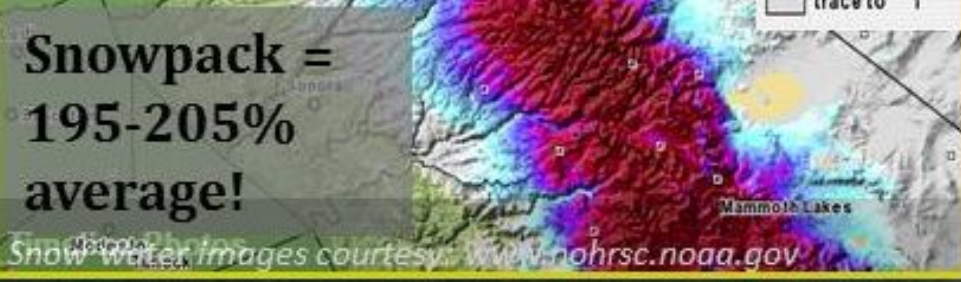
- 9-15+ feet
- 2-5 feet (6-8 feet west shore)
- 2+ feet
- 1-4 feet



Photo:
Former NWS
Reno
employee

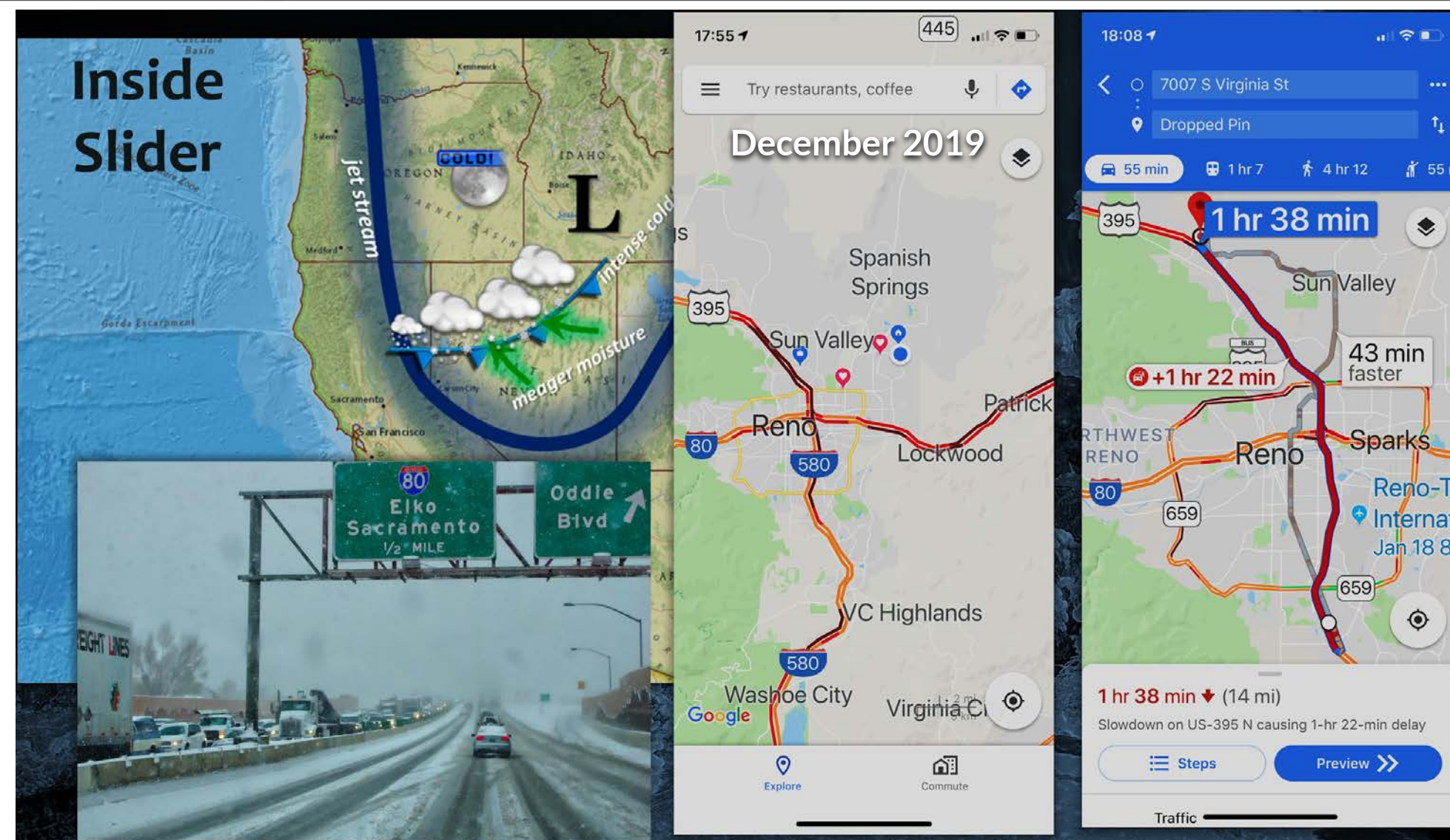



SIERRA AVALANCHE CENTER.ORG

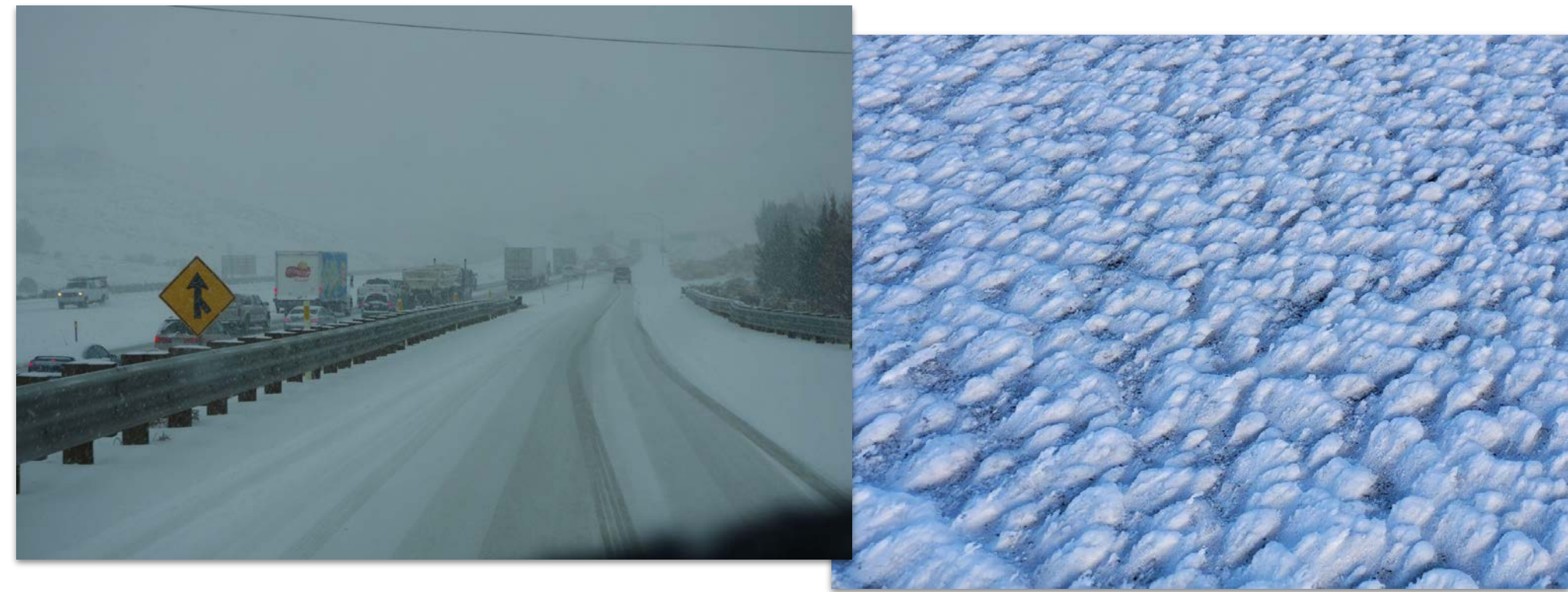



Increase!

roads, warehouses, schools, EMS, schools...



