Idaho and Eastern Oregon Alfalfa & Clover Seed Growers Conference
2025 Winter Meeting Agenda
January 14, 2025 Caldwell, Idaho

The 2025 Water Year Outlook

This talk & more posted here
https://snowweatherandflow.blog/

Ron Abramovich
Mostly Retired
but still watching the weather…

Topics:

- Current Ocean & Atmosphere Conditions
- 2025 Analog Years Based on Current Pacific Conditions and Years that Follow Strong El Nino Events like Last Year
- Summer / Fall Precipitation & Drought Information
- 2024 Extreme Weather & Disasters
- Fall / Winter Streamflow, Current Reservoir & Snow Conditions for Weiser, Payette, Boise and Owyhee Basins
- Weather Outlooks – Short-Term (Dry) and Long-Term (TBD)

Background Information:
Three Primary Atmospheric Teleconnections or Drivers

ENSO – El Nino / La Nina – measure of Pacific Sea Surface Temperatures
=> Cool temps - La Nina Conditions

Southern Oscillation Index (SOI) - measure of Pacific Atmosphere
=> Neutral / Positive - La Nina Conditions

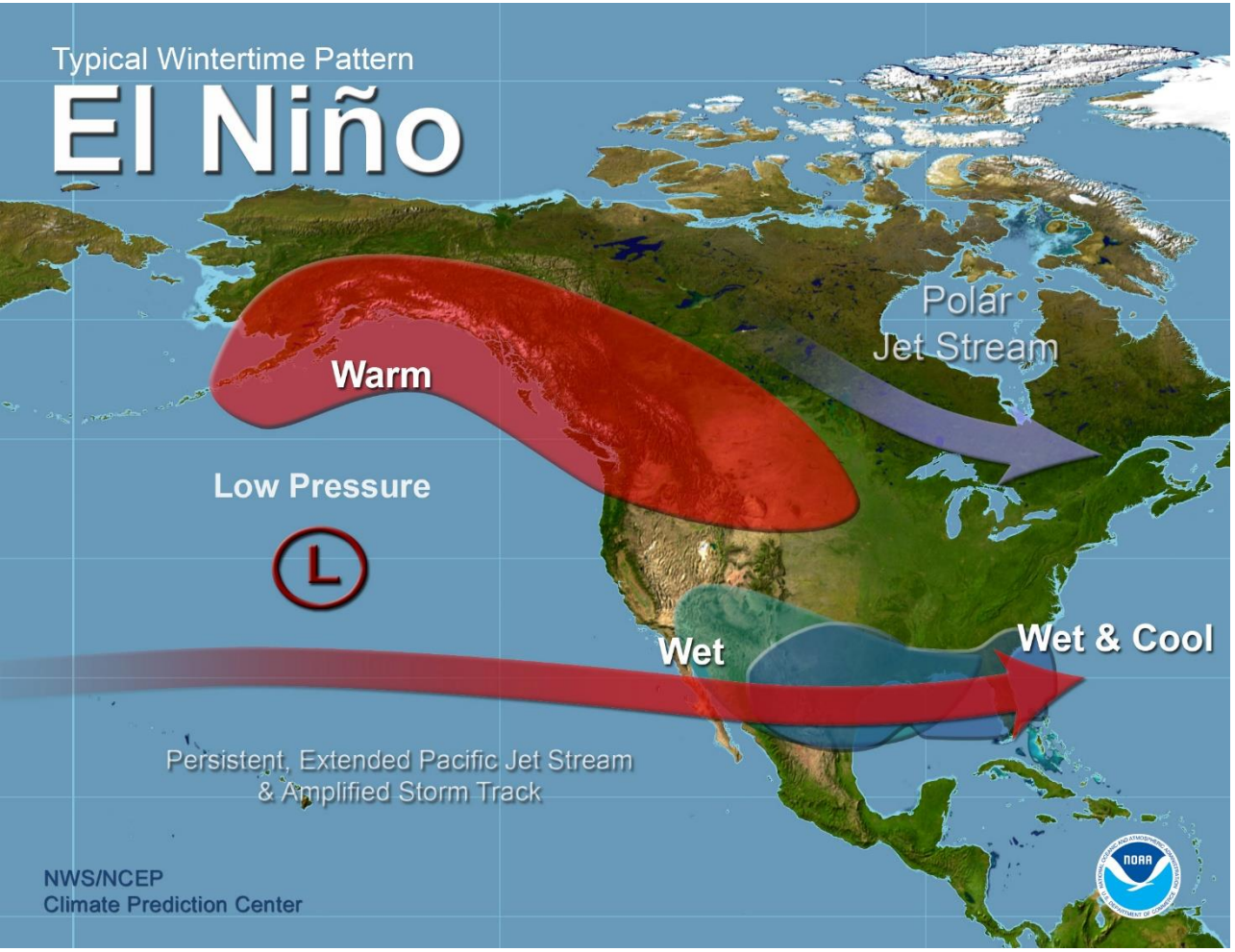
Pacific Decadal Oscillation (PDO) – measure of north Pacific Sea Surface Temperatures
=> Cool Phase – very cold past few years

Many researchers, like Pete Parsons, look at these climate teleconnections that correlate with our wet season (winter) to better understand what the future may bring.

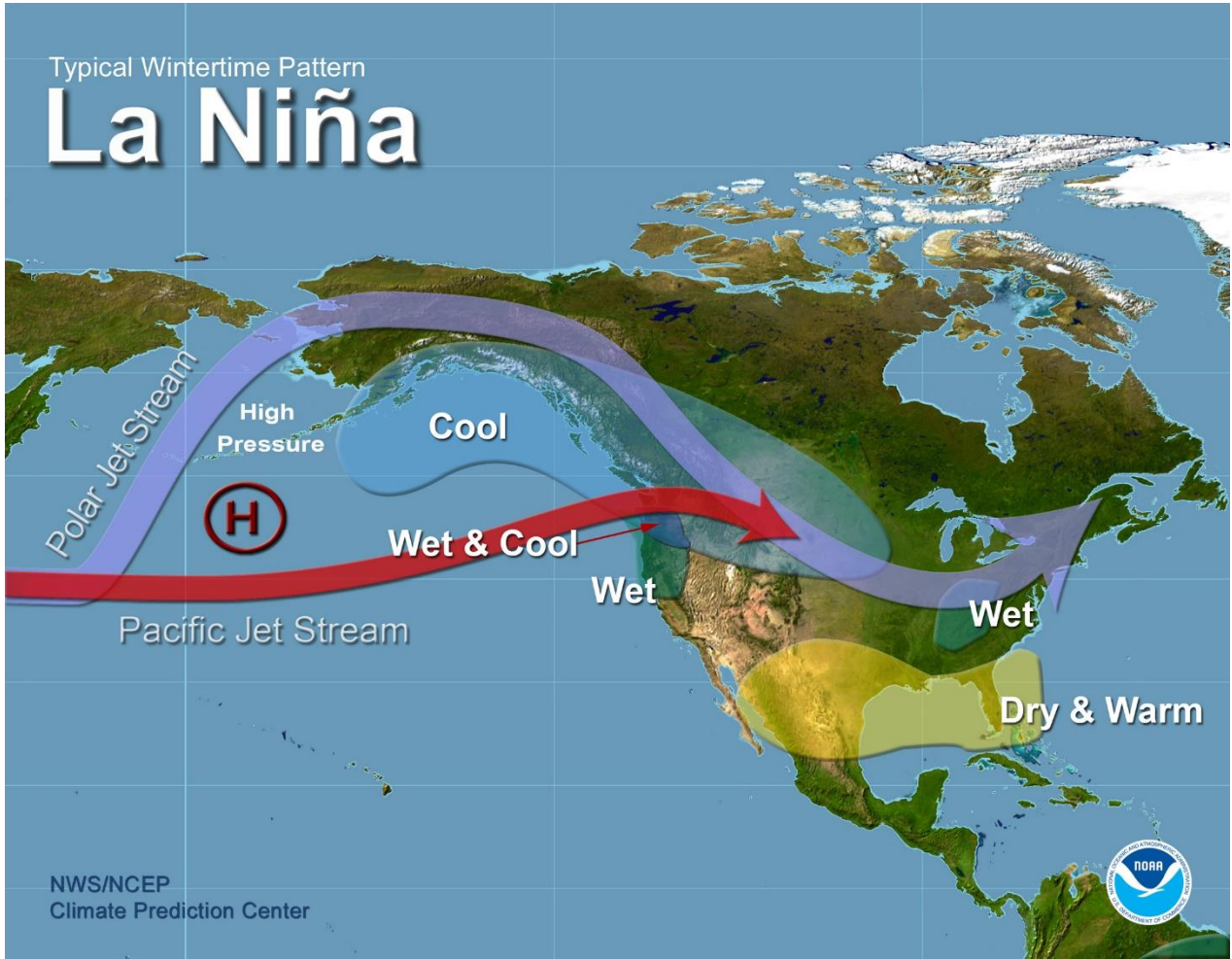
Key is if we can still use the past to predict the future in a changing climate.

Quick Review

El Nino



La Nina

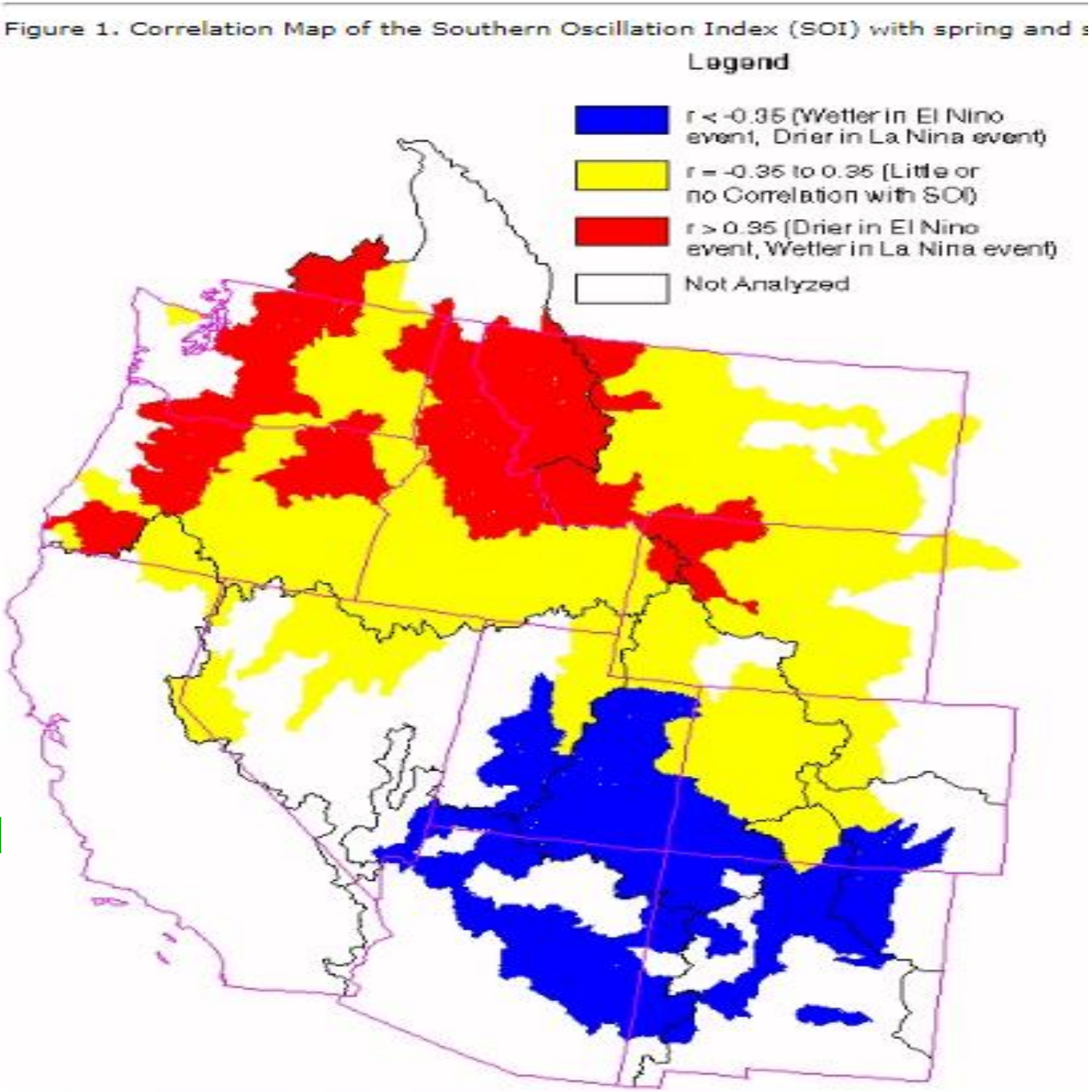


Correlation Map of Southern Oscillation Index (SOI) with Spring-Summer Streamflow

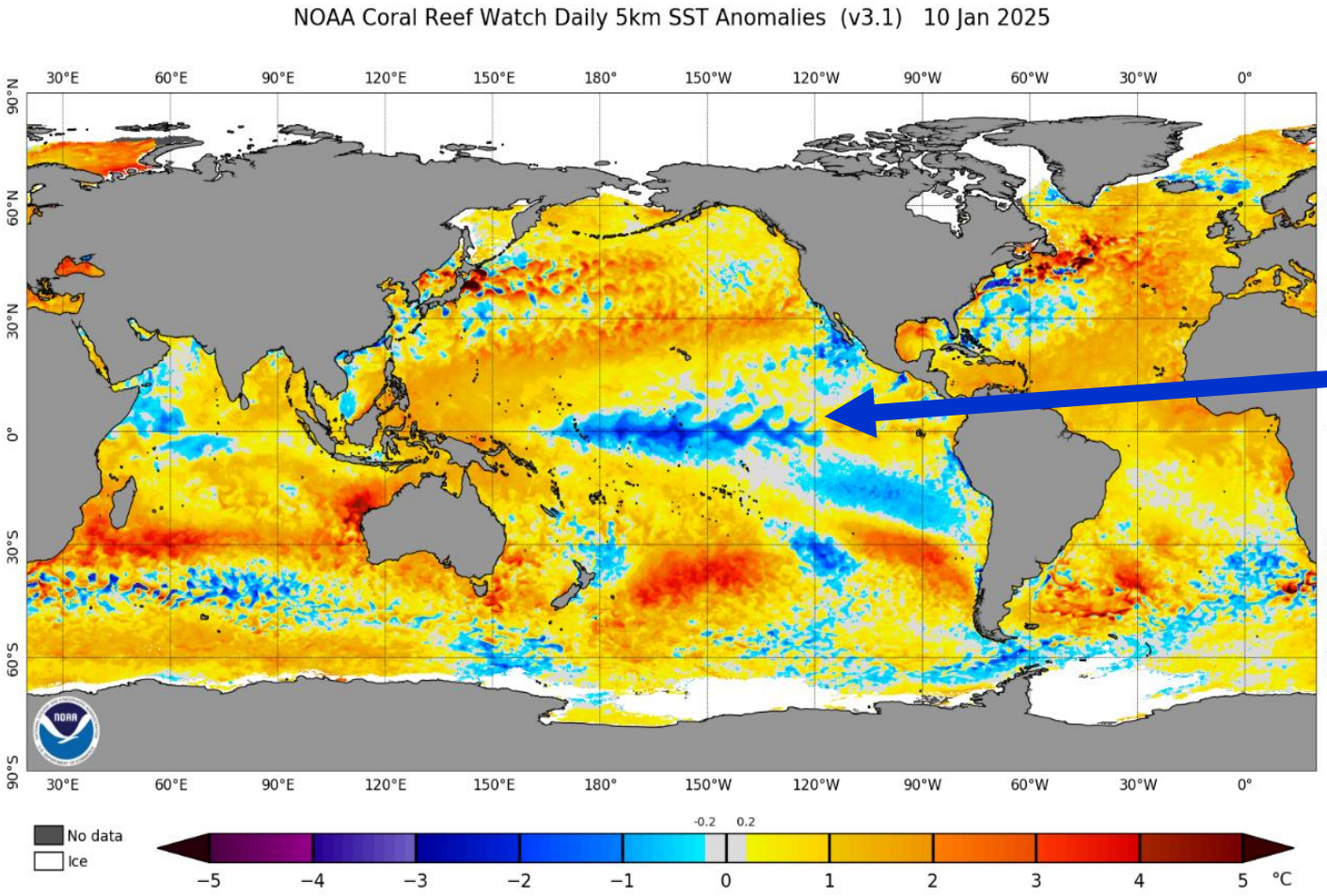
Red wetter in La Nina years.

Blue wetter in El Nino years.

Key is – what happens July-Nov in Pacific correlates with snowfall and summer streamflow in Western US.

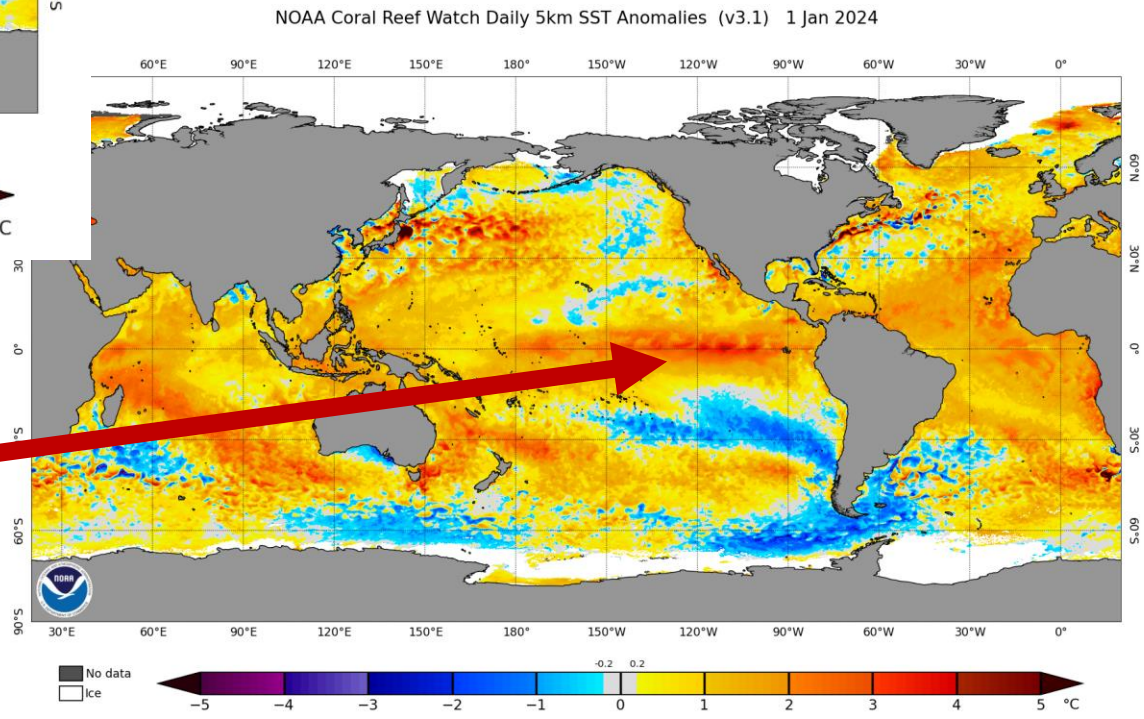


Sea Surface Temperatures



La Nina Conditions
Jan 10, 2025

El Nino Conditions
Jan 1, 2024



Seasonal Climate Forecast
January – March 2025

Issued: December 19, 2024

Contact: ODF Lead Meteorologist Pete Parsons
503-945-7448 or peter.gj.parsons@odf.oregon.gov

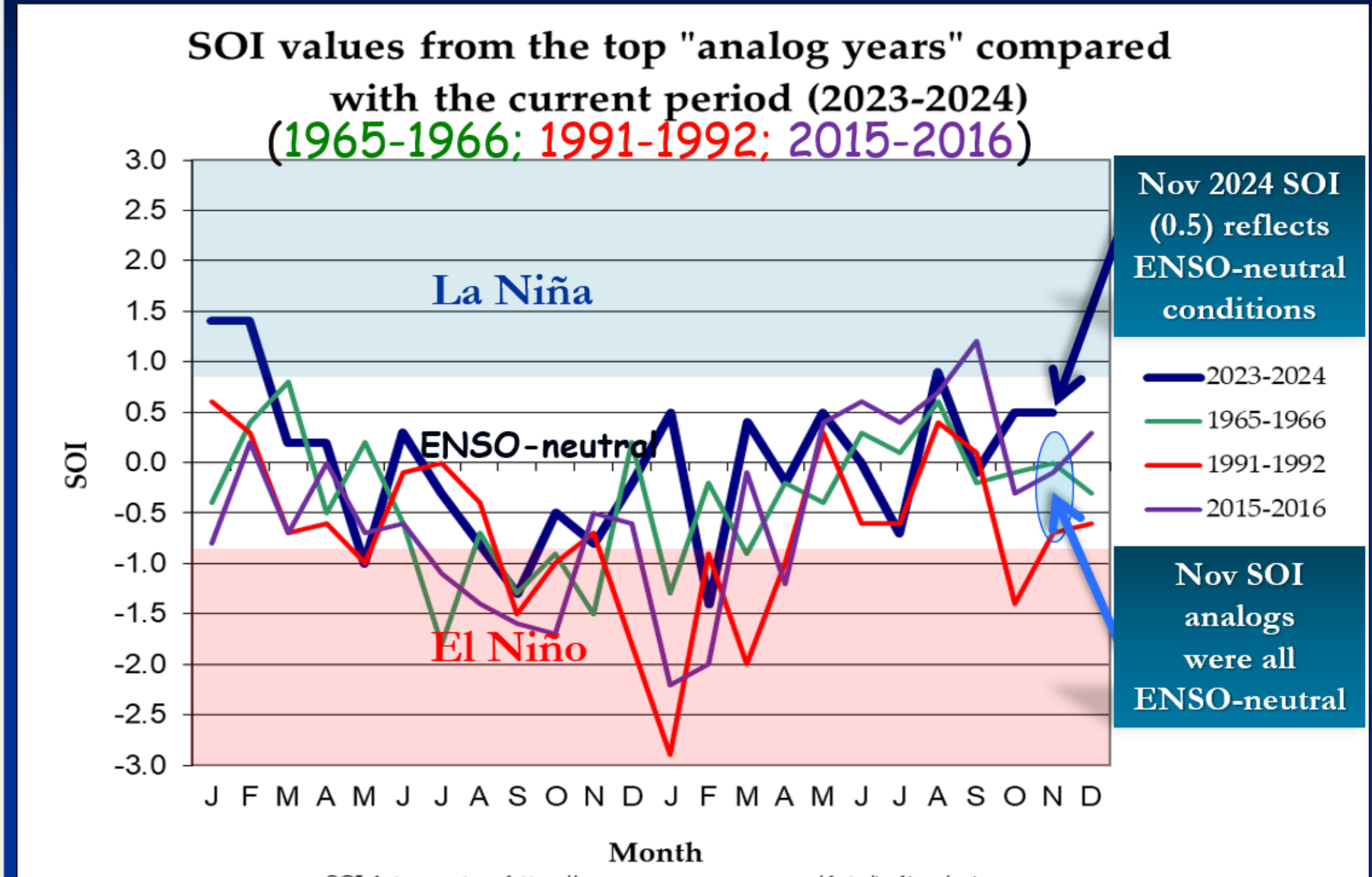
Forecast Highlights

- Analog years are water years 1967, 1993 & 2017.