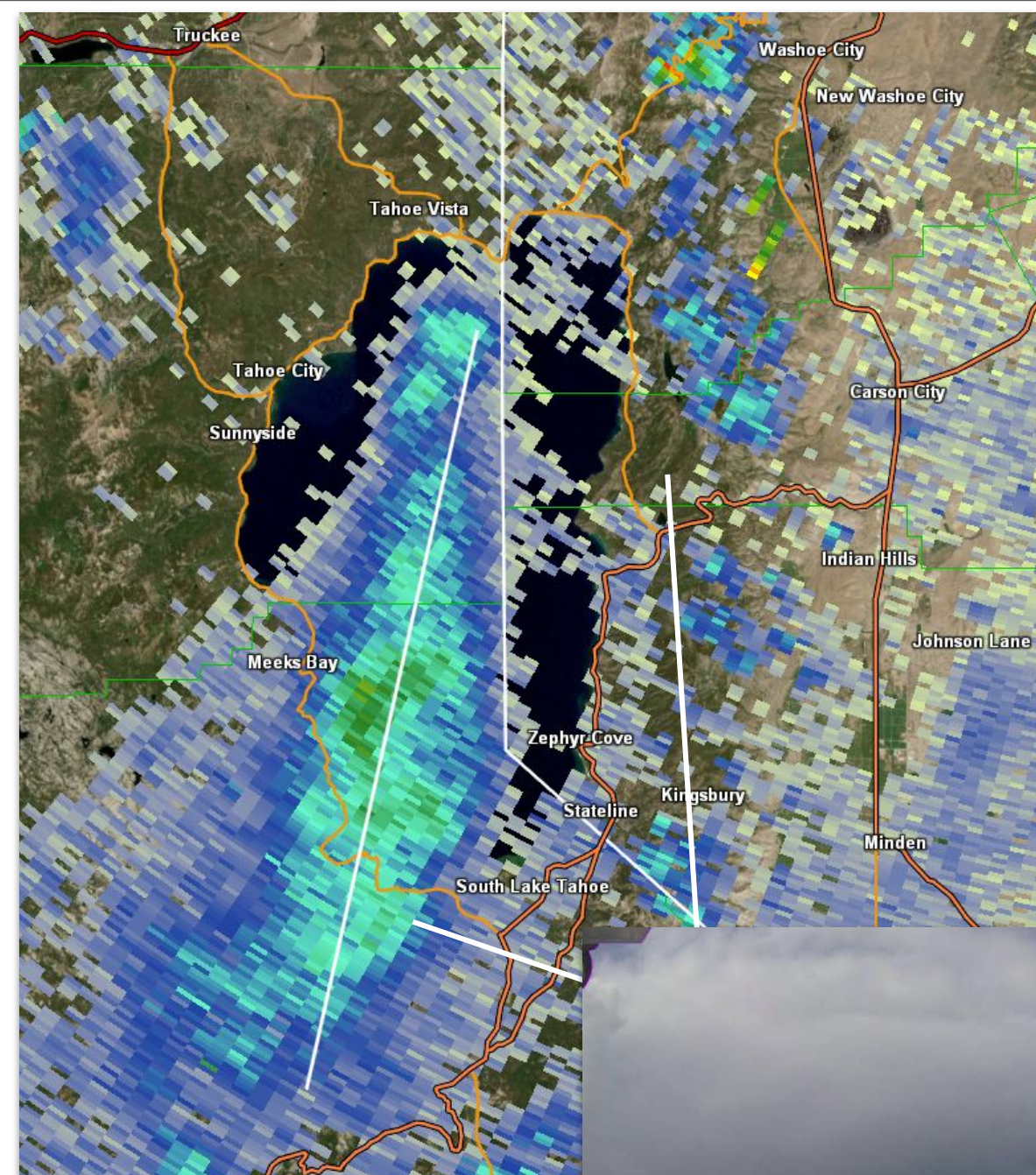
- Analogous to “Alberta Clippers” in midwest.
- Fast moving, high intensity bursts of snow with cold air - so snow sticks on valley floors.
- If it hits during commute, it will be a train wreck. 3-5x normal travel times.
- Messaging challenge: Public doesn’t react to 1” snowfall forecast, no preemptive closures.
- Predictability: not too good, maybe 1-3 days.
- More common in drought years, due to position of blocking high pressure ridge off west coast.