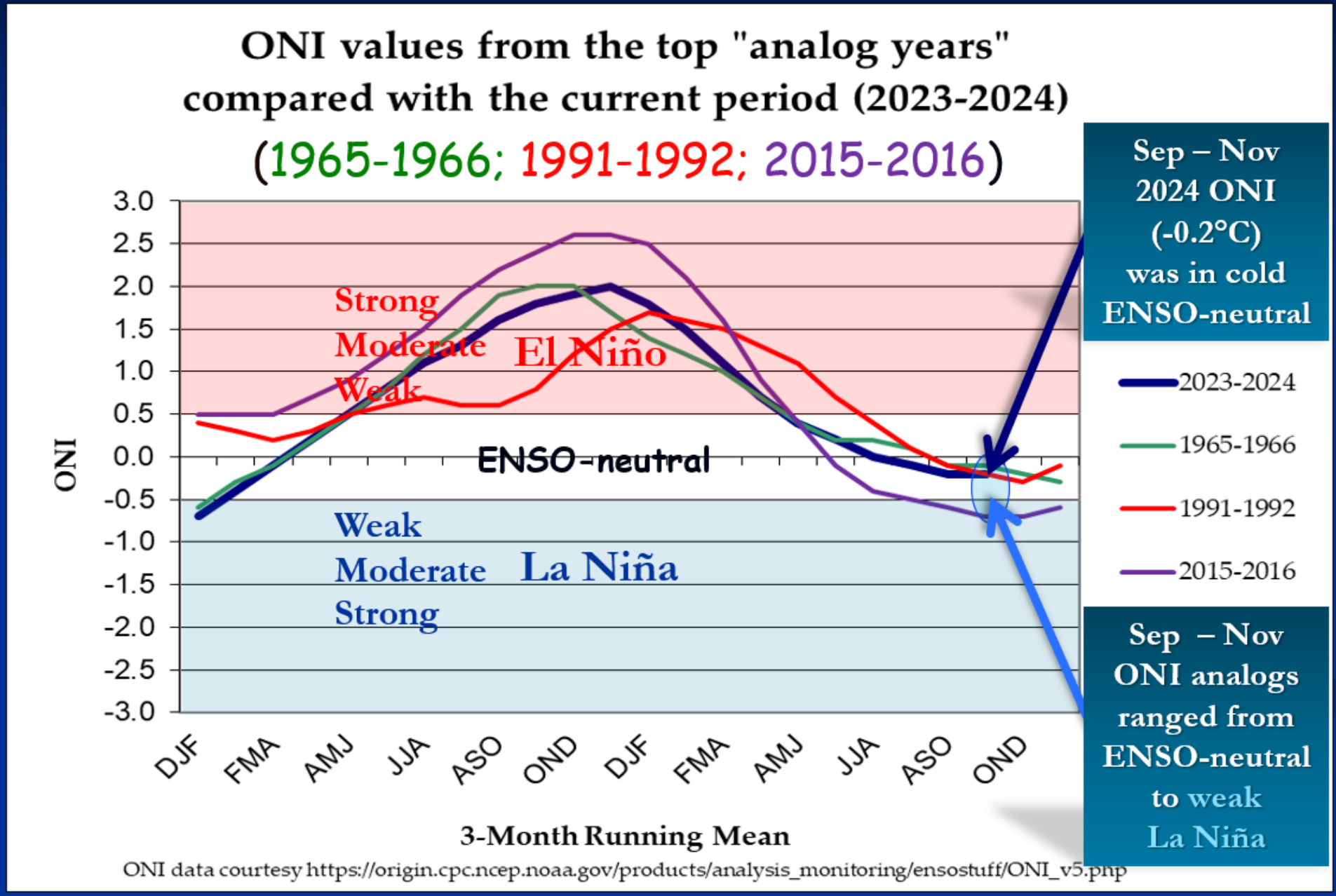
- NOAA's Climate Prediction Center (CPC) expects a transition from cold ENSO-neutral to weak La Niña during the November 2024 – January 2025 period, then back to ENSO-neutral by March – May 2025.

Current Analog Years	Winter Of	Water Year
1965-66 =>	1966-67	**1967**
1991-92 =>	1992-93	**1993**
2015-16 =>	2016-17	**2017**

Southern Oscillation Index (SOI)

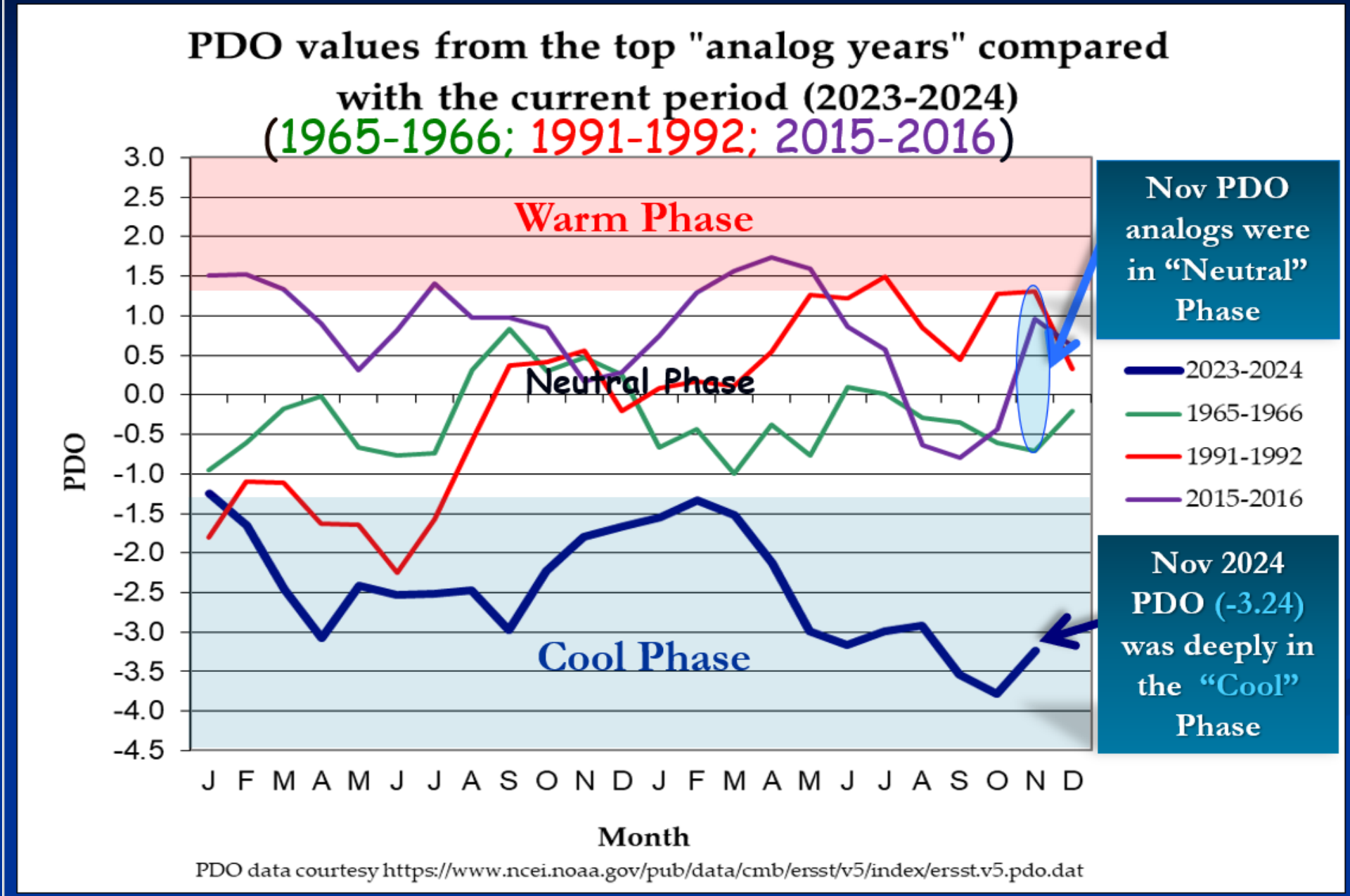


Oceanic Niño Index (ONI)

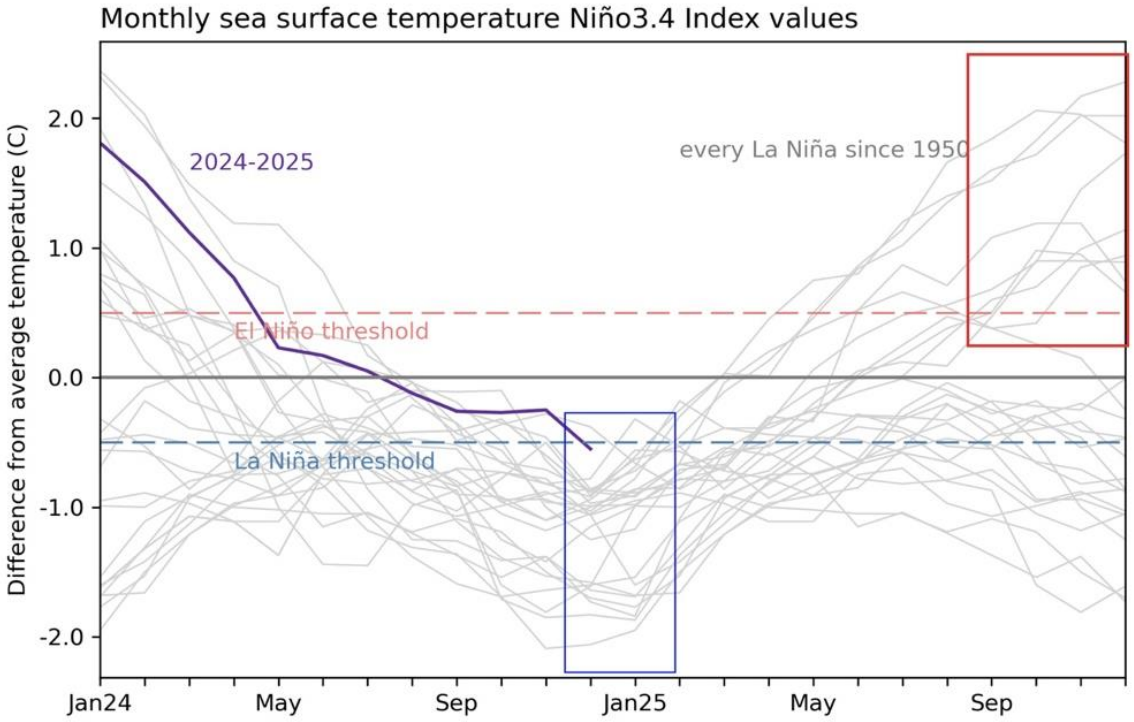


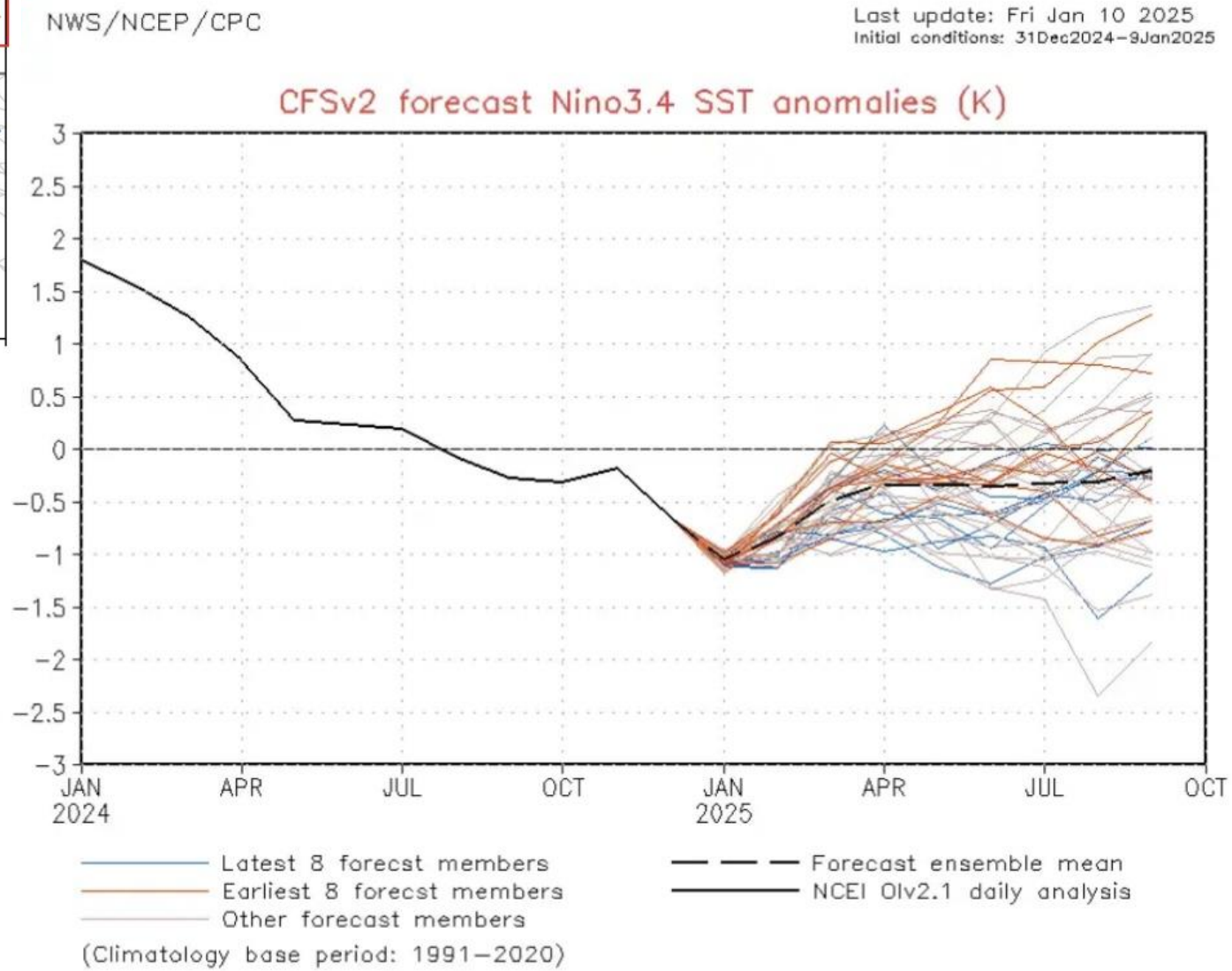
North Pacific Ocean

(Poleward of 20°N Latitude)



PDO data courtesy https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/index/ersst.v5.pdo.dat


Monthly sea surface temperature Niño3.4 Index values
Difference from average temperature (C)
2.0
1.0
0.0
-1.0
-2.0
2024-2025
every La Niña since 1950
El Niño threshold
La Niña threshold
Jan24
May
Sep
Jan25
May
Sep


NWS/NCEP/CPC
Last update: Fri Jan 10 2025
Initial conditions: 31Dec2024-9Jan2025
CFSv2 forecast Nino3.4 SST anomalies (K)
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
JAN 2024
APR
JUL
OCT
JAN 2025
APR
JUL
OCT
Latest 8 forecst members
Earliest 8 forecst members
Other forecast members
Forecast ensemble mean
NCEI Olv2.1 daily analysis
(Climatology base period: 1991-2020)

New source found to track **Strong El Nino Years.**

SOI and Sea Surface Temps are not always in agreement because SOI is measure of atmosphere and others are based on Sea Surface Temps.

The Oceanic Niño Index (ONI) has become the de-facto standard that NOAA uses to classify El Niño and La Niña events and Pete uses too.

Let's use these 9 Strong and Very Strong El Nino years in this analysis.

https://ggweather.com/enso/oni.htm

El Niño - 27				La Niña - 25		
Weak - 11	Moderate - 7	Strong - 6	Very Strong - 3	Weak - 12	Moderate - 6	Strong - 7
1952-53	1951-52	1957-58	1982-83	1954-55	1955-56	1973-74
1953-54	1963-64	1965-66	1997-98	1964-65	1970-71	1975-76
1958-59	1968-69	1972-73	2015-16	1971-72	1995-96	1988-89
1969-70	1986-87	1987-88		1974-75	2011-12	1998-99
1976-77	1994-95	1991-92		1983-84	2020-21	1999-00
1977-78	2002-03	2023-24		1984-85	2021-22	2007-08
1979-80	2009-10			2000-01		2010-11
2004-05				2005-06		
2006-07				2008-09		
2014-15				2016-17		
2018-19				2017-18		
				2022-23		

			Streamflow as % of 1991 - 2020 Average							
			Feb-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep
Strong & Very Strong El Nino Years	Year Following a Strong & Very Strong El Nino Year		Owyhee R blw Dam	Weiser River nr Weiser	Boise R nr Boise	Payette R nr Horseshoe Bend	MF Salmon R at MF Lodge	Salmon R at White Bird	Selway River	Spokane R nr Post Falls
Very Strong		ENSO								
2015-16	2017	LA	155	135	184	164	180	148	104	110
1982-83	1984	LA	363	159	162	146	NA	144	126	109
1997-98	1999	LA	100	156	138	140	121	124	112	126
					Sorted high to low					
Strong										
1972-73	1974	LA	120	167	185	188	182	164	145	189
1991-92	1993	N	165	153	124	128	NA	107	94	114
1965-66	1967	N	69	106	107	111	NA	119	109	110
1987-88	1989	LA	145	98	99	91	NA	78	102	114
1957-58	1959	EL	20	78	89	99	NA	101	124	136
2023-24	2025	LA	?	?	?	?	?	?	?	?

Jan 1 Owyhee River forecasts are for about 100% of Avg.