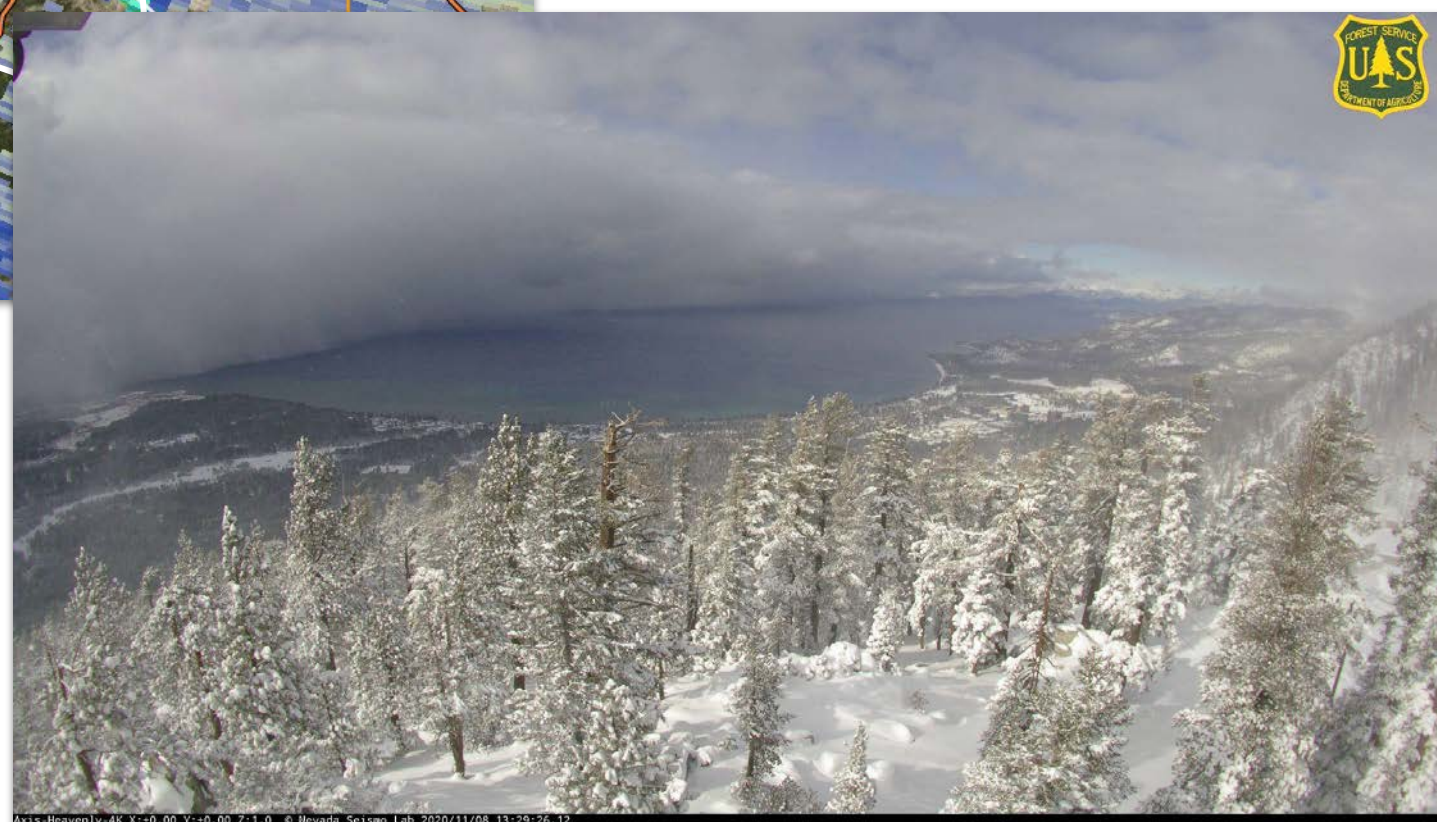
Freakout Scenarios: Lake Effect Snow

Weather Forecast Office
Reno, NV
Tuesday, November 7



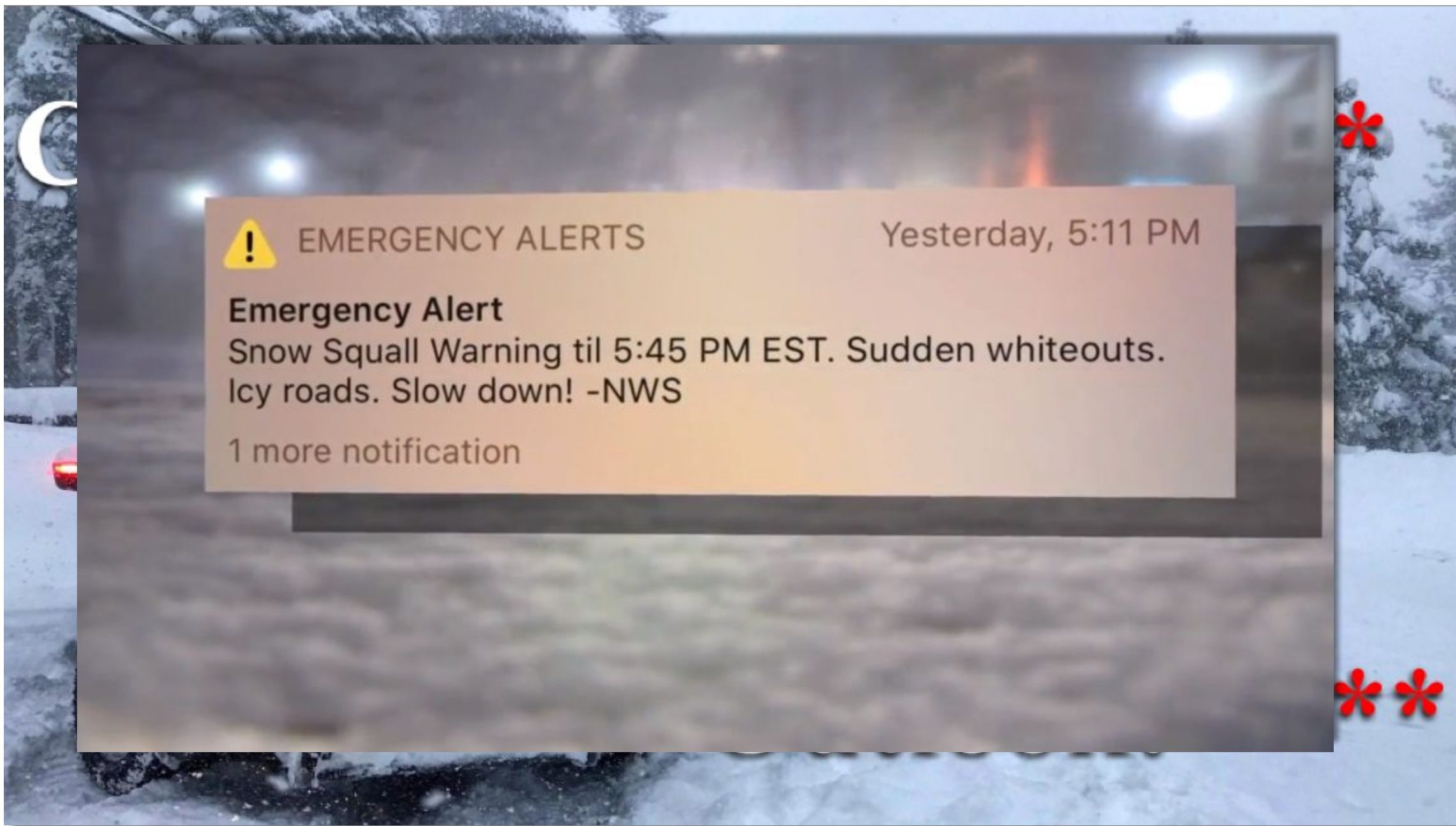
- Hot spots: Carson City, Washoe Valley, Reno, Spanish Springs, Fernley, South Lake Tahoe, June Lake, Lee Vining.
- Localized high intensity snow, 2-4"/hour not uncommon. No snow just a few miles away.
- Often peak intensity at night or early morning - bad news for AM commute & schools.
- Predictability is limited - 1-3 days on general potential, 0-12 hours on specifics.
- Snow Squall Warning can be used for these high intensity bursts of snow.
- Climate change aspect - LE snow becoming more common as lakes stay warmer, longer into the winter months.

November 2020



Snow Squall Warning

- Short Duration
- High Intensity
- Rapid Changes
- Big Travel Impact



WEA = yes!

Think of it as a snow-version of a thunderstorm warning



- Freezing fog is common, freezing rain is not.
- Fog can cause icy deposit and especially slick conditions on bridges, along with very low visibility.
- Even minimal amounts of freezing rain can have huge impacts.



Road Forecasts - Winter Specific

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What We Know

- When conditions are lining up for snowfall.
- If the storm is more of a “nuisance” or major event.
- General timing, better details the closer we get to the event.



Photo: Marilyn Newton, RGJ



Photo: NDOT, Mt Rose Hwy 2/2017

What We Don't Know

- Snow levels can be +/- several hundred or more feet. Big boom/bust potential!
- Exact timing several days out.
- Will snow stick to the roads, esp during shoulder seasons.
- Spillover amounts can be tricky - huge gradients!



NWS Support for Incident Response & Alerts

Weather Forecast Office
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Backcountry
Avalanche Warning

Central Sierra Mountains
Greater Lake Tahoe Area
Eastern High Sierra

HIGH avalanche danger may occur Saturday Evening through Monday morning.

SIERRA AVALANCHE CENTER.ORG

Avalanche Warnings

NWS will disseminate SAC & ESAC alerts via social media, web, weather radio, broadcast media partners.

Lost Snowboarder

SAR Over Land
Forecast Start Time: 2021-01-29 2:00 PM PST
Request Time: 2021-01-29 1:45 PM PST
Deliver Time: 2021-01-29 1:45 PM PST
Forecast Complete At: 2021-01-29 2:01 PM PST

Requested By: Washoe County Sheriffs Office IMT
Contact:
Phone:
Fax:

Map
Satellite

Map
Satellite

Location Legal:
Lat/Lon: 39.3104 / -119.863
Quad:
Calculated: 39.3104 / -119.863

Elevation: 7041
Drainage:
Aspect:
Size:
Fuel Type:

Site	Date	Elev	Wind	Temp	WB	RH	Td	Sky	Wx	Vsby	Rmks
No observations available											

[Submit New Observation](#)

Requested Parameters	Remarks
X . . Sky/Weather	Looking for details about low level clouds for helicopter rescue mission
X . . Chance of Precipitation	
X . . Surface Wind	
X . . Temperature	
X . . Humidity	
X . . Rainfall Amount	
X . . Snowfall Amount	
X . . Precipitation Amount	
X . . Begin/End of Precipitation	
X . . Snow Level	
X . . Sunrise/Sunset	

Forecast:
Spot Forecast for Lost Snowboarder...Washoe County Sheriffs Office IMT
National Weather Service Reno NV
200 PM PST Fri Jan 29 2021

Forecast is based on forecast start time of 1400 PST on January 29. If conditions become unrepresentative...contact the National Weather Service in Reno.