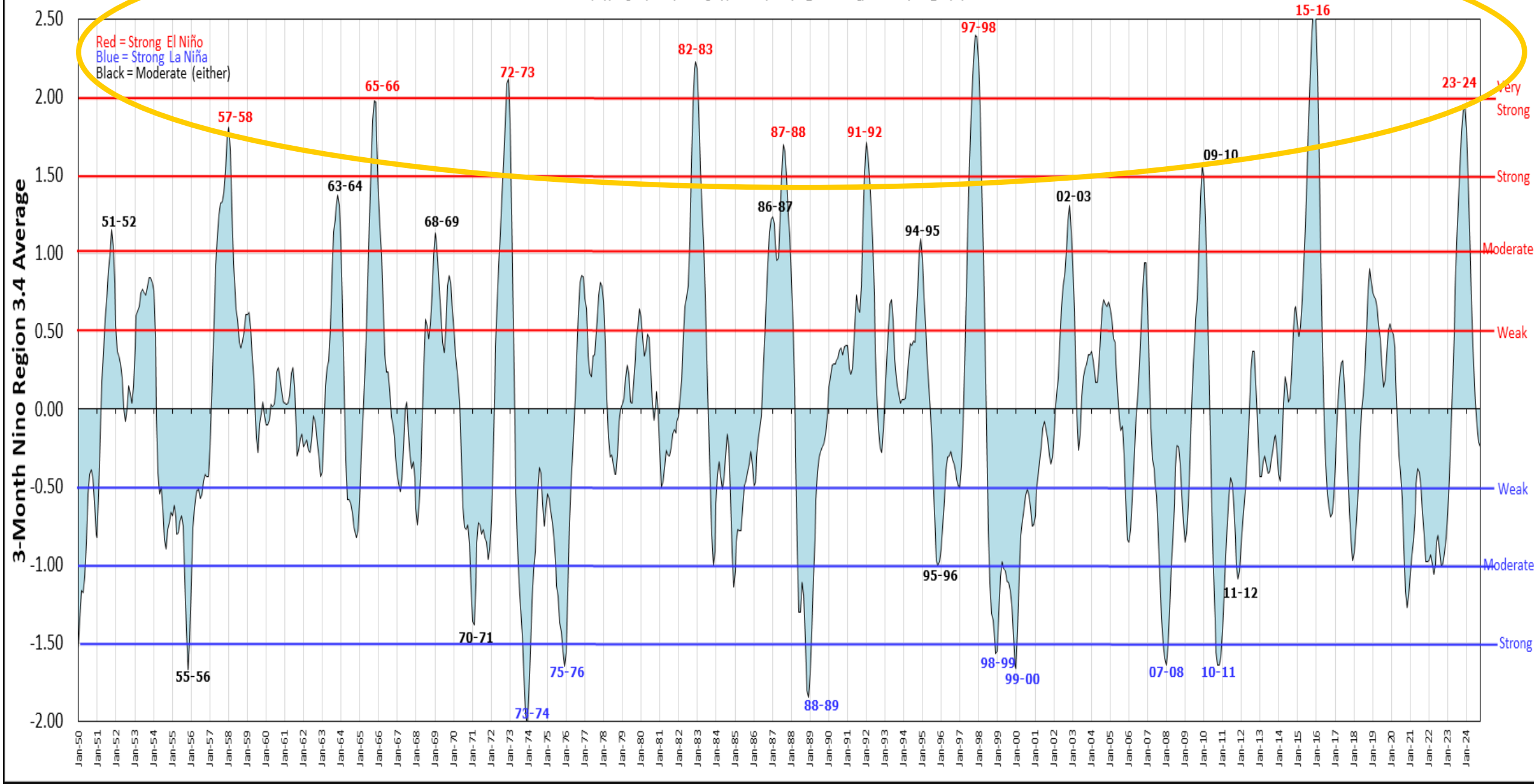
Sorted high to low

< 80%
80-110%
110-150%
> 150%

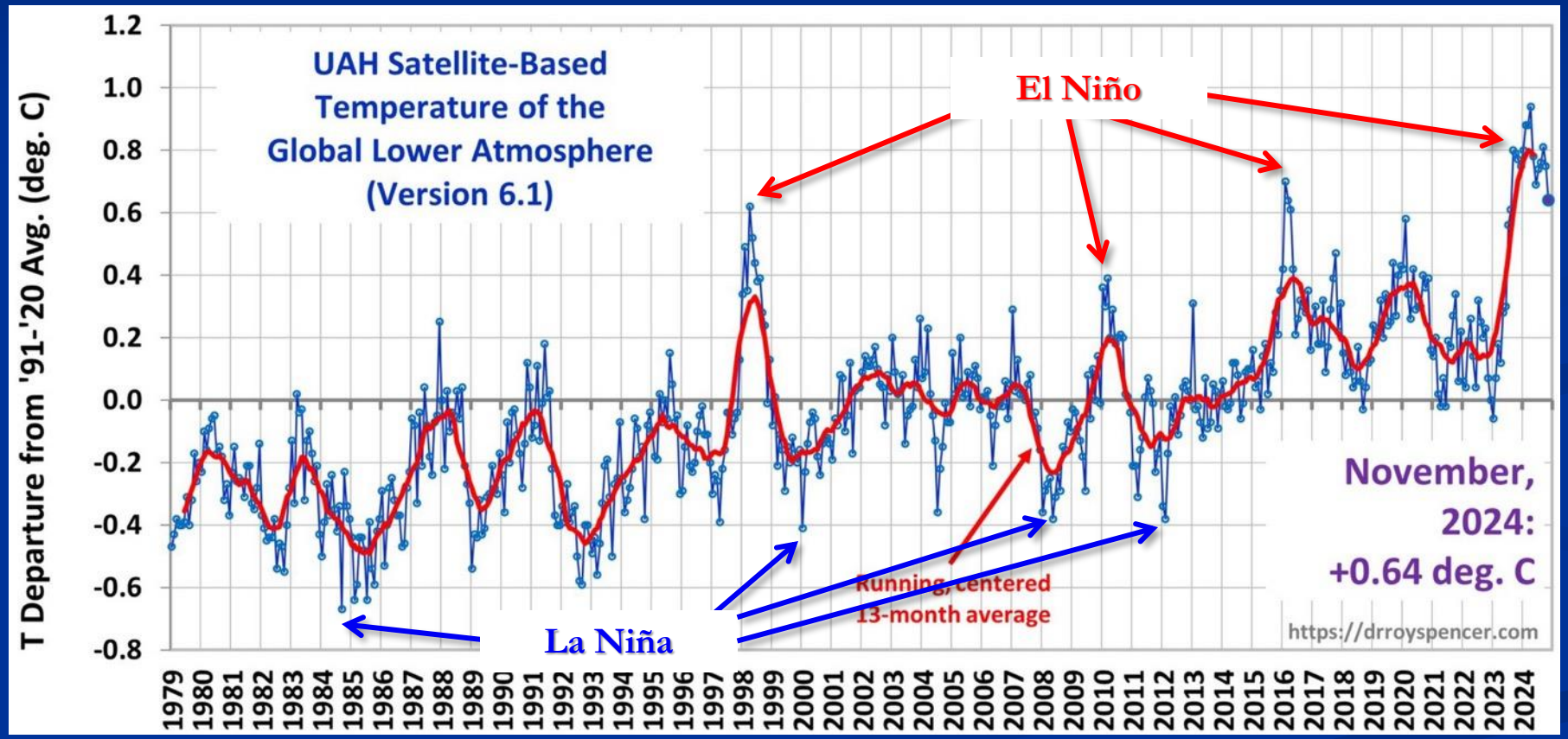
Streamflow %s color code

Oceanic Niño Index (ONI)

https://origin.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php



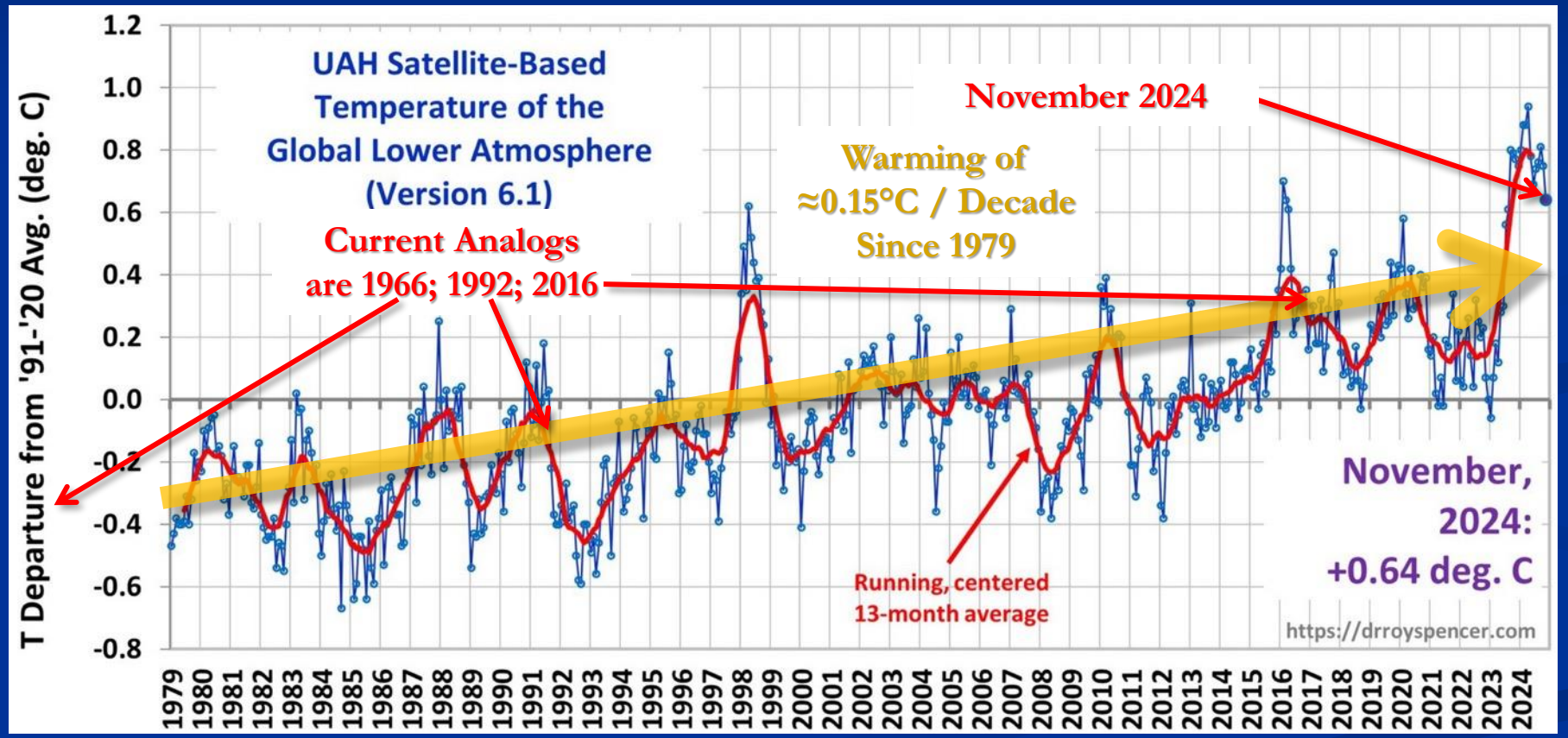
El Niño & La Niña Impact Global Temperatures...



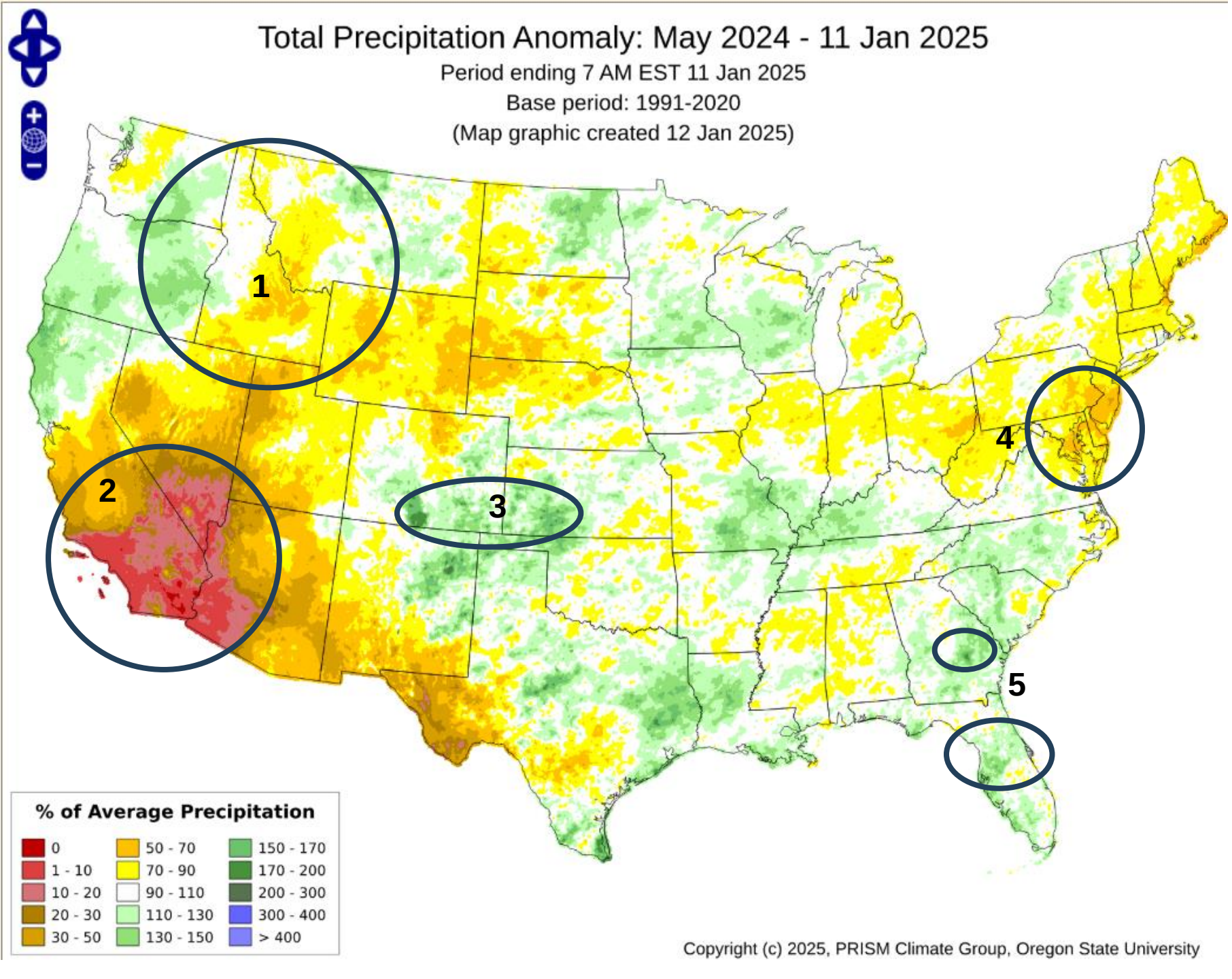
Courtesy: http://www.drroyspencer.com/latest-global-temperatures/

Global Temperature Trends

Increase Error in Analog Forecasts!



Courtesy: http://www.drroyspencer.com/latest-global-temperatures/



Let's look at the past weather /storms to see how we got here today.

Total Precipitation Since May 1, 2024

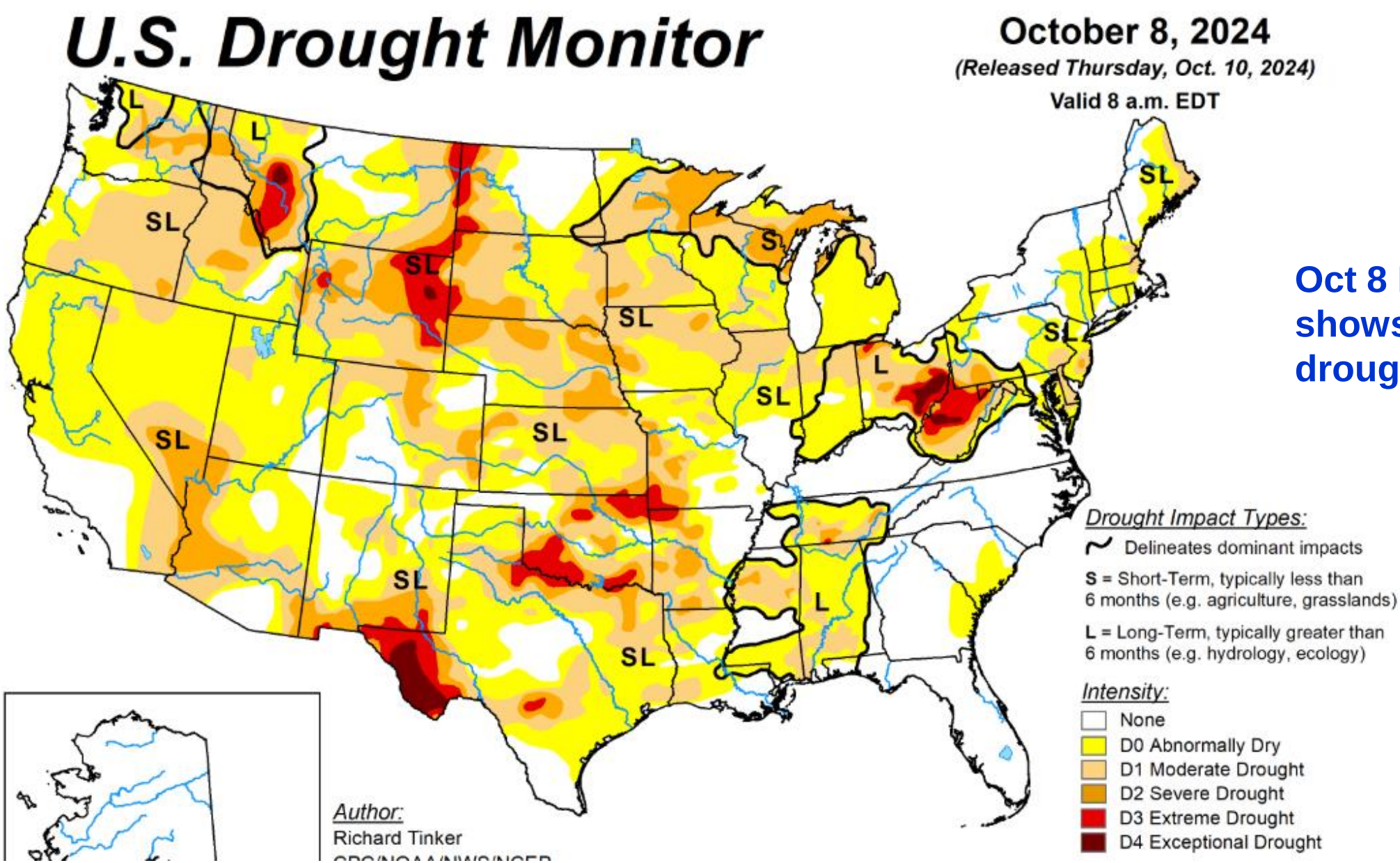
1. Idaho's Precip ranges from 50-130% Avg

2. Southern CA near 0%

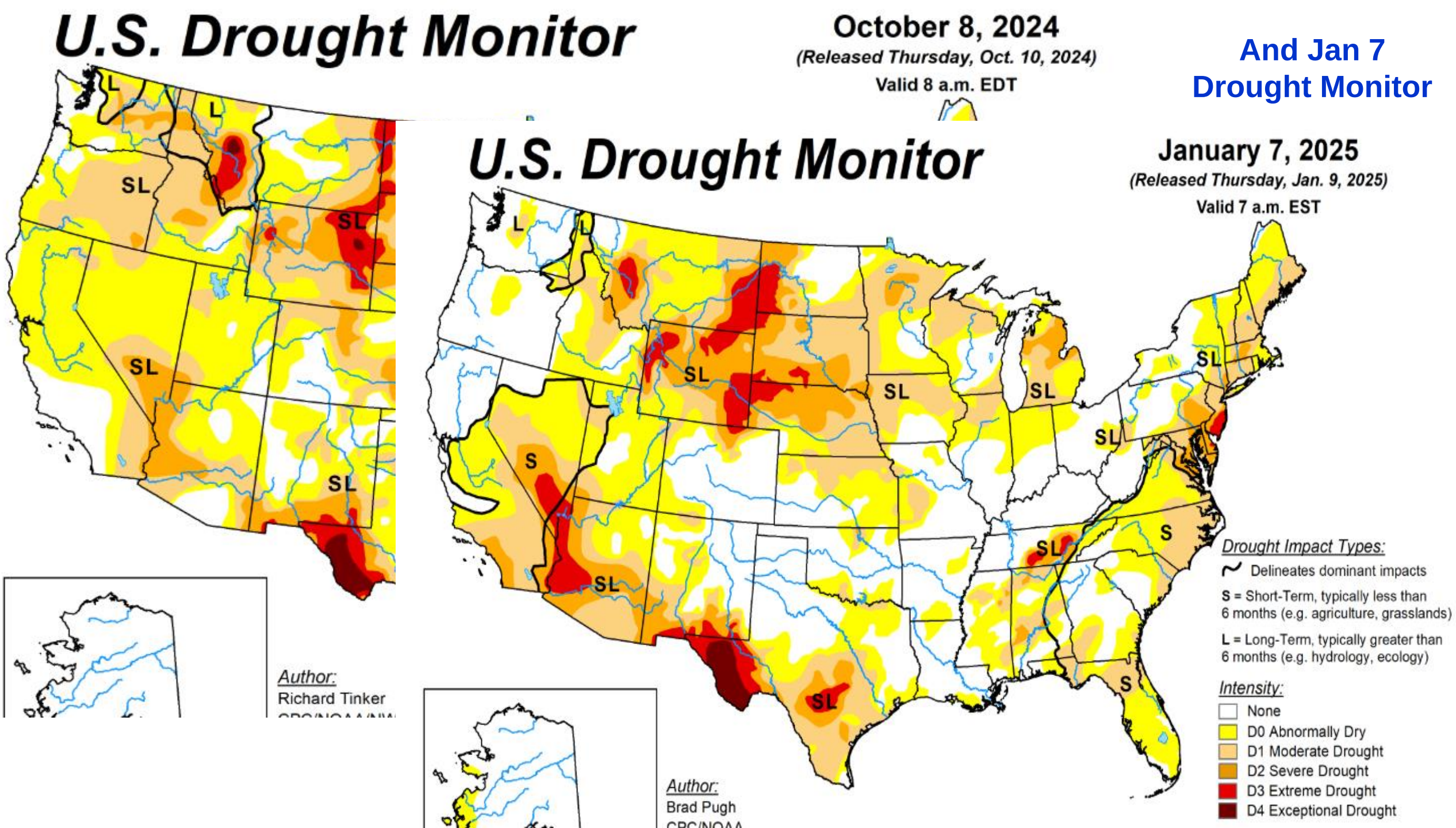
3. CO Nov snowstorm

4. NY Fires

5. Back-to-Back Major Hurricanes in SE

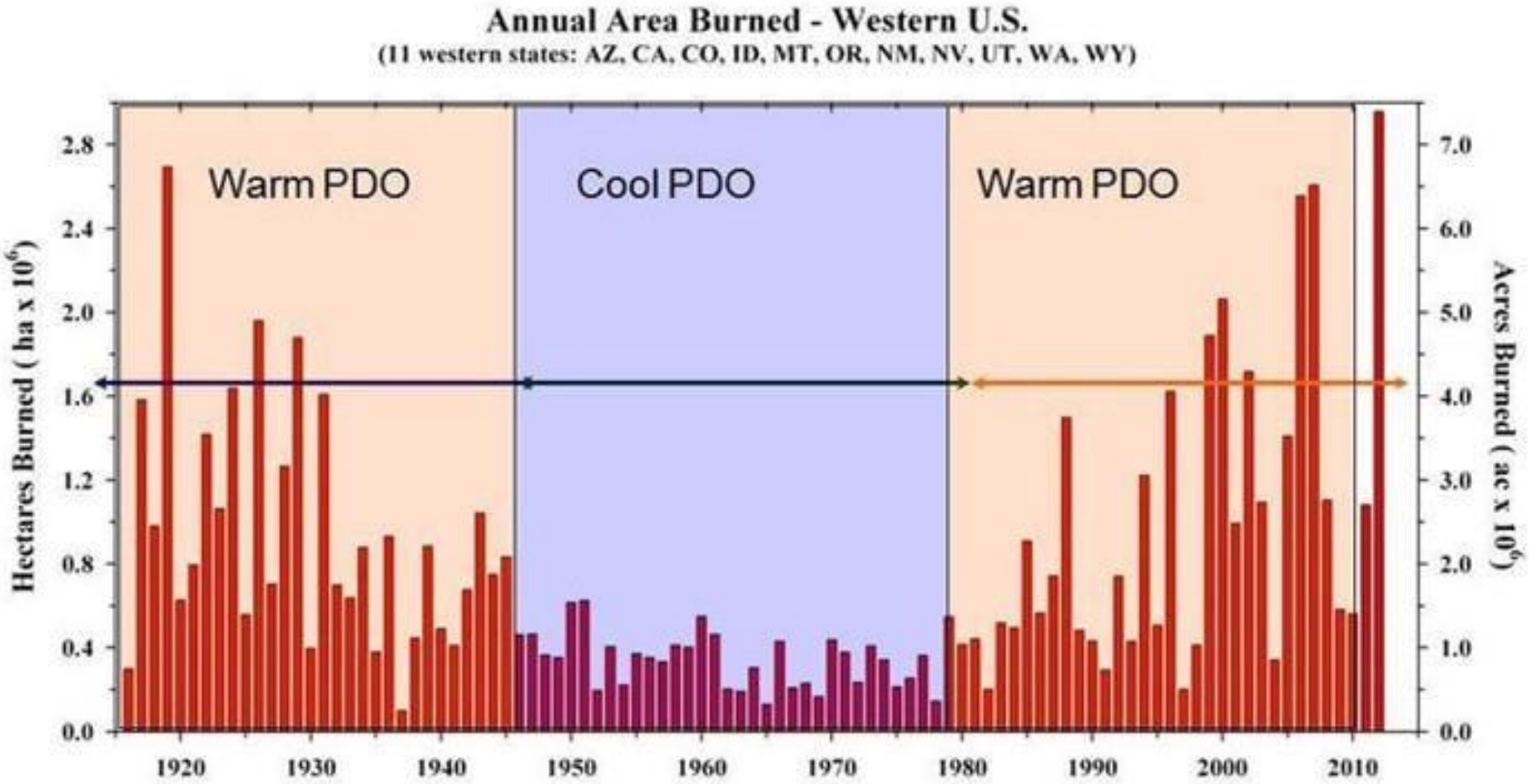


Oct 8 Drought Monitor shows some type of drought in most of West.