.DISCUSSION...
Light snow showers possible through the evening. Cloud ceilings are right around 1000-2000 feet agl at this time. Ceilings should lift up and break up a bit more through the evening to around 3000-3500 feet agl by around 5pm. Freezing fog may start to develop as early as 8pm or 9pm tonight and then will remain around the valley locations through the morning. Winds will remain light and variable through the next 24 hours.

.REST OF TODAY...
Sky/Weather.....Mostly cloudy.
Temperature.....20 at forecast start...Max 23.
RH.....81% at forecast start...Min 66%.
Surface Winds.....West winds 11-16 mph increasing to 14-19 mph late in the afternoon.
Chance of pcpn.....10%.
Begin/end of pcpn...
Rainfall Amount.....0.00 inches.
Pcpn Amount.....0.00 inches.
Snowfall Amount.....0.0 INCHES.
Snow level.....4500 ft at forecast start...otherwise 4300-4500 ft.
SUNSET.....516 PM PST

Spot Weather Forecasts

Highly detailed point forecasts for Search & Rescue, HAZMAT, and Fires.

Weather Briefing for 9/11 UNR Home Football Game

National Weather Service - Reno, NV
Issued: 8 AM PDT Wednesday, September 8, 2021
NWS Point of Contact: NWS Reno Operations, (775) 673-8107
UNR Point of Contact: Ed Atwell, (775) 343-5075

- SIGNIFICANT WEATHER ISSUES FOR GAME DAY ON 9/11:**
- Smoke Impacts:** Can't rule out smoke or haze on Saturday. Too soon to tell as it depends on fire activity to our west.
 - Thunderstorms:** None predicted for Saturday. However there is a 1 in 3 chance of t-storms in the area Thursday late afternoon, night, and into Friday which could affect setup activities with brief downpours, strong outflow winds, and lightning.
 - Friday Winds:** While Saturday winds will be fairly tame, note that winds Friday midday through early evening will be rather breezy - southwest winds gusting to 30-35 MPH. This could affect preparations for the game as well.

HOURLY WEATHER TABLE FOR SATURDAY

Time:	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM
Weather:	☀	☀	☀	☀	☀	☀	☀	☁	☁	☁
Temperature (°F):	77	80	83	85	85	84	82	79	76	73
Heat Index, °F:	77	79	81	82	82	81	80	78	76	73
Wind Speed (mph):	3	3	6	6	6	9	9	9	8	8
Wind Gust (mph):	6	6	9	9	9	15	15	15	14	14
Wind Direction (°):	110	110	220	220	220	270	270	270	280	280
Wind Direction:	↙	↙	↗	↗	↗	→	→	→	→	→
Prob. of Precip. (%):	0	0	0	0	0	0	0	0	0	0
Prob. of Thunder (%):	-	-	-	-	-	-	-	-	-	-
Precip. Amount (in.):	0.00							0.00		
Snow (in.):	0.0							0.0		
Ice (in.):	0.00							0.00		
Dew Point (°F):	39	38	37	35	33	33	33	34	34	34
RH (%):	26	22	19	17	16	16	17	19	22	24
Sky Cover (%):	8	8	21	21	21	23	23	23	43	43

Weather Briefing for Burning Man Partners 9/3

Weather Forecast Office Reno, NV
Saturday, Sep 3, 2022

Greetings! Hot and breezy conditions on tap for the playa today, with enhanced blowing dust. Hot temperatures will persist through Tuesday, with a cool down still anticipated starting Friday. The conditions tonight and tomorrow night will be very pleasant for the burnings with light winds overnight and the temperature bottoming out around 60! It's advised to take extra care if spending time outdoors during the hottest time of the day: seek shaded areas, use plenty of sun block, and please hydrate as often as possible.

KEY POINTS

- Prolonged Heat Risk through next Tuesday with little to no cloud cover.
- Increased afternoon breezes today, leading to areas of blowing dust.
- Stronger winds looking possible on Wednesday with additional blowing dust.

CHANGES FROM PREVIOUS BRIEFING

No major changes to the forecast compared to yesterday's briefing. We just continue to recommend breaks from direct sunlight during the middle of the day and staying hydrated!

WEATHER RISK OUTLOOK

Risk levels incorporate potential impacts from weather hazards and likelihood of occurrence.

Sat 9/3	Sun 9/4	Mon 9/5	Tue 9/6	Wed 9/7	Thu 9/8	Fri 9/9
High PM heat health risk, increased breezes.	High PM heat health risk.	High PM heat health risk.	High PM heat health risk.	Moderate PM heat health risk, increased winds.	Still hot, but starting to cool. Breezy.	Cooler.

Risk Levels: Little to None, Minor, Moderate, Major, Extreme

Special Event Briefings

Weather outlooks for large public gatherings requested by public safety partners. Key to success: knowing your weather thresholds!



Avalanche Weather Support from NWS

Weather Forecast Office
Reno, NV
Tuesday, November 7

New Avalanche Weather Page with Site Specific Tabular Forecasts

Mono Co: www.weather.gov/rev/avalanche

Inyo Co: www.weather.gov/wrh/TextProduct?product=avgvef

Reno, NV

Weather Forecast Office

Current Hazards
Current Conditions
Radar
Forecasts
Rivers and Lakes
Climate and Past Weather
Local Programs

** Experimental Webpage (For Evaluation Only) ** [Provide Feedback](#)

The following page is designed to provide snow safety officials with a weather forecast over specific areas of backcountry recreation interest. This forecast is not meant to be indicative of actual snow and avalanche conditions in the backcountry. [More information.](#)

Winter Related Watches & Warnings
Displayed Only in the Highlighted Area

- Avalanche Watch
- Winter Storm Watch

- NEAR DONNER PASS - ELEV 7200 FT
- NEAR MT ROSE SUMMIT - ELEV 8900 FT
- NEAR HOMEWOOD - ELEV 8000 FT
- NEAR ECHO PASS - ELEV 7500 FT
- NEAR CARSON PASS - ELEV 8800 FT
- NEAR SONORA PASS - ELEV 9800 FT
- NEAR TIOGA PASS - ELEV 10000 FT
- ✓ MAMMOTH MOUNTAIN - ELEV 10000 FT
- NEAR MAMMOTH - ELEV 9000 FT
- NEAR MAMMOTH - ELEV 8000 FT

Active Alerts
Tabular Forecast
Graphical Forecast
Overview

Near Term Forecast

Forecast Issued: Fri Dec 2 2:32am PST

DATE	FRIDAY 12/02/22							SATURDAY 12/03/22									
TIME (LT)	06	09	12	15	18	21	00	03	06	09	12	15	18	21	00	03	06
CLOUD COVER	FW	FW	FW	SC	SC	OV	OV	OV	OV	OV	OV	OV	OV	OV	OV	OV	
CLOUD COVER (%)	20	15	20	35	50	70	70	70	85	85	85	85	90	85	85	90	
TEMPERATURE	14	19	24	23	21	22	24	26	25	26	27	27	28	30	31	30	
MAX/MIN TEMP						24			18				30			24	
WIND DIR	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	
WIND (MPH)	17	13	11	11	12	13	13	13	12	12	25	33	35	23	27	33	
WIND GUST (MPH)	26	20	23	25	24	23	20	19	18	19	37	50	54	34	41	50	
PRECIP PROB (%)	0	0	0	0	20	20	20	20	60	60	80	80	80	80	80	80	
PRECIP TYPE					S	S	S	S	S	S	S	S	S	S	S	S	
12 HOUR QPF					0.00				0.44				1.18			1.22	
12 HOUR SNOW					0.1				4.4				11.4			12.1	
12 HOUR ICE					0.00				0.00				0.00			0.00	
SNOW LEVEL (KFT)	1.9	2.1	3.7	4.7	4.7	5.3	5.5	6.2	6.4	5.6	6.5	7.3	7.6	7.4	7.4	7.2	

① [How to decode this Avalanche Weather Guidance product](#)



Avalanche Weather Support from NWS

Weather Forecast Office
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- [Avalanche Watch - Fri Dec 2 8:29 AM PST 2022](#)
- [Winter Weather Statement - Fri Dec 2 4:50 AM PST 2022](#)

Lake Tahoe Mono County

Forecasts Webcams Observations Avalanche Advisory

[2 Day Mountain Forecast](#) [Forecast Discussion](#) [Snow Level Forecasts](#) [Graphical Forecasts](#)

Mono County Sierra Crest from 8000 to 10000 feet-
545 AM PST Fri Dec 2 2022

...WINTER STORM WATCH IN EFFECT FROM THIS EVENING THROUGH LATE SUNDAY NIGHT...

.TODAY...
Sky/Weather.....Sunny.
Snow Level.....Below 7000 feet.
Chc Rain/Snow...0%.
Lightning.....None Forecast.
Temperature.....25 to 31.
Mid Slope Wind..Southwest around 15 mph. Gusts up to 45 mph decreasing to 35 mph in the afternoon.
Snow.....No accumulation.
Liquid Amount...None.

.TONIGHT...
Sky/Weather.....Partly cloudy then becoming mostly cloudy. Slight chance of snow after midnight.
Snow Level.....Below 7000 feet.
Chc Rain/Snow...15%.
Lightning.....None Forecast.
Temperature.....15 to 21.
Mid Slope Wind..South 15 to 25 mph. Gusts up to 40 mph increasing to 55 mph after midnight.
Snow.....90% probability of 1 to 3 inches.
10% probability of up to 5 inches.
Liquid Amount...Up to 0.15 inch.