And Jan 7 Drought Monitor

Area burned in 11 Western states, 1916-2012

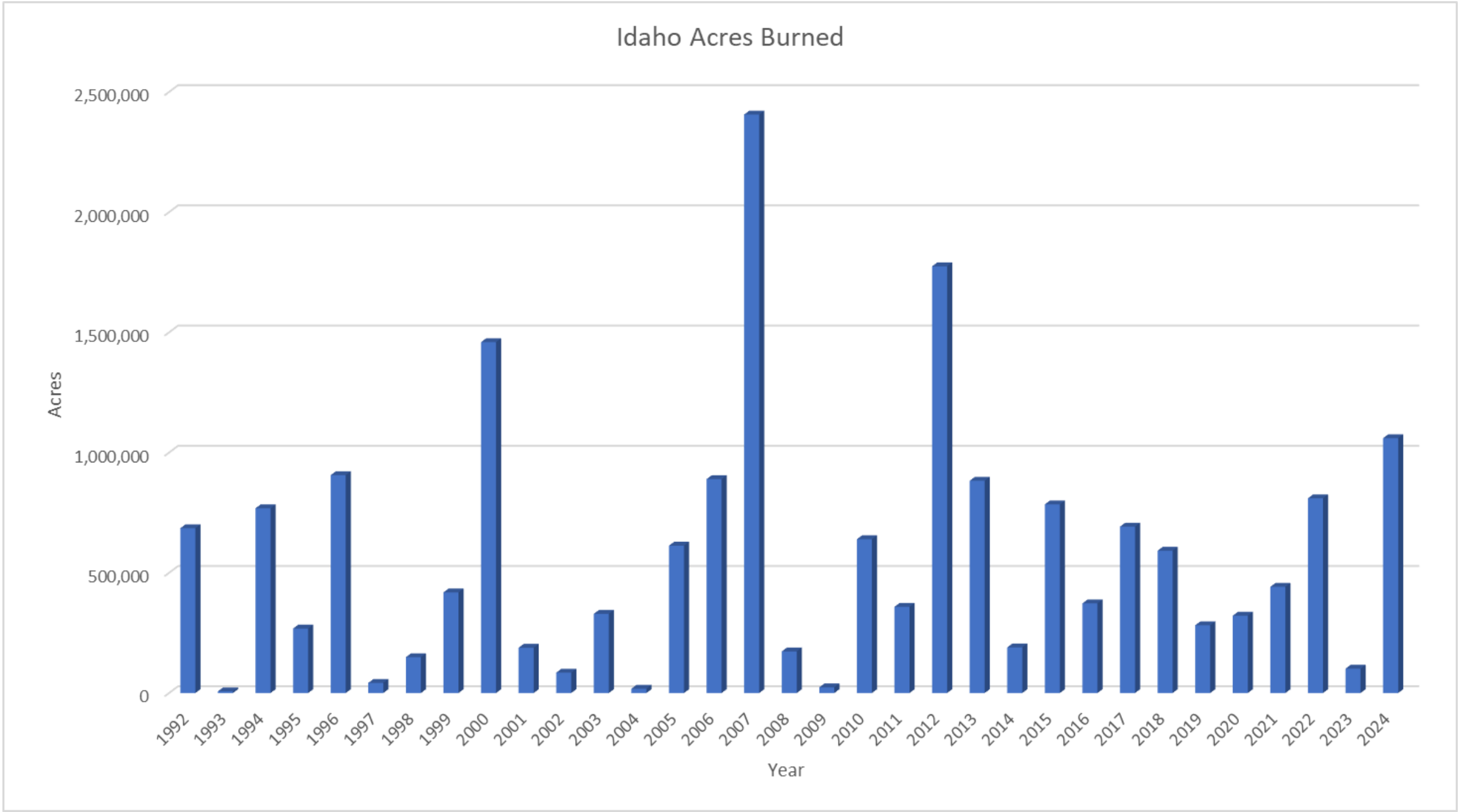


Period of post-settlement fire

Period of active fire suppression and fuel accumulation

Period of fire increase

Idaho Acres Burned 1992 - 2024



2024: An active year of U.S. billion-dollar weather and climate disasters

BY ADAM B. SMITH
PUBLISHED JANUARY 10, 2025
COMMENTS

NOAA's National Centers for Environmental Information (NCEI) has updated its 2024 Billion-dollar disaster analysis. In 2024, there were 27 individual weather and climate disasters with at least $1 billion in damages, trailing only the record-setting 28 events analyzed in 2023. These disasters caused at least **568 direct or indirect fatalities,** which is the eighth-highest for these billion-dollar disasters over the last 45 years (1980-2024). The cost was approximately $182.7 billion.

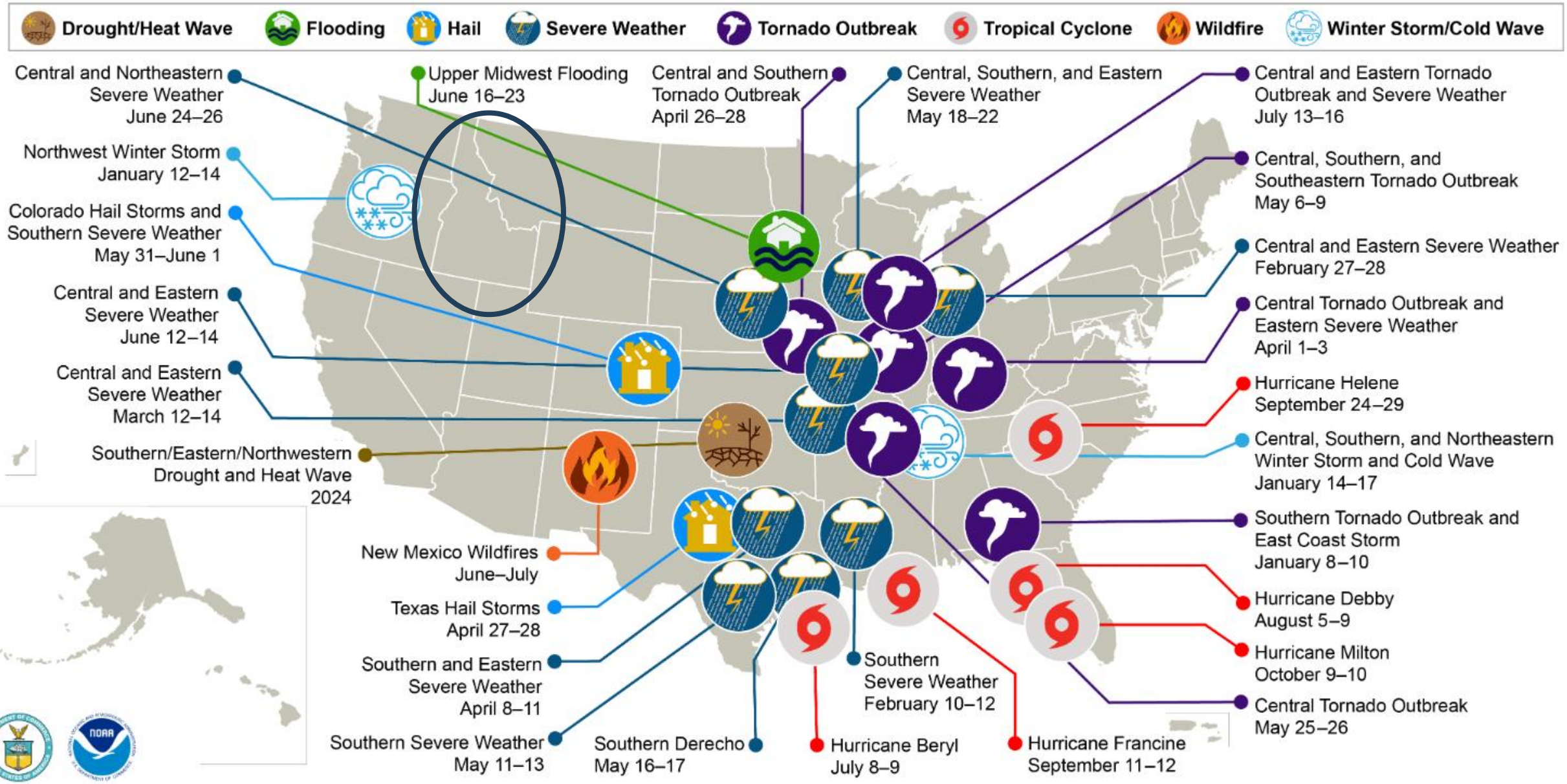
This total places 2024 as the fourth-costliest on record, trailing 2017 ($395.9 billion), 2005 ($268.5 billion) and 2022 ($183.6 billion). Adding the 27 events of 2024 to the record that begins in 1980, the U.S. has sustained **403 weather and climate disasters** for which the individual damage costs reached or exceeded $1 billion. The cumulative cost for these 403 events exceeds **$2.915 trillion**.

Climate.gov
SCIENCE & INFORMATION FOR A CLIMATE-SMART NATION

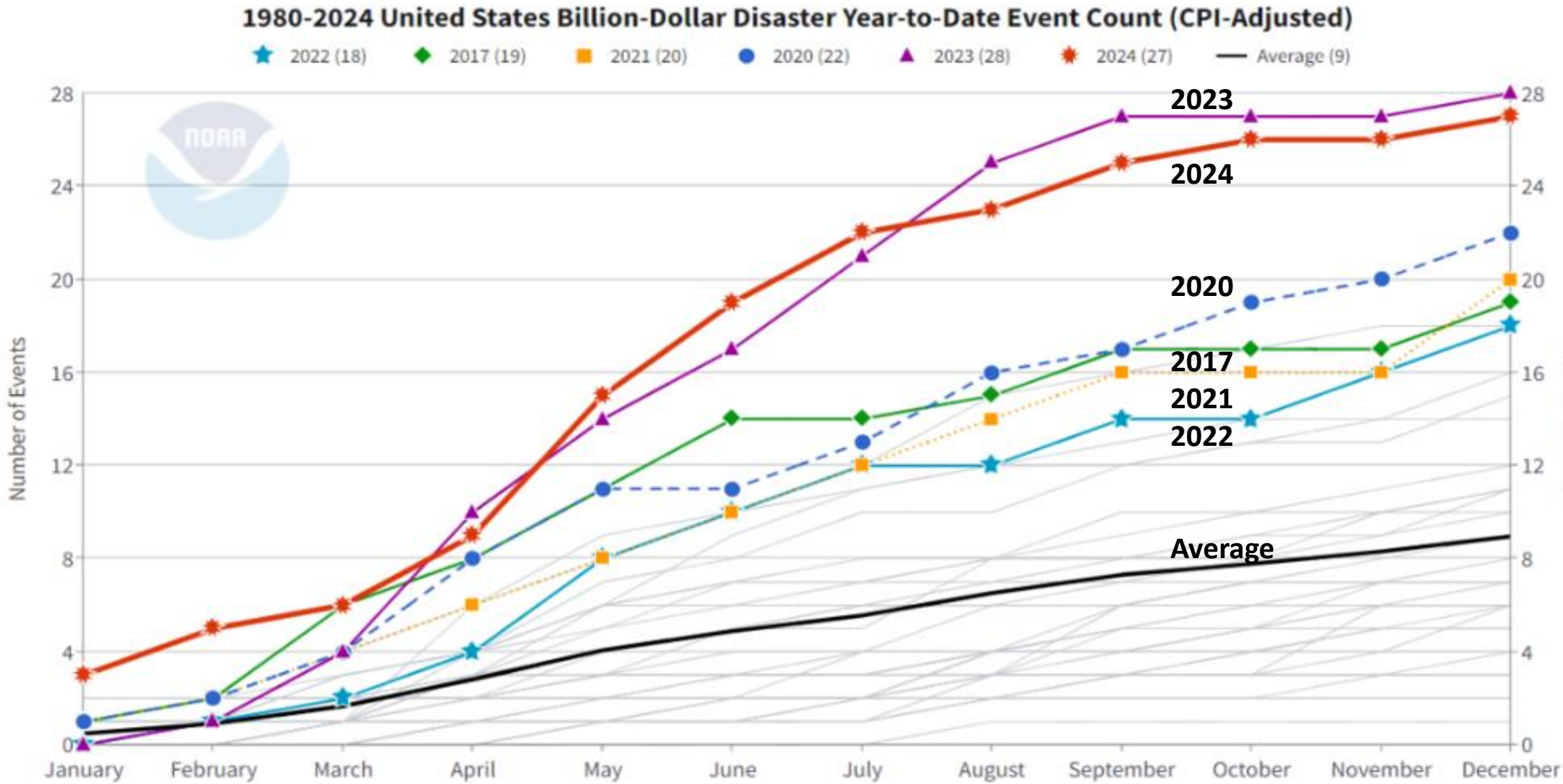
The billion-dollar disasters of 2024 came from multiple categories:

- **2 winter storm/cold wave events (across the Northwest and central/southern U.S. in mid-January).**
- **1 wildfire event (the South Fork Fire in New Mexico that destroyed many homes, vehicles, businesses and other infrastructure).**
- **1 drought and heat wave event (causing impacts across the southern, eastern and northwestern U.S.).**
- **1 flooding event (the Upper Midwest Flooding in mid-June across several states).**
- **6 tornado outbreaks (across the central and southeastern U.S.).**
- **5 tropical cyclones (Beryl, Debby, Francine, Helene and Milton – the final two were the costliest U.S. disasters of 2024).**
- **11 severe weather/hail events (across many parts of the country).**

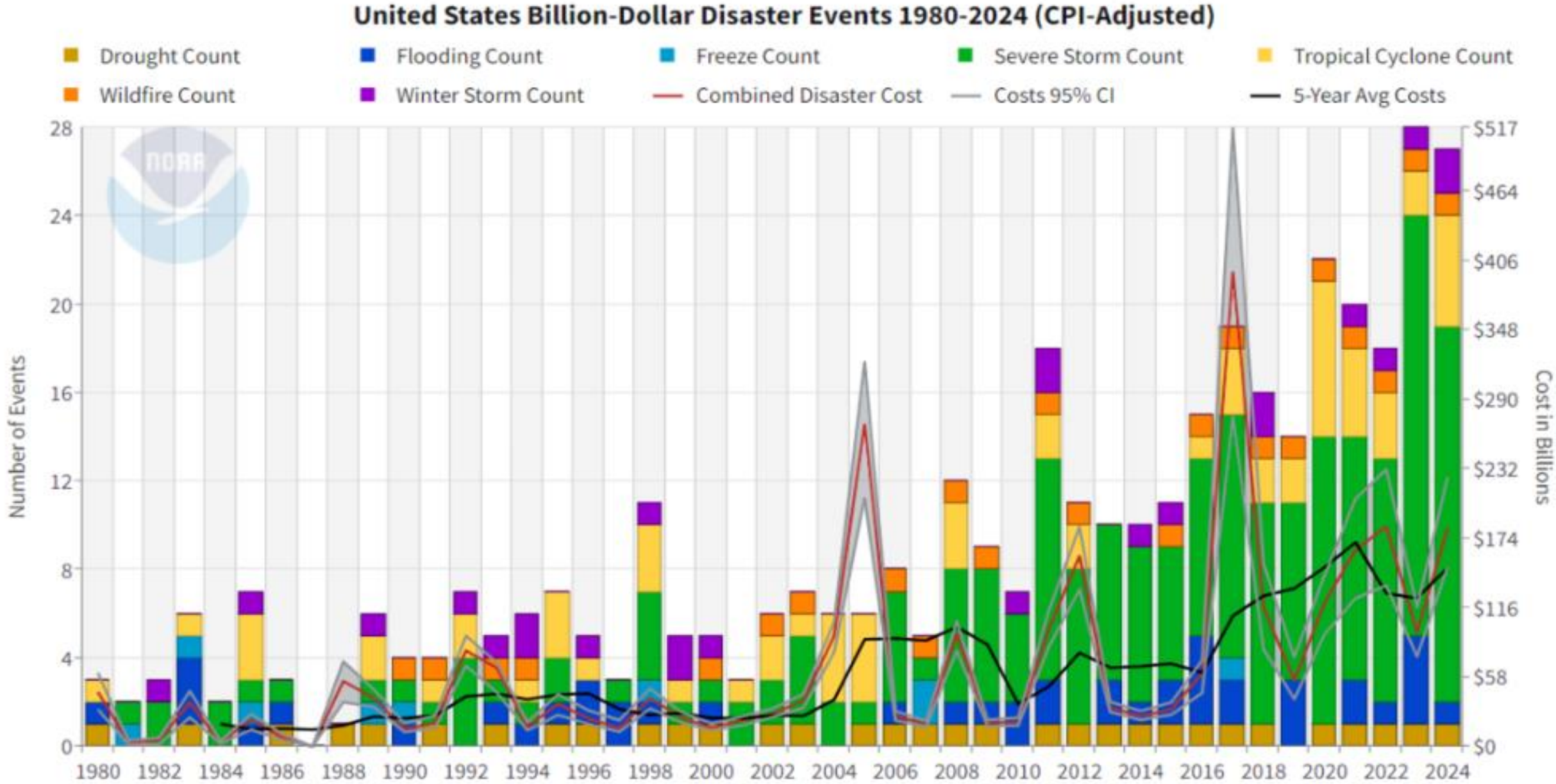
U.S. 2024 Billion-Dollar Weather and Climate Disasters



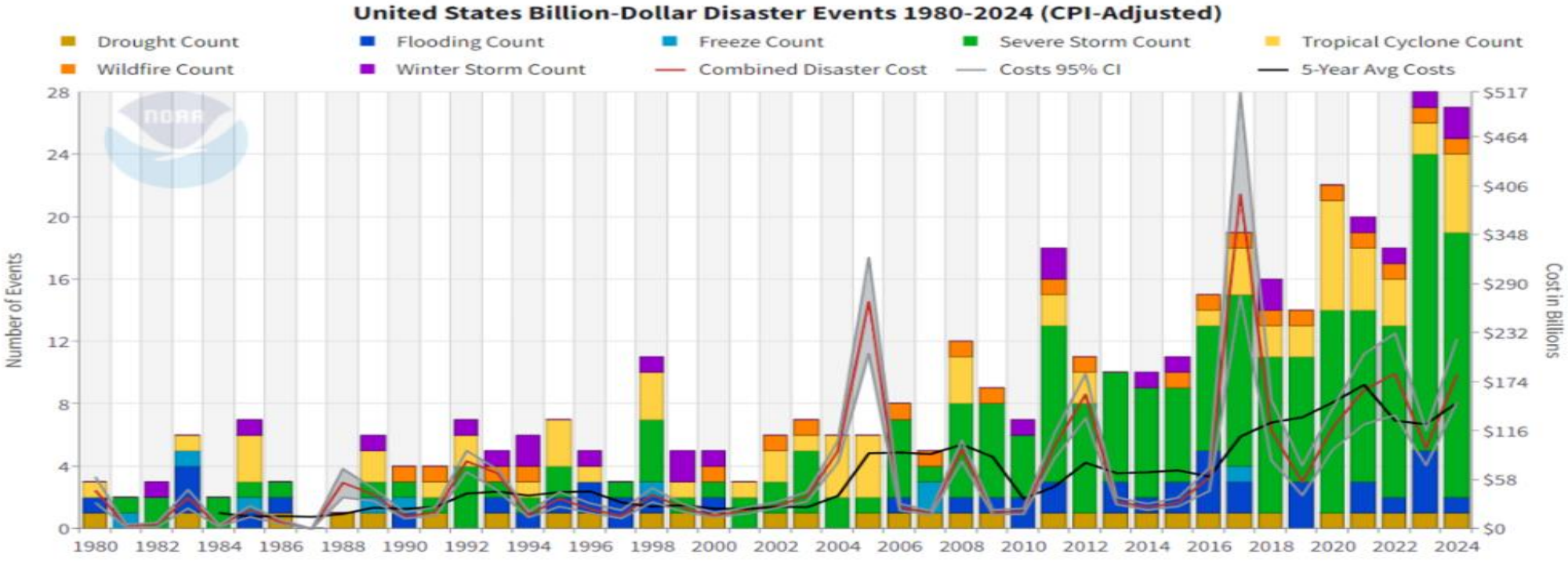
*This map denotes the approximate location for each of the **27 separate billion-dollar weather and climate disasters that impacted the United States in 2024.***

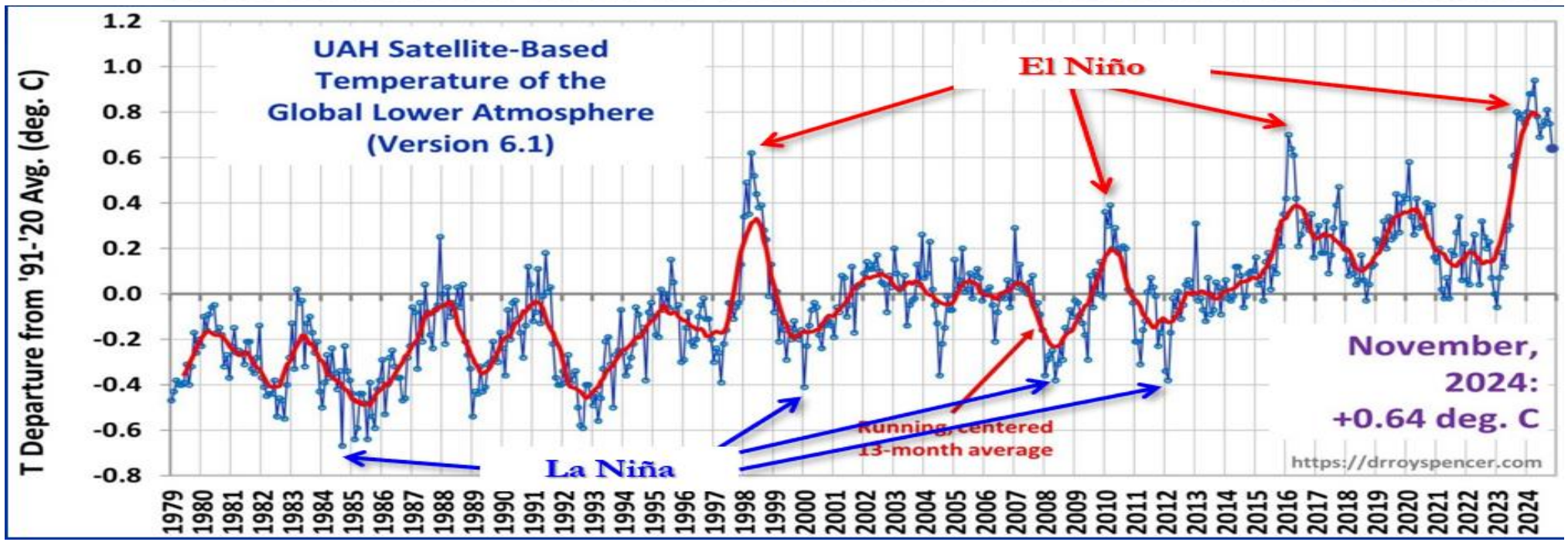


Month-by-month accumulation of billion-dollar disasters for each year on record. The colored lines represent the top 6 years for most billion-dollar disasters. The dark gray line shows the average. All other years are colored light gray. NOAA NCEI Billion-dollar Disasters webpage.

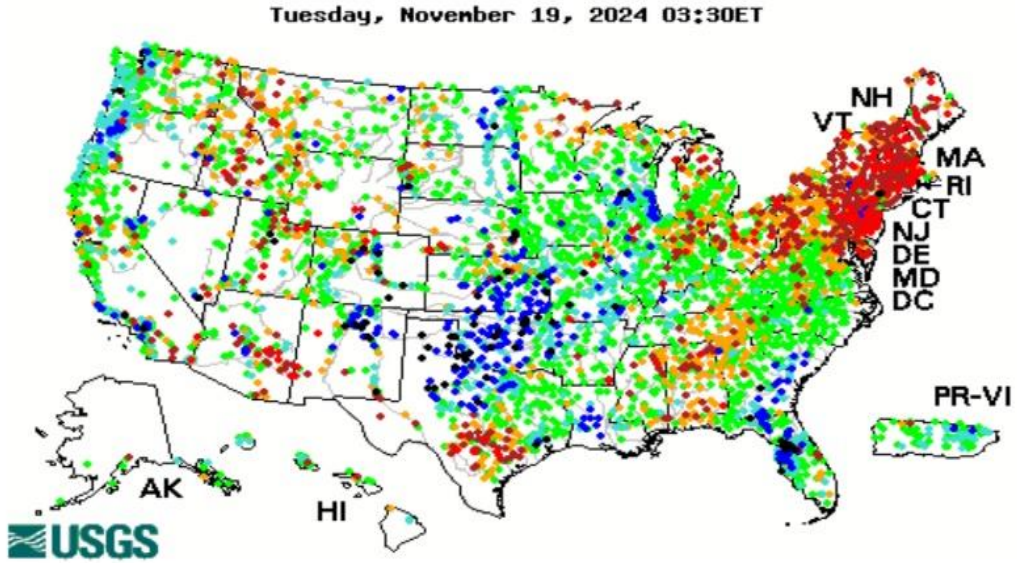


The history of billion-dollar disasters in the United States each year from 1980 to 2024, showing event type (colors), frequency (left-hand vertical axis), and cost (right-hand vertical axis) adjusted for inflation to 2024 dollars. NOAA NCEI Billion-dollar Disasters webpage.


United States Billion-Dollar Disaster Events 1980-2024 (CPI-Adjusted)
Drought Count
Flooding Count
Freeze Count
Severe Storm Count
Tropical Cyclone Count
Wildfire Count
Winter Storm Count
Combined Disaster Cost
Costs 95% CI
5-Year Avg Costs
Number of Events
Cost in Billions
0
4
8
12
16
20
24
28
$0
$58
$116
$174
$232
$290
$348
$406
$464
$517
1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024


UAH Satellite-Based
Temperature of the
Global Lower Atmosphere
(Version 6.1)
El Niño
La Niña
Running, centered
13-month average
November,
2024:
+0.64 deg. C
https://drroyspencer.com
T Departure from '91-'20 Avg. (deg. C)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
-0.8
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Daily Streamflow Conditions



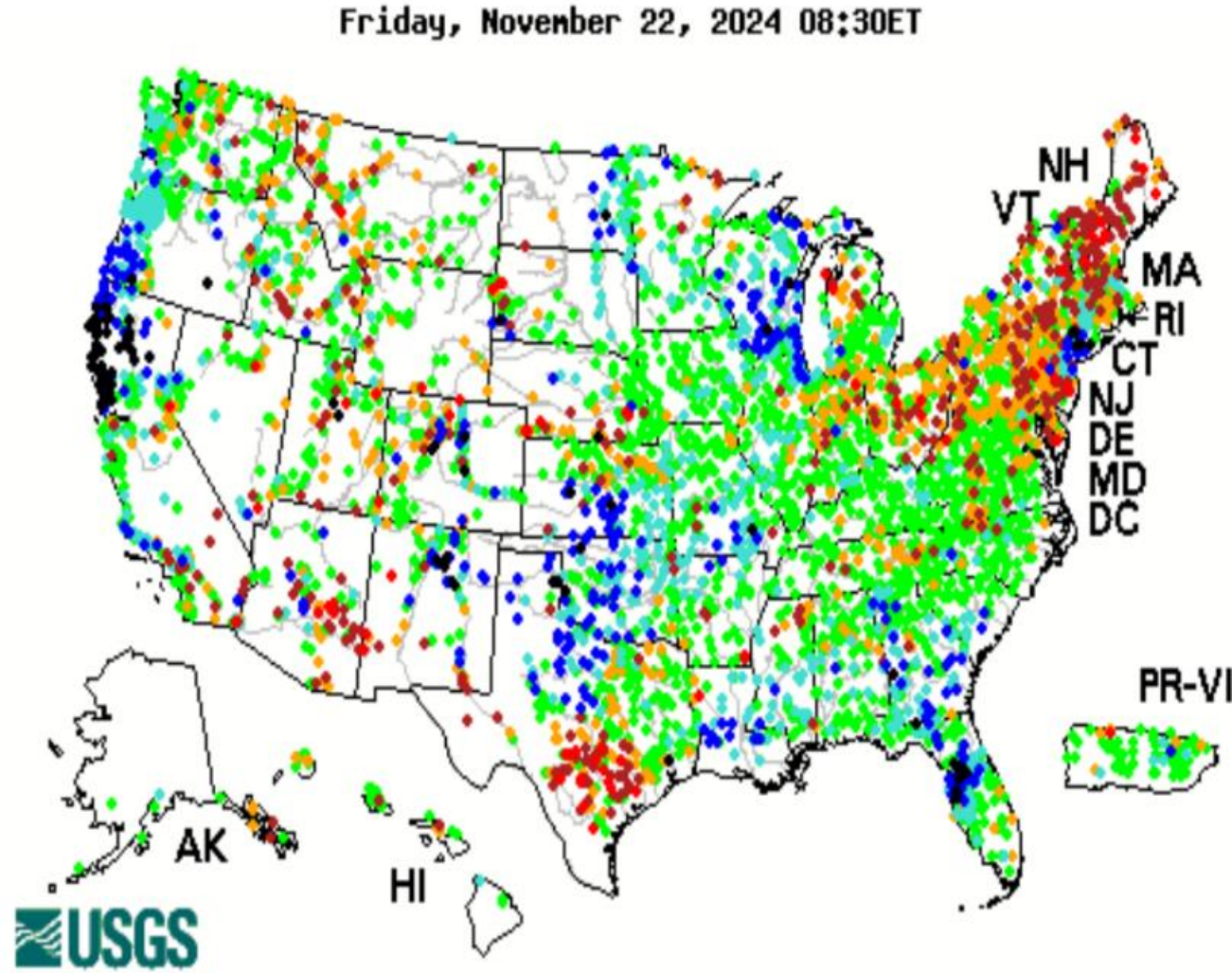
Explanation

- High
- > 90th percentile
- 76th - 90th percentile
- 25th - 75th percentile
- 10th - 24th percentile
- < 10th percentile
- Low
- Not ranked

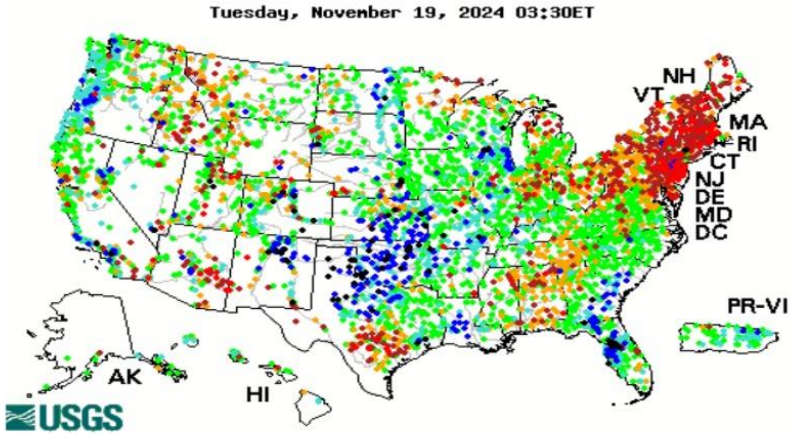
The colored dots on this map depict streamflow conditions as a percentile, which is computed from the period of record for the current day of the year. Only stations with at least 30 years of record are used.

The **gray circles** indicate other stations that were not ranked in percentiles either because they have fewer than 30 years of record or because they

Daily Streamflow Conditions



Daily Streamflow Conditions



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Explanation

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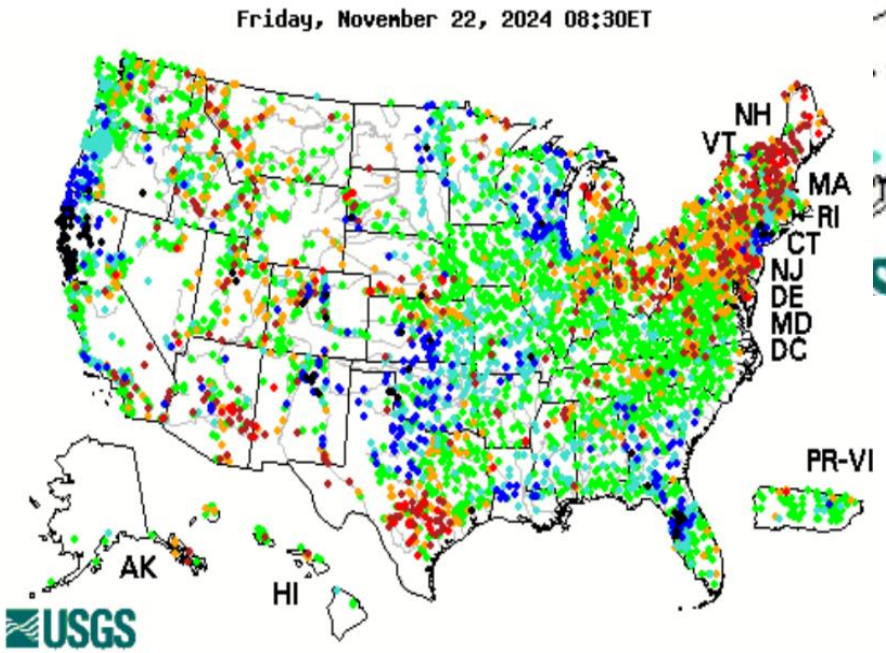
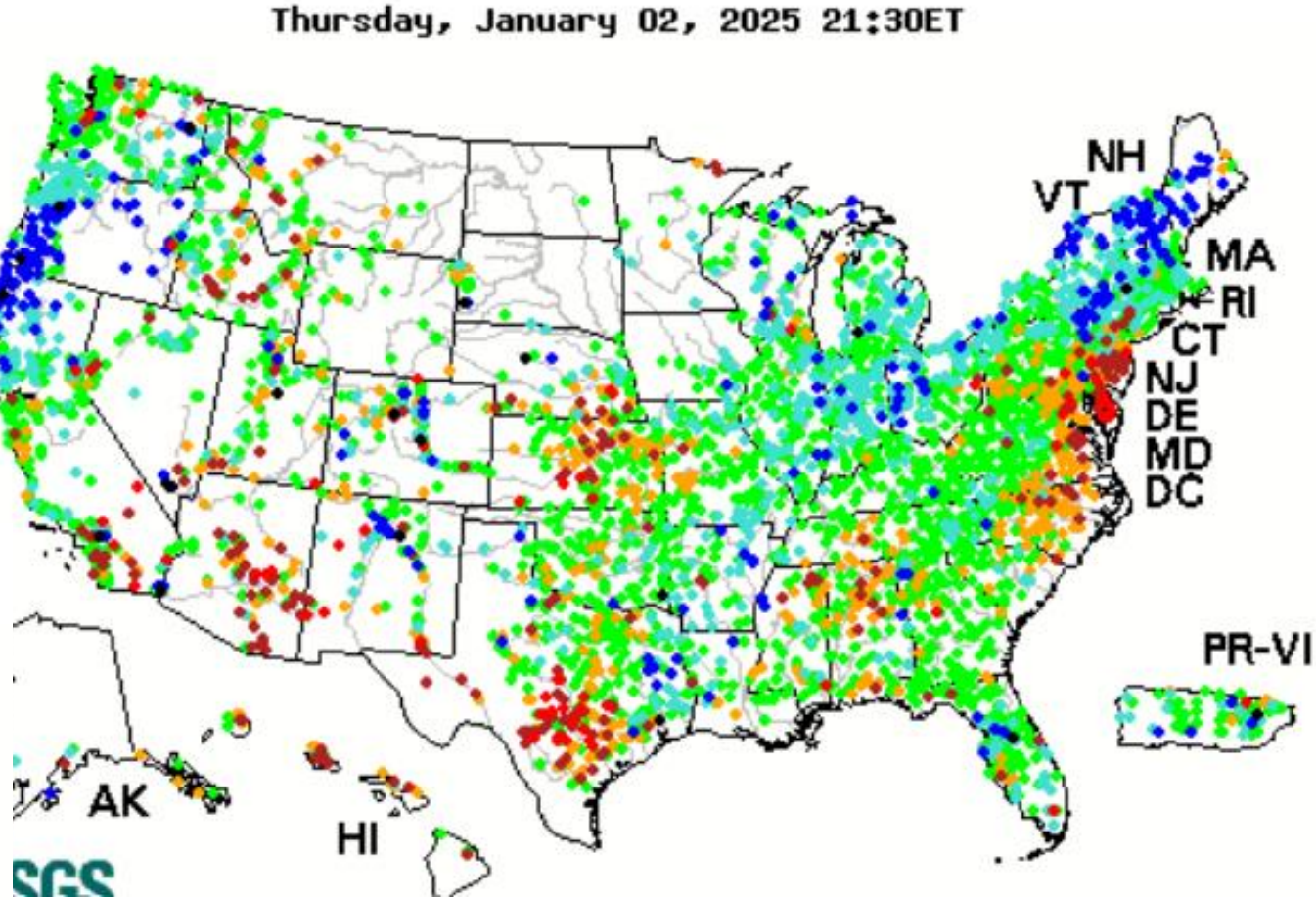
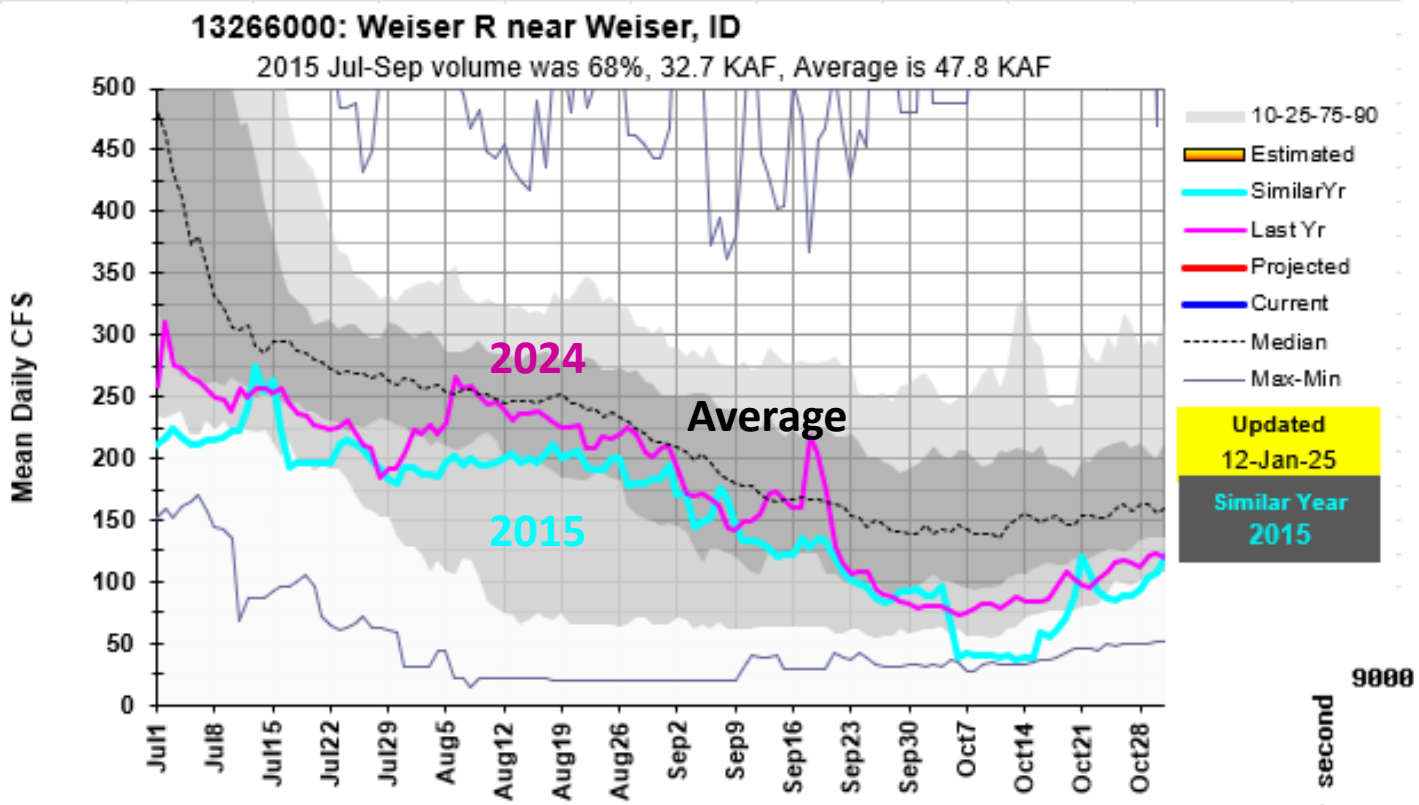
Daily Streamflow Conditions