.SATURDAY...
Sky/Weather.....Mostly cloudy. Snow likely.
Snow Level.....Below 7000 feet increasing to 7500 feet in the afternoon.
Chc Rain/Snow...60%.
Lightning.....None Forecast.
Temperature.....31 to 37.
Mid Slope Wind..South 15 to 20 mph with gusts to 45 mph increasing to 15 to 30 mph with gusts to 55 mph in the afternoon.
Snow.....60% probability of 3 to 9 inches.
40% probability no accumulation.
Liquid Amount...Up to 0.70 inch.

Mono County Sierra Crest Above 10000 Feet-
545 AM PST Fri Dec 2 2022

Backcountry Forecast Summary for Specific Elevation Bands with Snowfall Scenarios

Source: www.wrh.noaa.gov/rev/avalanche/



How Can You Prepare? Stay Informed!



Hydrologist Tim Bardsley briefing Nevada DEM in the State EOC.

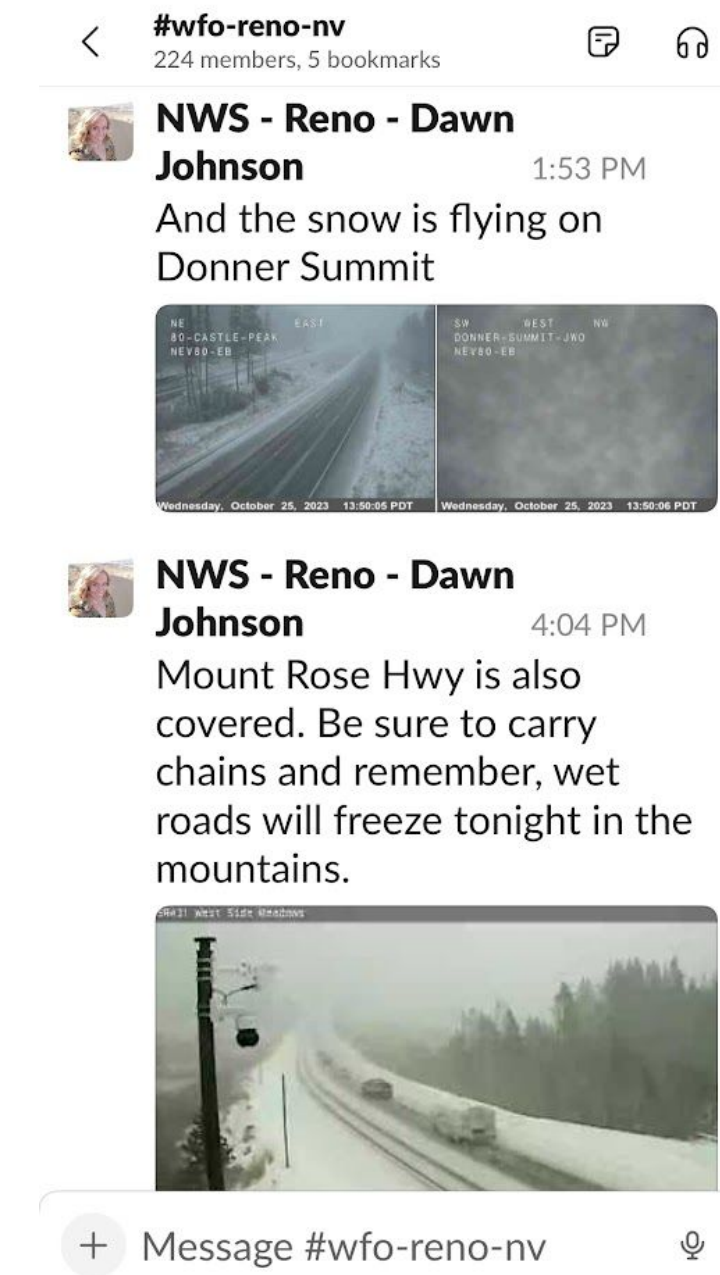
- Forecast Discussion, 2x/day [\[link\]](#)
- Briefing emails, aka “the freakout” (each NWS office is separate)
- Social media: @NWSReno
- iNWS: Watches & Warnings [\[link\]](#)
- Call Us ([775.673.8107](tel:775.673.8107) for 24/7 weather support - non-public #)
- Various support options

Where's your app?
mobile.weather.gov



New! NWS Chat 2.0

- For core partners in public safety roles.
- Easy way to interact with NWS Reno in addition to other offices in the local area.
- Learn more about significant events and ask questions in real time with our staff.
- We appreciate you sharing photos, reports, etc. from what you are seeing on the ground.
- Easy access through your computer or a mobile app as well.



Register here:
<https://partnerservices.nws.noaa.gov/registration/>



Any Questions?

Weather Forecast Office
Reno, NV
Tuesday, November 7



Dawn Johnson

Warning Coordination Meteorologist

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