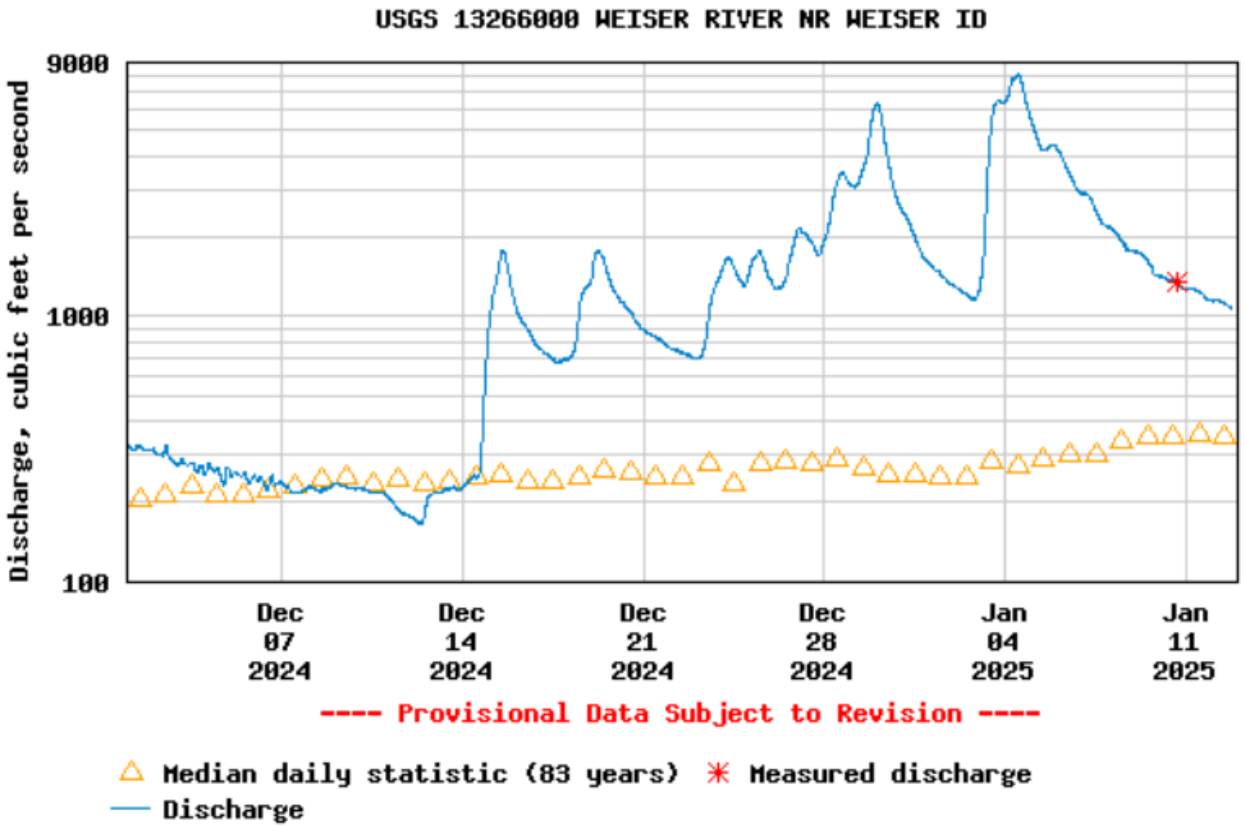


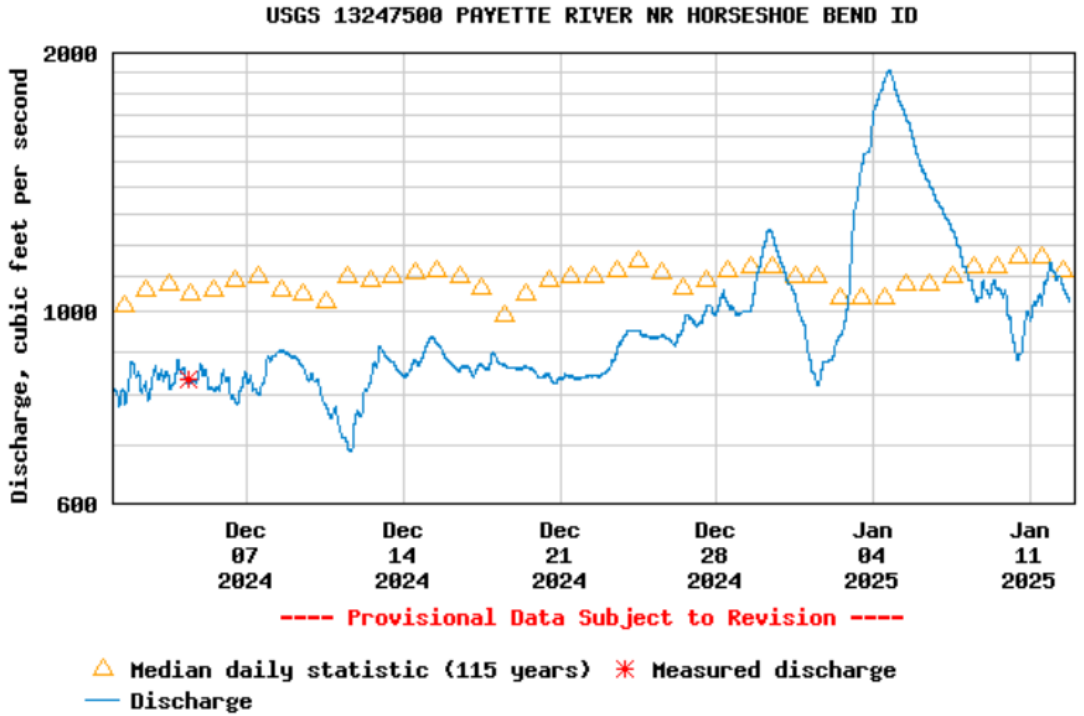
Daily Streamflow Conditions





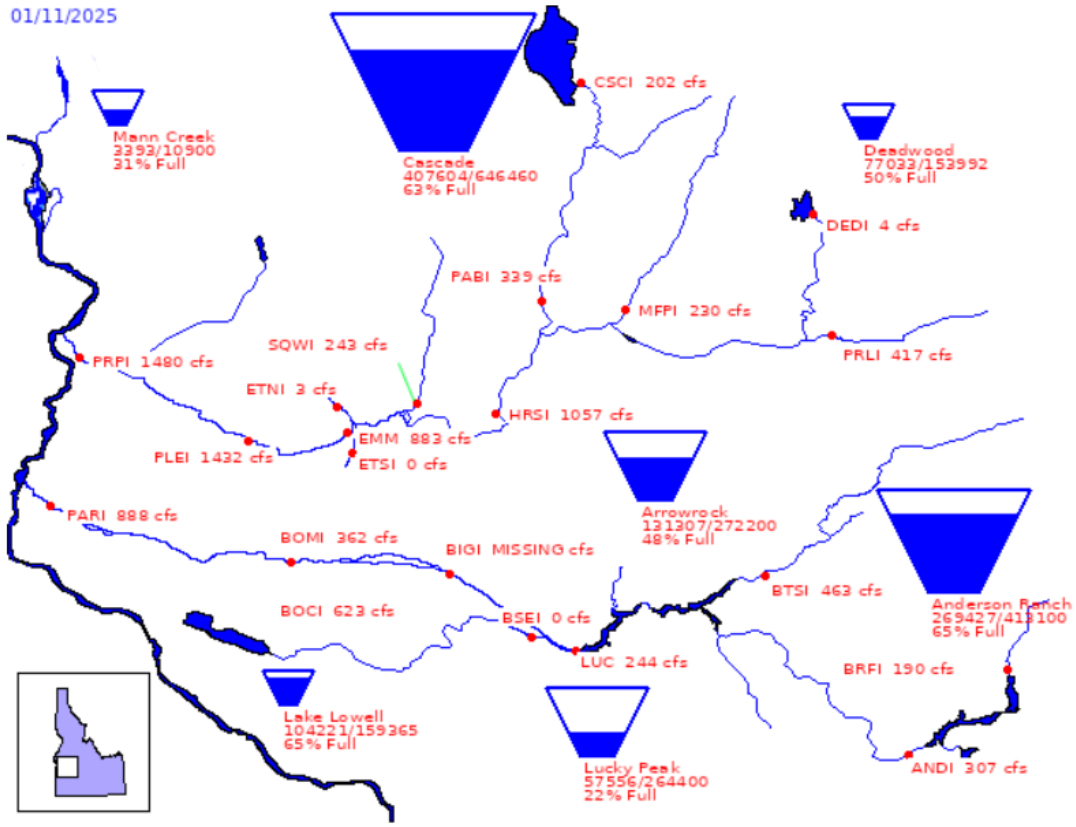
Late Dec & Jan 4 peaks pushing 9000 cfs means soils are probably primed.





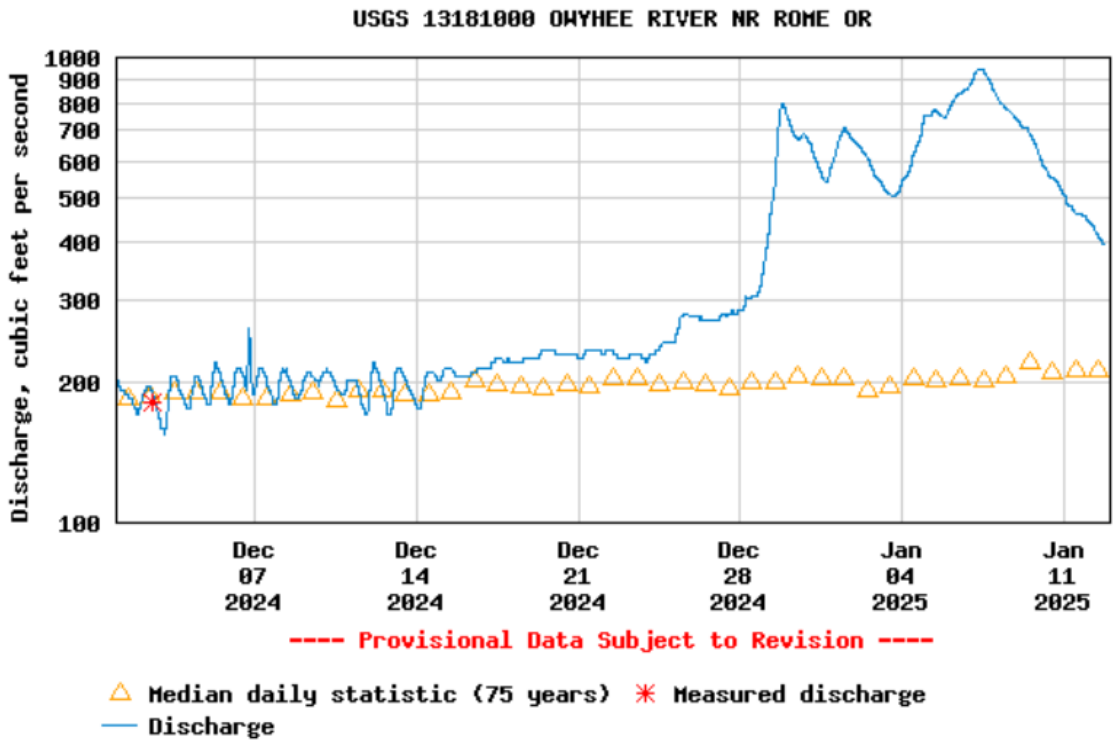
Payette River also had a Jan 5 peak pushing 1800 cfs

Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Boise & Payette River Basins



Payette Reservoir System 61% of Capacity

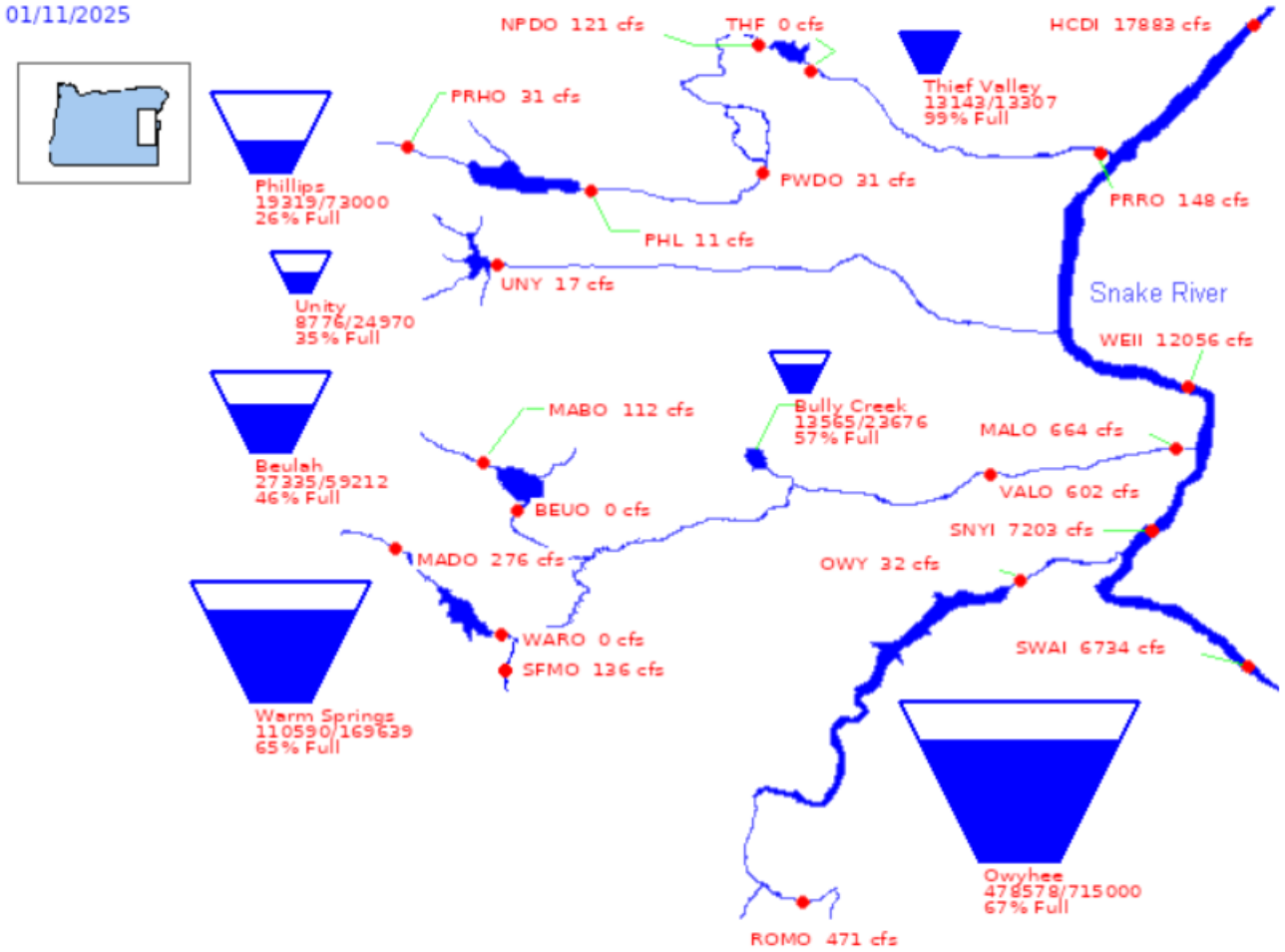
Boise Reservoir System 48% of Capacity
which is average



Owyhee River above Reservoir reached peaks of 800 and 900 cfs

Owhyee Reservoir 67% of Capacity

US Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in Southeastern Oregon



Owyhee Basin SWSI

Adequate Water Supply Greater than -1.5 SWSI or 575 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13183000	Owyhee R blw Owyhee Dam	Feb-Sep	strm	1991-2024	34	Units KAF
13182500	Lake Owyhee nr Nyssa	31-Dec	resv	1991-2024	34	Units KAF

ENSO Classification
SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Feb-Sep	Reservoir 31-Dec	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
	2025 10% Chance Exceedance Forcast	N	1090	459	1549	99%	4.0
1	2006	N	1161	474	1635	97%	3.9
2	2011	SL	1347	215	1561	94%	3.7
3	1998	SE	897	438	1336	91%	3.5
4	1996	N	825	479	1304	89%	3.2
5	2024	N	858	395	1253	86%	3.0
6	2017	LN	1024	213	1236	83%	2.7
7	1997	N	784	443	1227	80%	2.5
	2025 30% Chance Exceedance Forcast	N	760	459	1219	79%	2.4
8	1999	SL	662	480	1142	77%	2.3
9	1993	EN	1097	37	1134	74%	2.0
	2025 50% Chance Exceedance Forcast	N	575	459	1034	73%	1.9
10	2019	N	746	254	1000	71%	1.8
11	1995	SE	825	85	910	69%	1.5
	2025 70% Chance Exceedance Forcast	N	440	459	899	67%	1.4
12	2005	EN	660	152	813	66%	1.3
13	2020	N	331	481	812	63%	1.1
14	2000	N	349	426	775	60%	0.8
15	2023	LN	667	94	761	57%	0.6
	2025 90% Chance Exceedance Forcast	N	295	459	754	56%	0.5
16	2012	LN	257	492	749	54%	0.4
17	2007	EN	241	448	689	51%	0.1
18	2018	LN	226	461	687	49%	-0.1
19	2008	N	504	174	678	46%	-0.4
20	2009	N	442	186	628	43%	-0.6
21	2016	SE	545	70	614	40%	-0.8
22	2010	EN	425	160	585	37%	-1.1
23	2004	N	524	56	580	34%	-1.3
24	1994	SE	152	423	575	31%	-1.5
25	2001	LN	316	251	567	29%	-1.8

2024 →

2023 →

Based upon NRCS Jan 1 Streamflow Forecasts and current reservoir storage shows there's better than a 90% chance of having adequate irrigation supplies for the Owyhee Reservoir Users.

Adequate supplies above 575 KAF (Streamflow & Reservoir Storage)

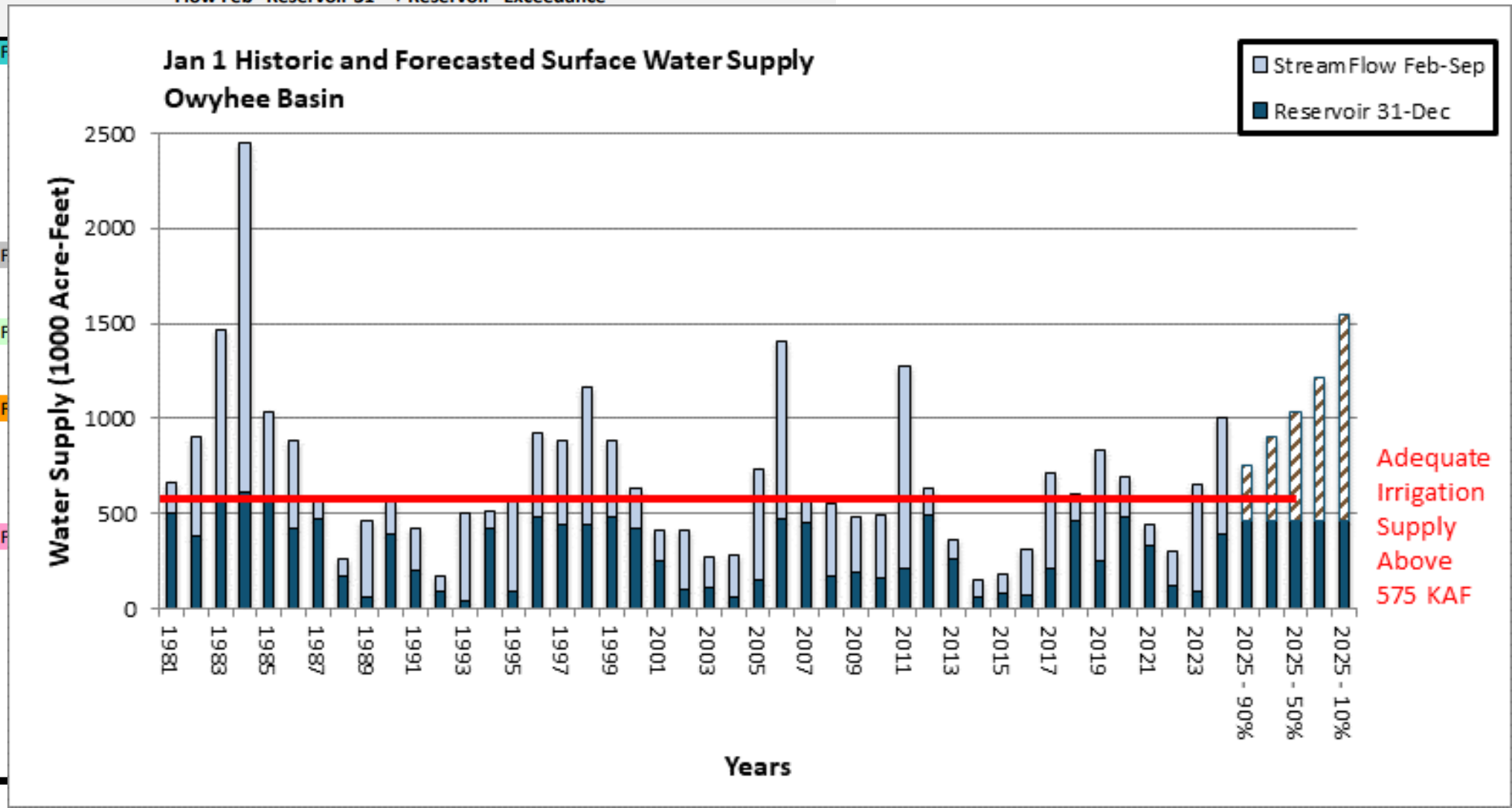
Owyhee Basin SWSI

Adequate Water Supply Greater than -1.5 SWSI or 575 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13183000	Owyhee R blw Owyhee Dam	Feb-Sep	strm	1991-2024	34	Units KAF
13182500	Lake Owyhee nr Nyssa	31-Dec	resv	1991-2024	34	Units KAF

ENSO Classification
SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Stream Flow Feb-	Reservoir 31-	Streamflow + Reservoir	Non-Exceedance
2025 10% Chance Exceedance F				
1				
2				
3				
4				
5				
6				
7				
2025 30% Chance Exceedance F				
8				
9				
2025 50% Chance Exceedance F				
10				
11				
2025 70% Chance Exceedance F				
12				
13				
14				
15				
2025 90% Chance Exceedance F				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

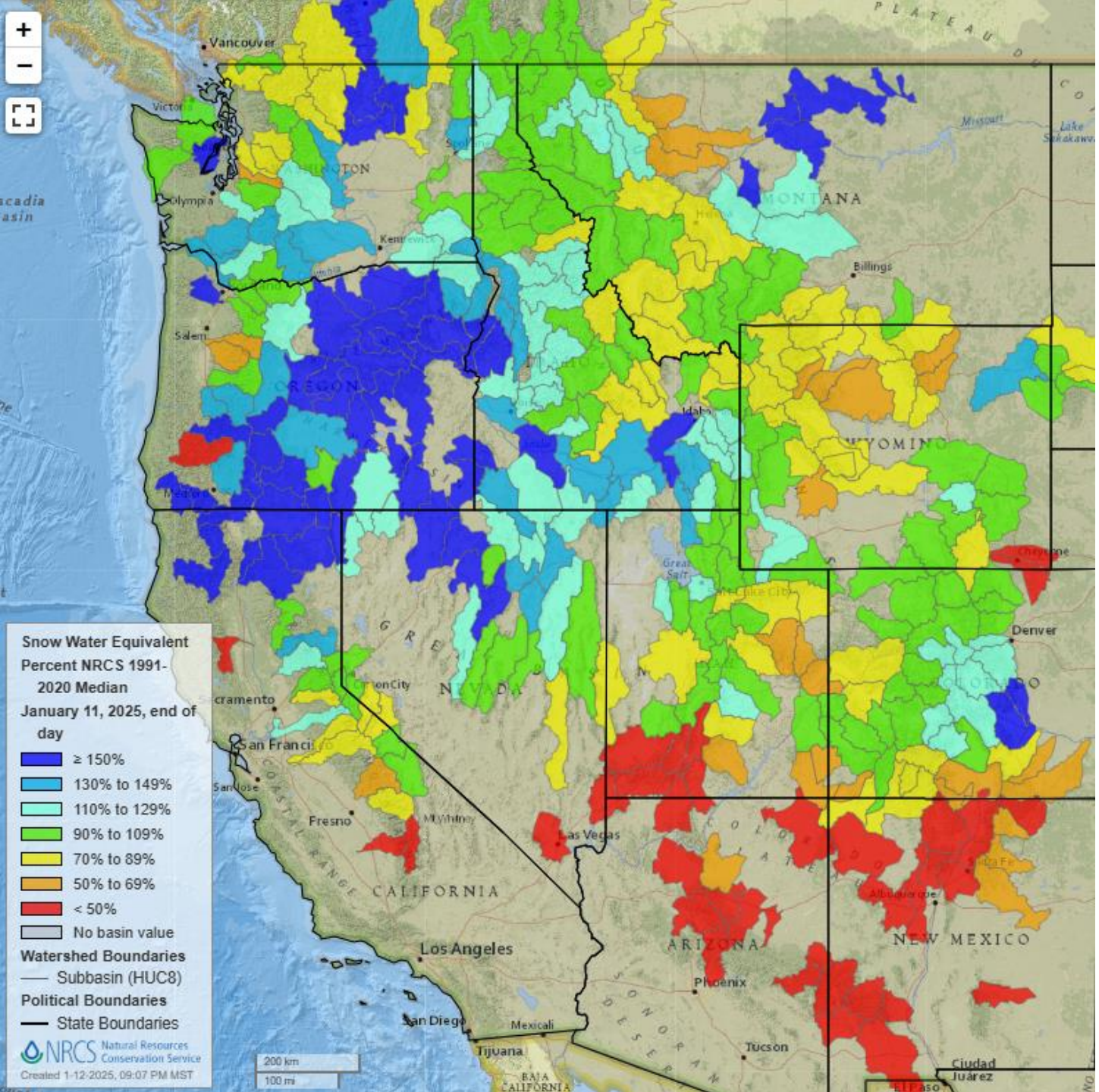


Current Analog Years	Winter Of	Water Year
1965-66 =>	1966-67	**1967**
1991-92 =>	1992-93	**1993**
2015-16 =>	2016-17	**2017**

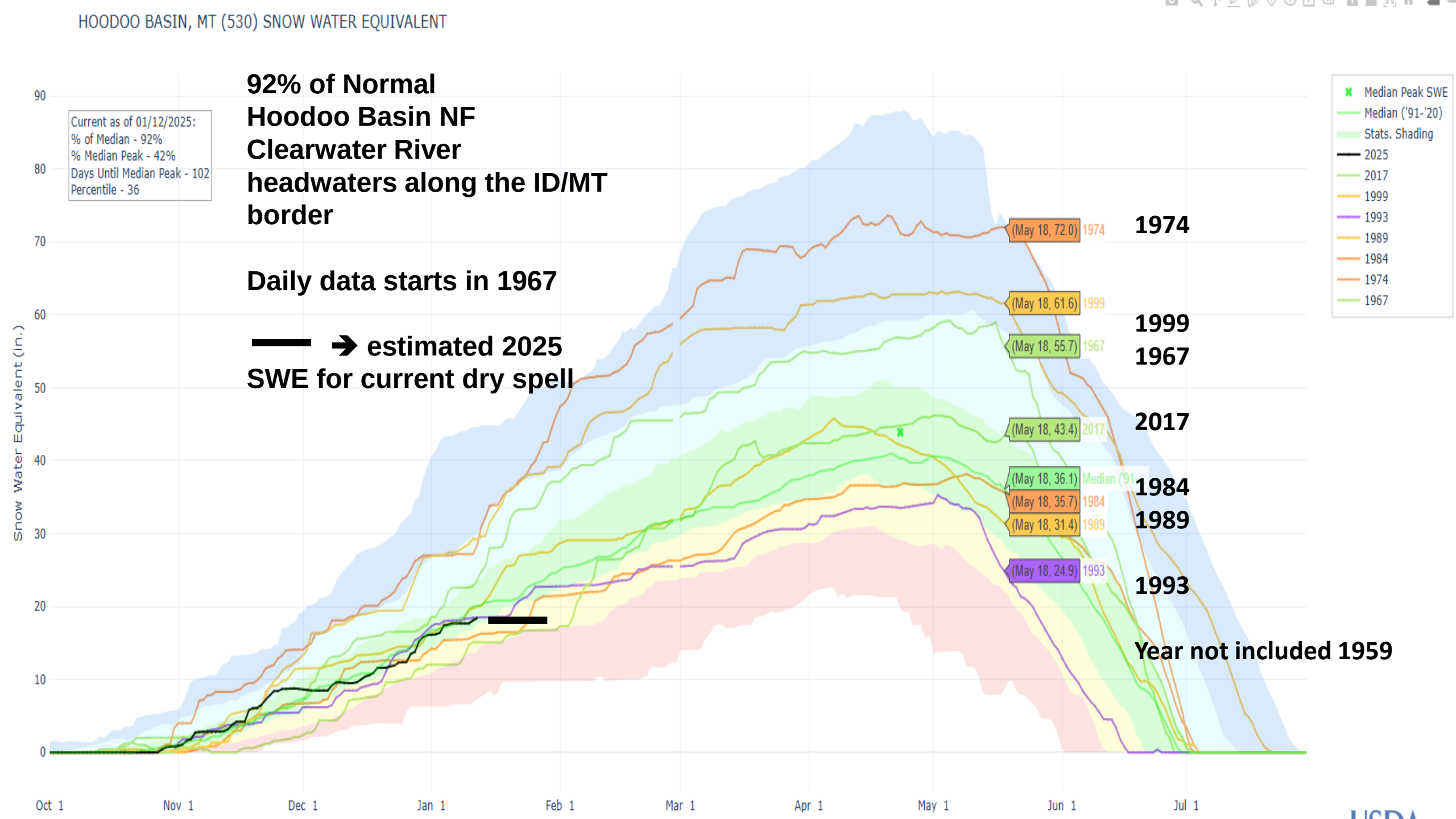
Strong & Very Strong El Nino Years	Year Following a Strong & Very Strong El Nino Year	ENSO	Streamflow as % of 1991 - 2020 Average: Feb-Sep Owyhee R blw Dam	Apr-Sep Weiser River nr Weiser	Apr-Sep Boise R nr Boise	Apr-Sep Payette R nr Horseshoe Bend	Apr-Sep MF Salmon R at MF Lodge	Apr-Sep Salmon R at White Bird	Apr-Sep Selway River	Apr-Sep Spokane R nr Post Falls
Very Strong					Sorted high to low					
2015-16	2017	LA	155	135	184	164	180	148	104	110
1982-83	1984	LA	363	159	162	146	NA	144	126	109
1997-98	1999	LA	100	156	138	140	121	124	112	126
Strong										
1972-73	1974	LA	120	167	185	188	182	164	145	189
1991-92	1993	N	165	153	124	128	NA	107	94	114
1965-66	1967	N	69	106	107	111	NA	119	109	110
1987-88	1989	LA	145	98	99	91	NA	78	102	114
1957-58	1959	EL	20	78	89	99	NA	101	124	136
2023-24	2025	LA	?	?	?	?	?	?	?	?

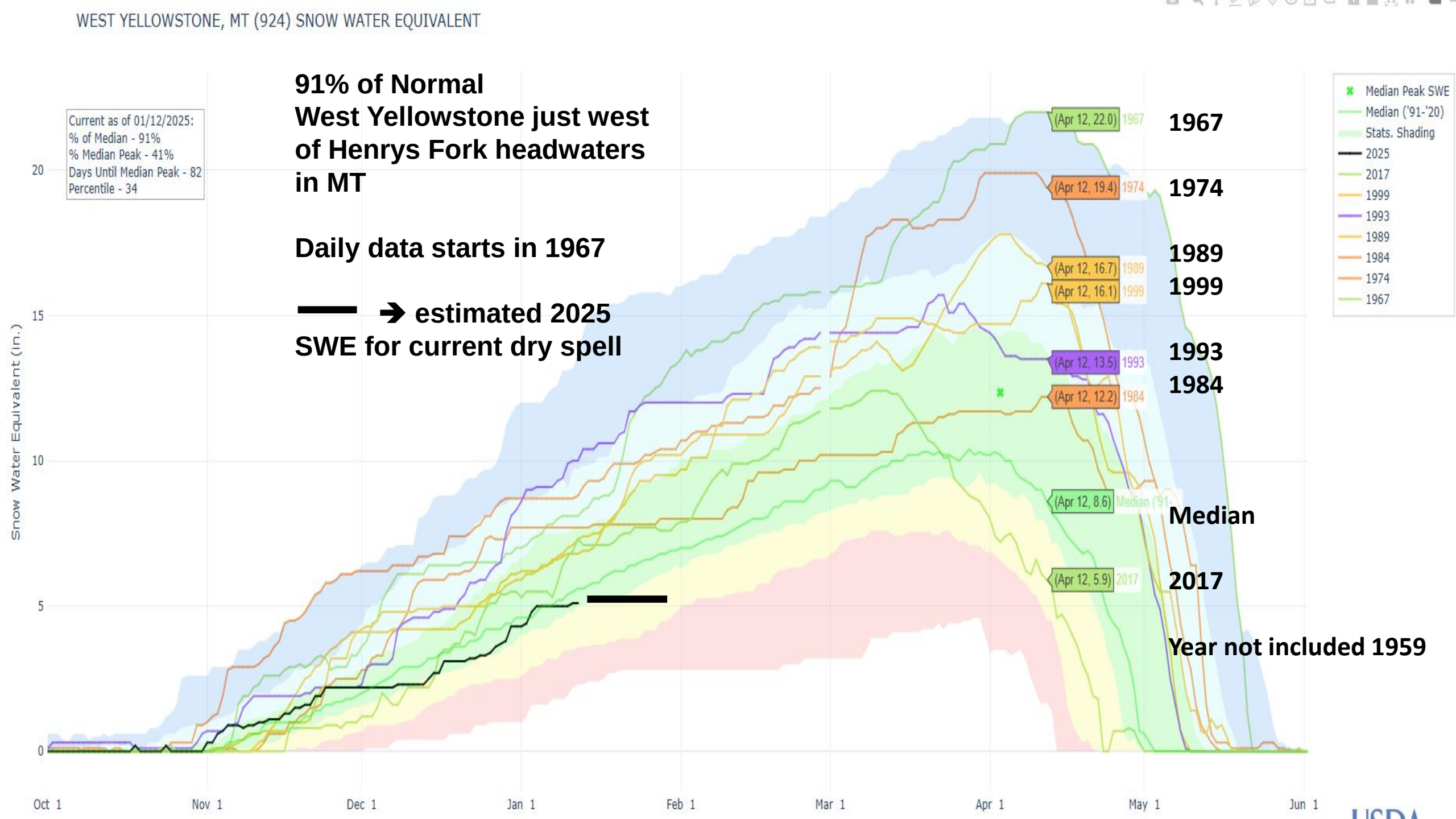
Sorted high to low

Streamflow %s color code
< 80%
80-110%
110-150%
> 150%

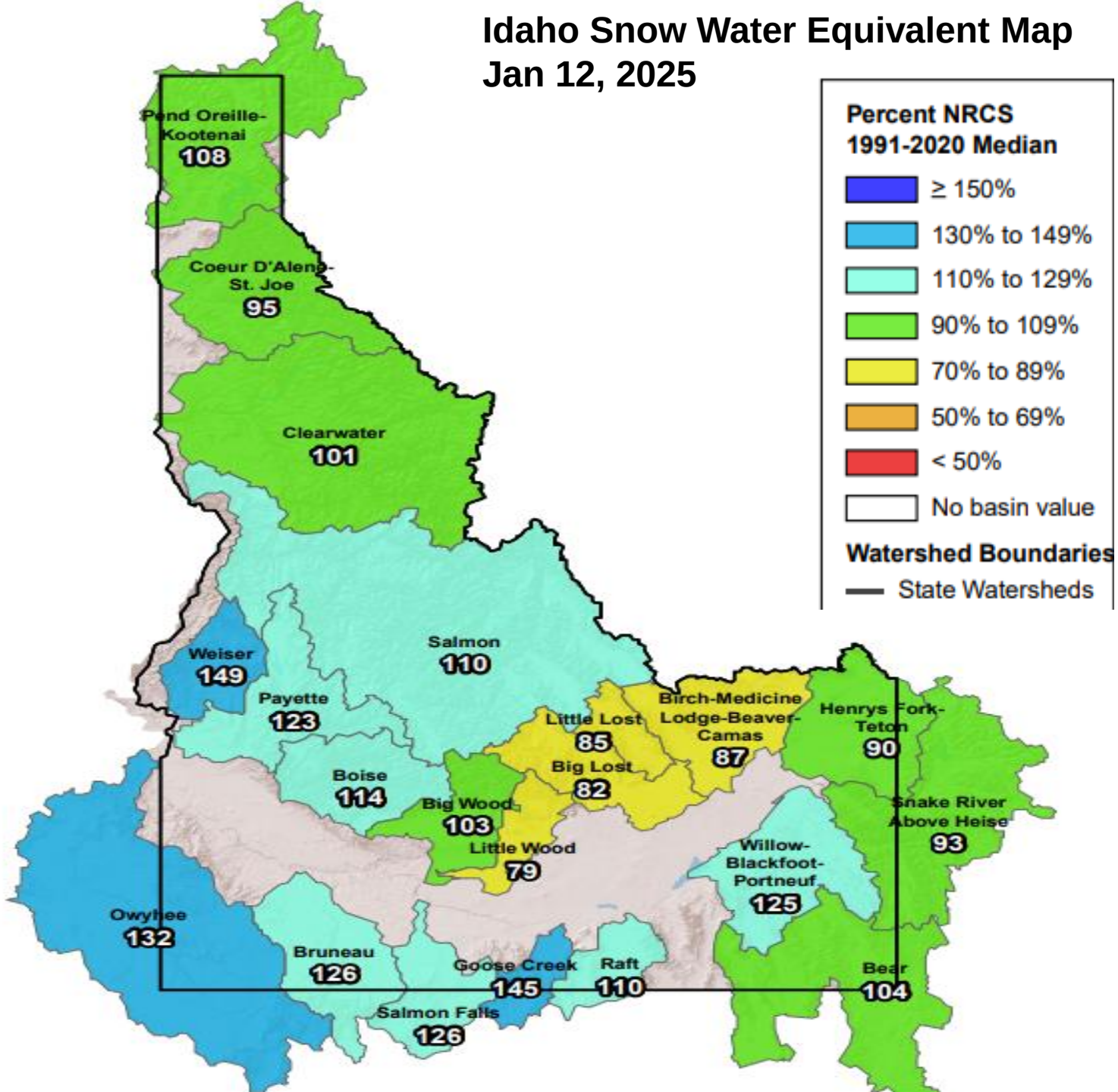


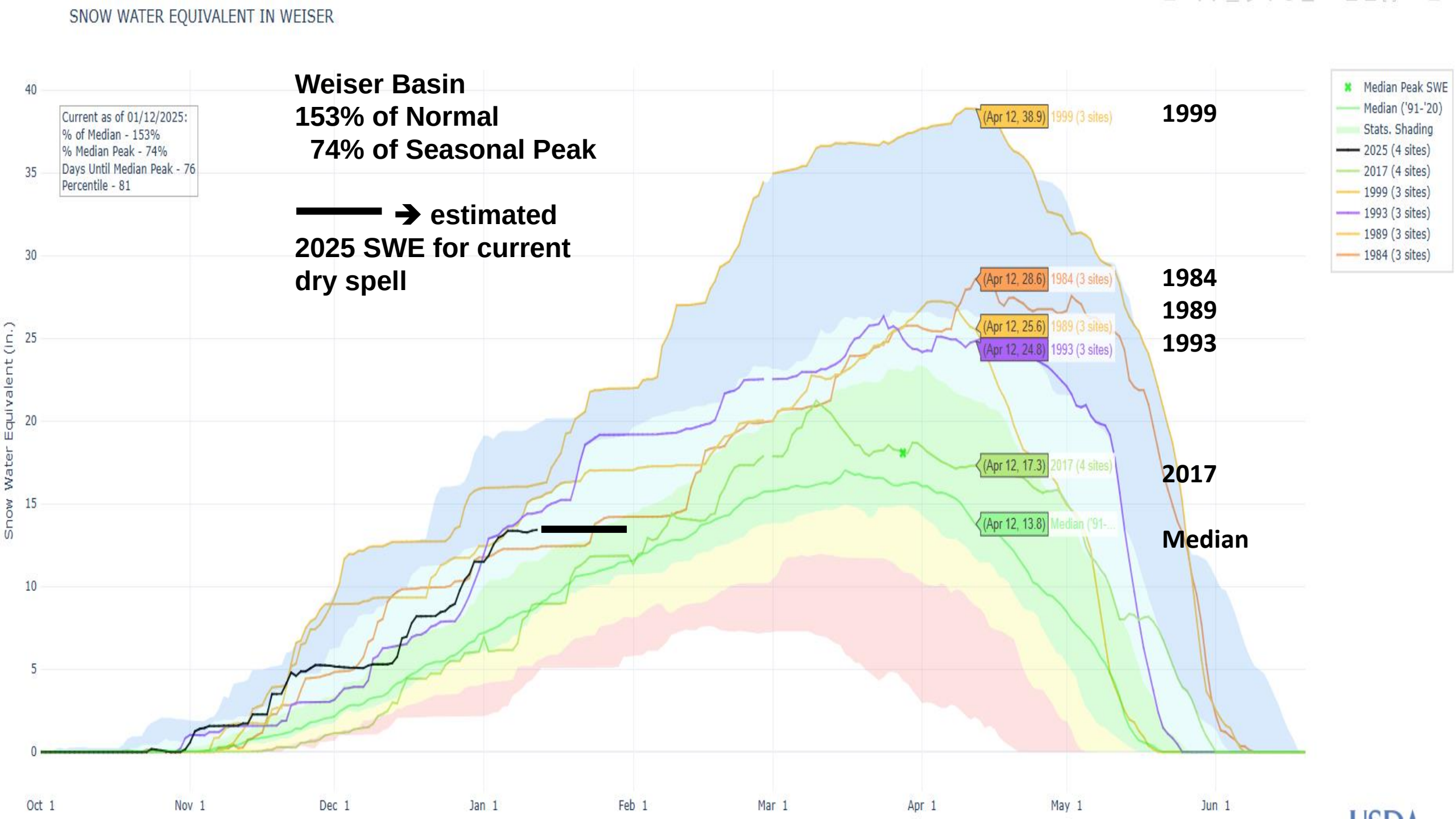
WEST Wide Snow Map Jan 11, 2025

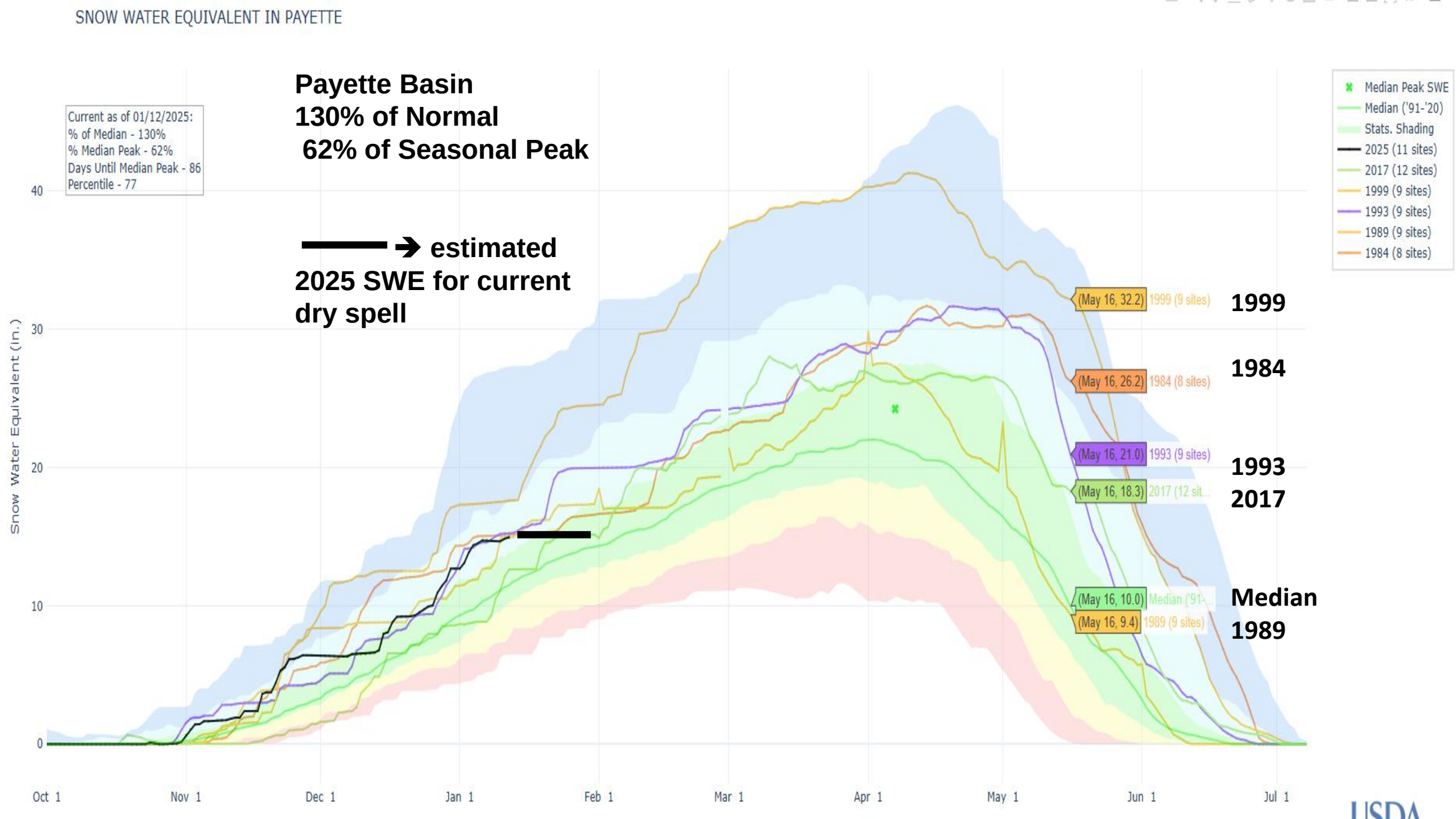

HOODOO BASIN, MT (530) SNOW WATER EQUIVALENT
92% of Normal
Hoodoo Basin NF
Clearwater River
headwaters along the ID/MT
border
Daily data starts in 1967
➔ estimated 2025
SWE for current dry spell
Current as of 01/12/2025:
% of Median - 92%
% Median Peak - 42%
Days Until Median Peak - 102
Percentile - 36
Median Peak SWE
Median ('91-'20)
Stats. Shading
2025
2017
1999
1993
1989
1984
1974
1967
(May 18, 72.0) 1974
(May 18, 61.6) 1999
(May 18, 55.7) 1967
(May 18, 43.4) 2017
(May 18, 36.1) Median ('91
(May 18, 35.7) 1984
(May 18, 31.4) 1989
(May 18, 24.9) 1993
1974
1999
1967
2017
1984
1989
1993
Year not included 1959
Snow Water Equivalent (in.)
0
10
20
30
40
50
60
70
80
90
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1

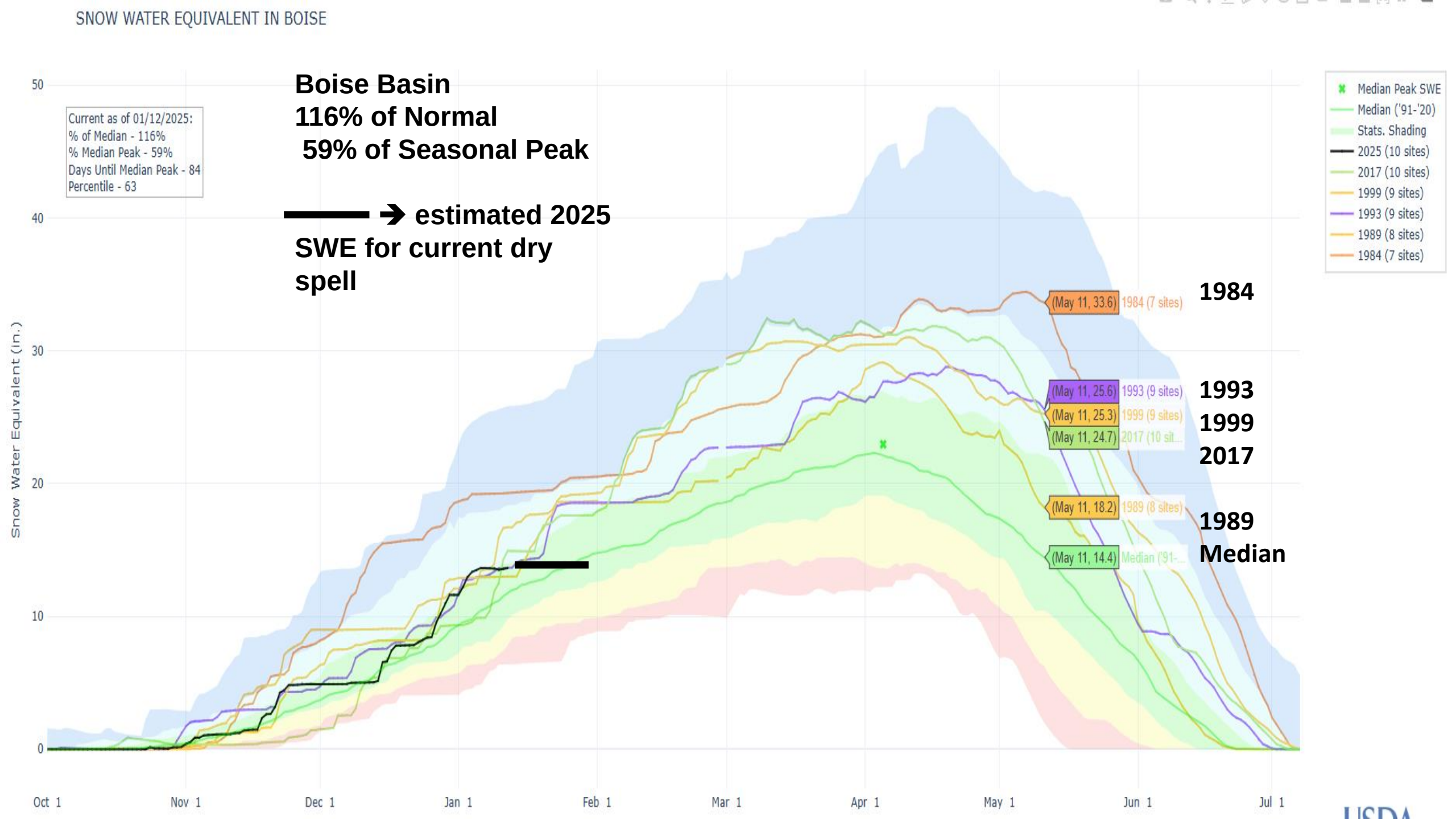

WEST YELLOWSTONE, MT (924) SNOW WATER EQUIVALENT
91% of Normal
West Yellowstone just west of Henrys Fork headwaters in MT
Daily data starts in 1967
➔ estimated 2025 SWE for current dry spell
Current as of 01/12/2025:
% of Median - 91%
% Median Peak - 41%
Days Until Median Peak - 82
Percentile - 34
Snow Water Equivalent (in.)
0
5
10
15
20
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
(Apr 12, 22.0) 1967
(Apr 12, 19.4) 1974
(Apr 12, 16.7) 1989
(Apr 12, 16.1) 1999
(Apr 12, 13.5) 1993
(Apr 12, 12.2) 1984
(Apr 12, 8.6) Median ('91-
(Apr 12, 5.9) 2017
1967
1974
1989
1999
1993
1984
Median
2017
Year not included 1959
Median Peak SWE
Median ('91-'20)
Stats. Shading
2025
2017
1999
1993
1989
1984
1974
1967

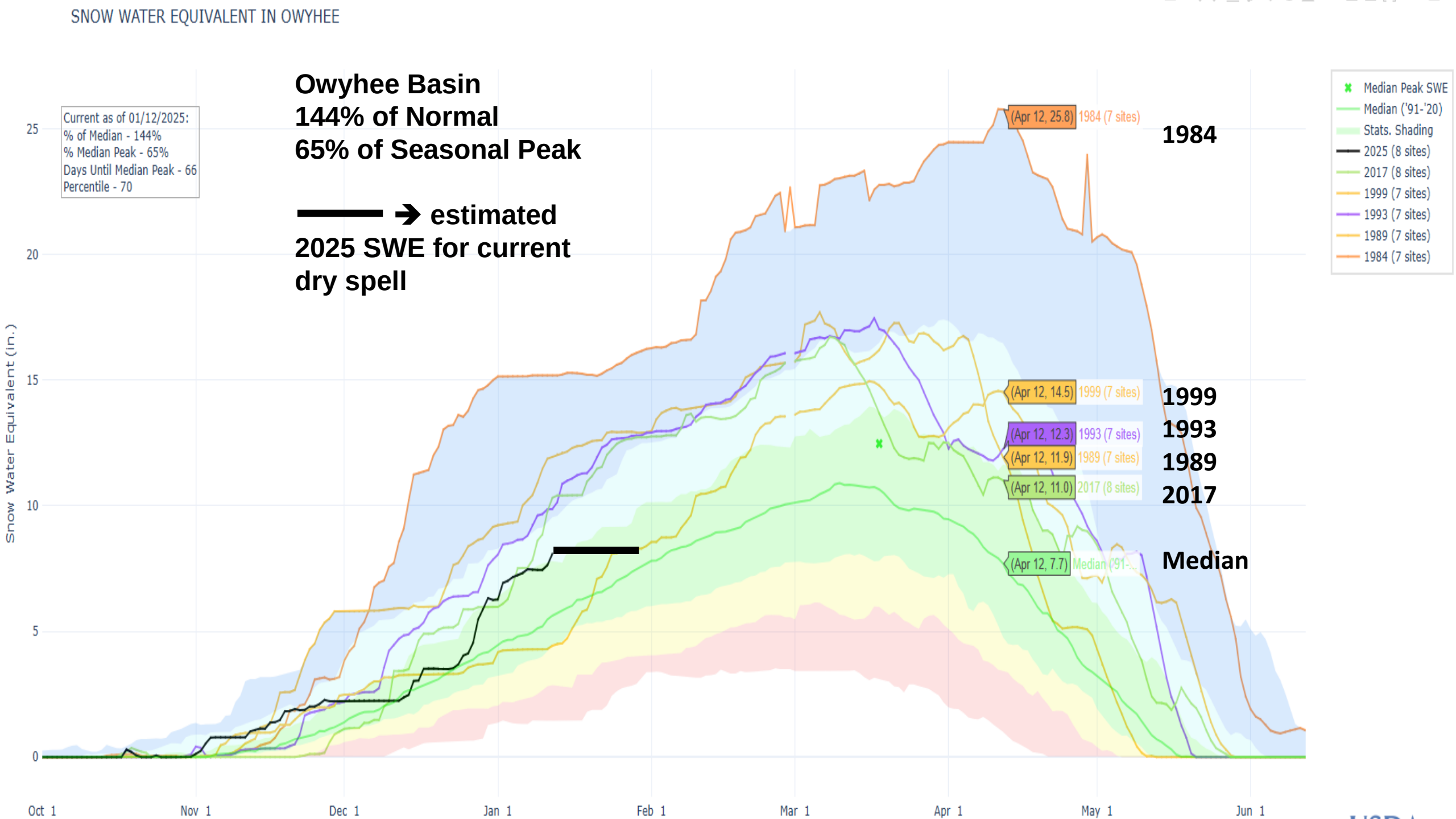
Idaho Snow Water Equivalent Map
Jan 12, 2025




SNOW WATER EQUIVALENT IN WEISER
Weiser Basin
153% of Normal
74% of Seasonal Peak
➔ estimated 2025 SWE for current dry spell
Current as of 01/12/2025:
% of Median - 153%
% Median Peak - 74%
Days Until Median Peak - 76
Percentile - 81
Snow Water Equivalent (in.)
40
35
30
25
20
15
10
5
0
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
(Apr 12, 38.9) 1999 (3 sites)
(Apr 12, 28.6) 1984 (3 sites)
(Apr 12, 25.6) 1989 (3 sites)
(Apr 12, 24.8) 1993 (3 sites)
(Apr 12, 17.3) 2017 (4 sites)
(Apr 12, 13.8) Median ('91-...
1999
1984
1989
1993
2017
Median
Median Peak SWE
Median ('91-'20)
Stats. Shading
2025 (4 sites)
2017 (4 sites)
1999 (3 sites)
1993 (3 sites)
1989 (3 sites)
1984 (3 sites)

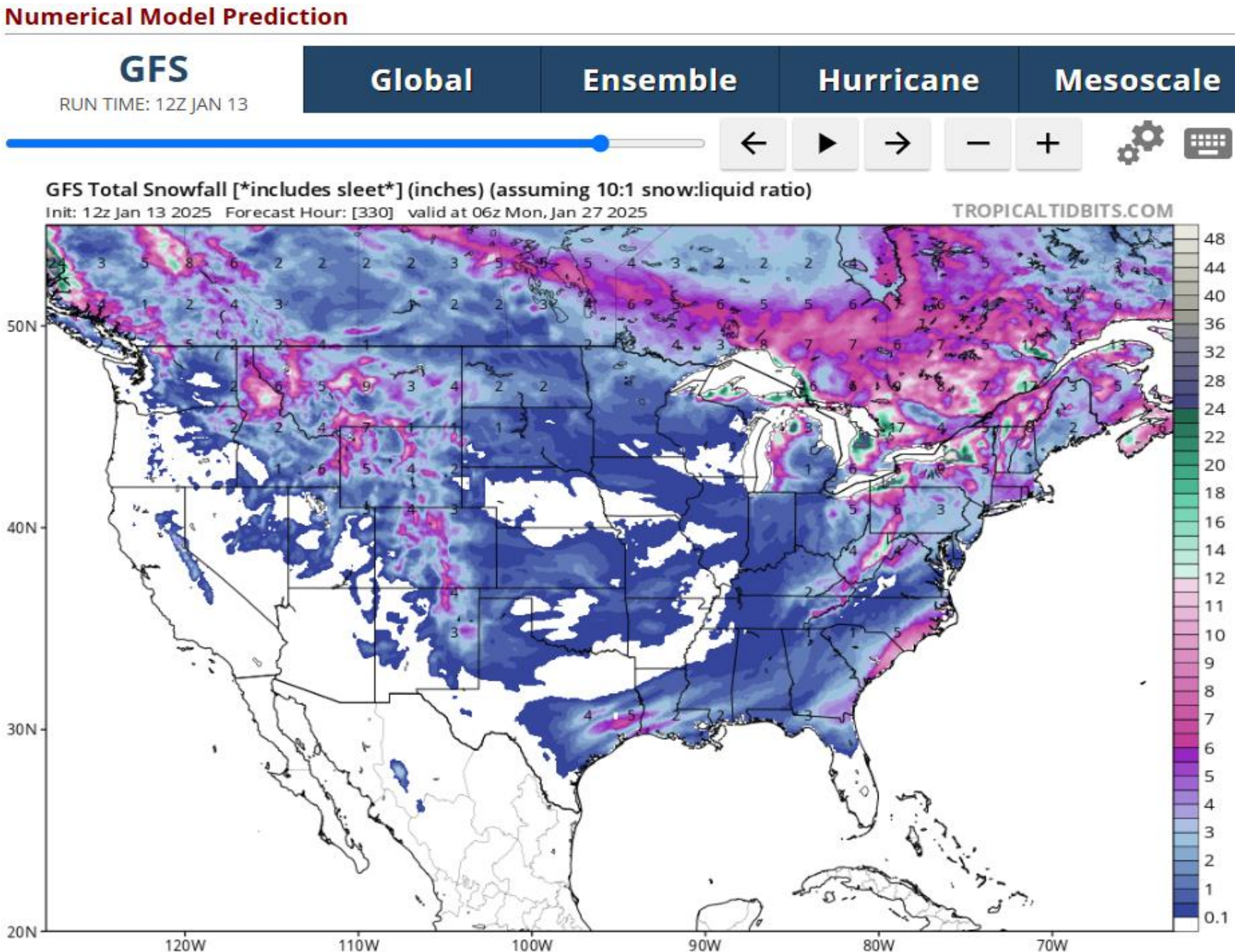

SNOW WATER EQUIVALENT IN PAYETTE
Payette Basin
130% of Normal
62% of Seasonal Peak
Current as of 01/12/2025:
% of Median - 130%
% Median Peak - 62%
Days Until Median Peak - 86
Percentile - 77
➔ estimated 2025 SWE for current dry spell
Median Peak SWE
Median ('91-'20)
Stats. Shading
2025 (11 sites)
2017 (12 sites)
1999 (9 sites)
1993 (9 sites)
1989 (9 sites)
1984 (8 sites)
(May 16, 32.2) 1999 (9 sites)
(May 16, 26.2) 1984 (8 sites)
(May 16, 21.0) 1993 (9 sites)
(May 16, 18.3) 2017 (12 sit...
(May 16, 10.0) Median ('91-...
(May 16, 9.4) 1989 (9 sites)
1999
1984
1993
2017
Median
1989
Snow Water Equivalent (in.)
0
10
20
30
40
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1


SNOW WATER EQUIVALENT IN BOISE
Boise Basin
116% of Normal
59% of Seasonal Peak
➔ estimated 2025 SWE for current dry spell
Current as of 01/12/2025:
% of Median - 116%
% Median Peak - 59%
Days Until Median Peak - 84
Percentile - 63
Median Peak SWE
Median ('91-'20)
Stats. Shading
2025 (10 sites)
2017 (10 sites)
1999 (9 sites)
1993 (9 sites)
1989 (8 sites)
1984 (7 sites)
(May 11, 33.6) 1984 (7 sites)
(May 11, 25.6) 1993 (9 sites)
(May 11, 25.3) 1999 (9 sites)
(May 11, 24.7) 2017 (10 sit...
(May 11, 18.2) 1989 (8 sites)
(May 11, 14.4) Median ('91-...
1984
1993
1999
2017
1989
Median
Snow Water Equivalent (in.)
50
40
30
20
10
0
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1

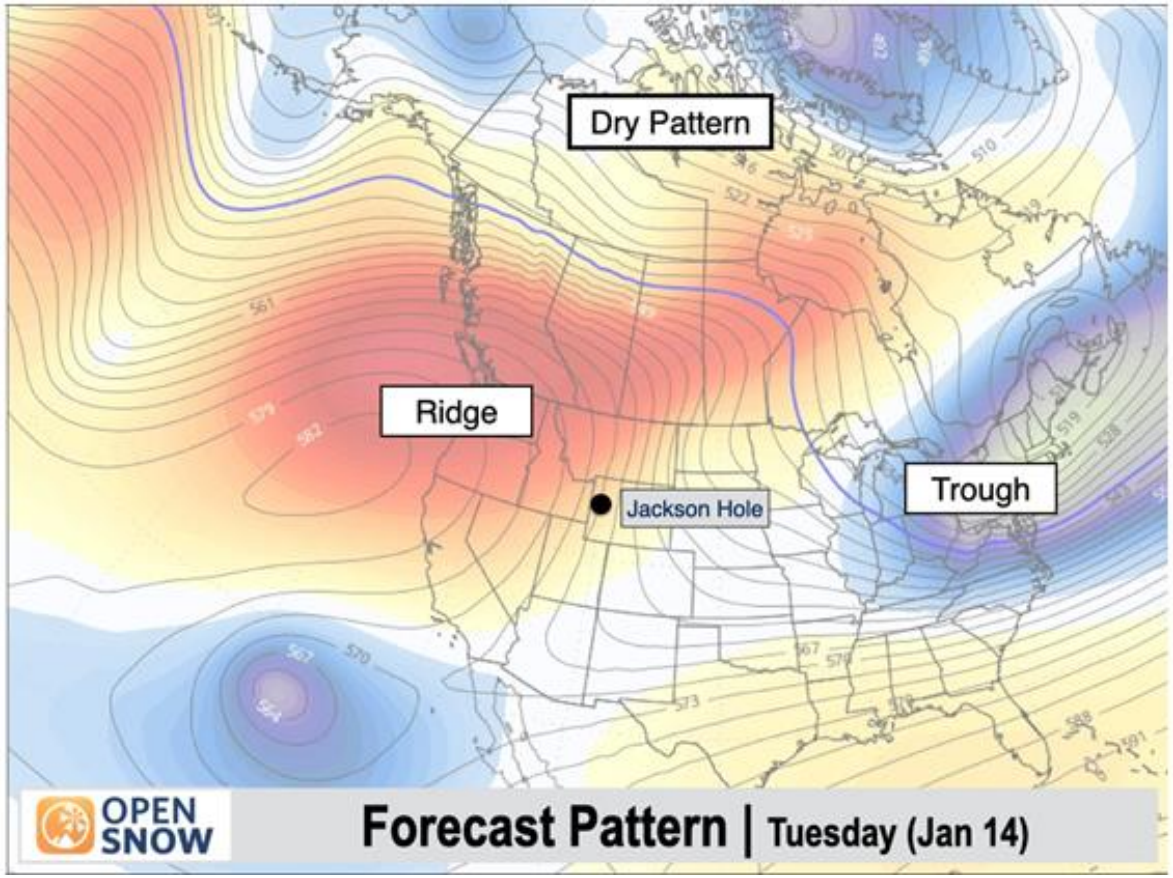

SNOW WATER EQUIVALENT IN OWYHEE
Owyhee Basin
144% of Normal
65% of Seasonal Peak
➔ estimated 2025 SWE for current dry spell
Current as of 01/12/2025:
% of Median - 144%
% Median Peak - 65%
Days Until Median Peak - 66
Percentile - 70
Median Peak SWE
Median ('91-'20)
Stats. Shading
2025 (8 sites)
2017 (8 sites)
1999 (7 sites)
1993 (7 sites)
1989 (7 sites)
1984 (7 sites)
(Apr 12, 25.8) 1984 (7 sites)
(Apr 12, 14.5) 1999 (7 sites)
(Apr 12, 12.3) 1993 (7 sites)
(Apr 12, 11.9) 1989 (7 sites)
(Apr 12, 11.0) 2017 (8 sites)
(Apr 12, 7.7) Median ('91-...
1984
1999
1993
1989
2017
Median
Snow Water Equivalent (in.)
0
5
10
15
20
25
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1

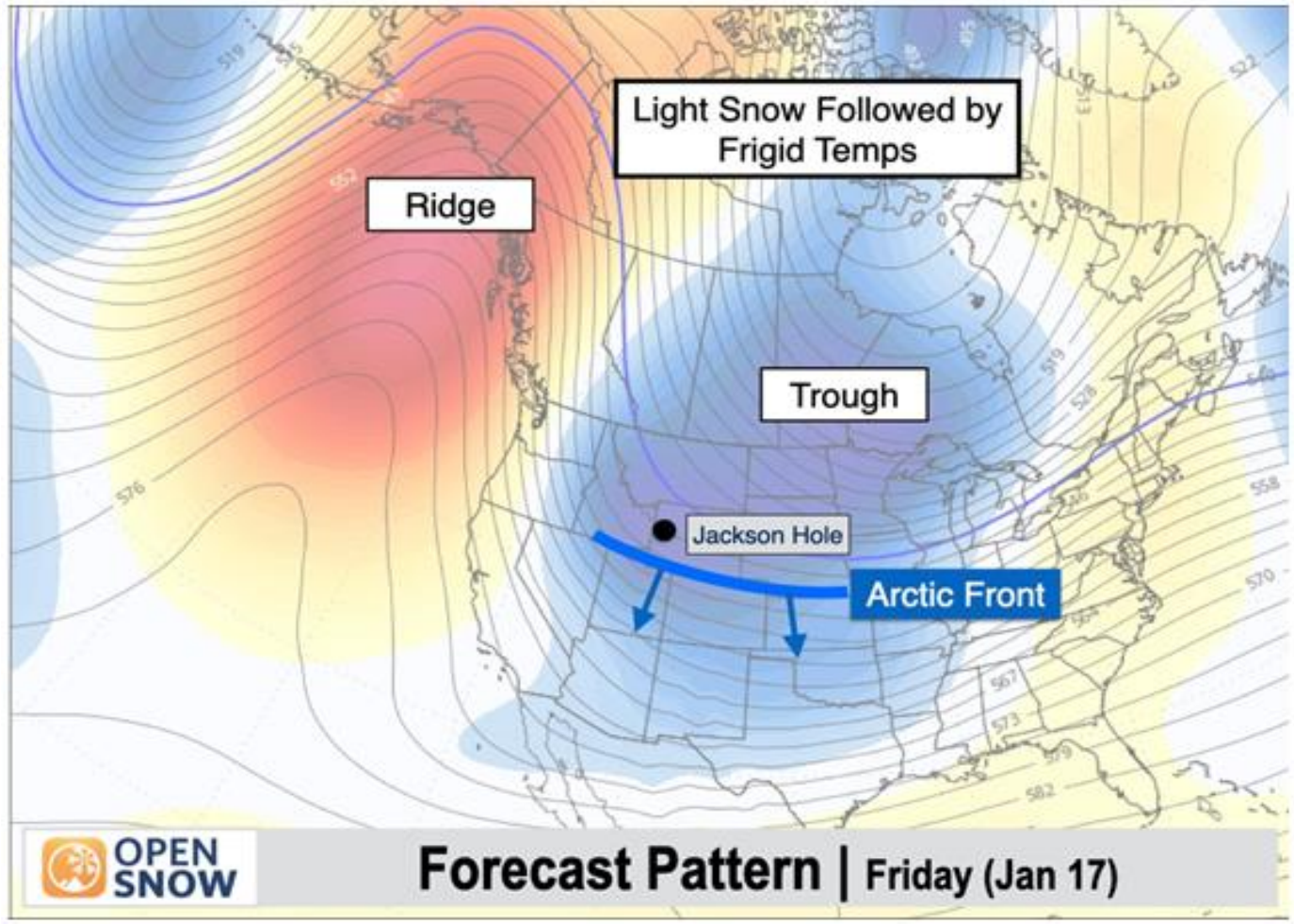
Let's talk about the weather…

GFS Total Snowfall from Jan 13-27



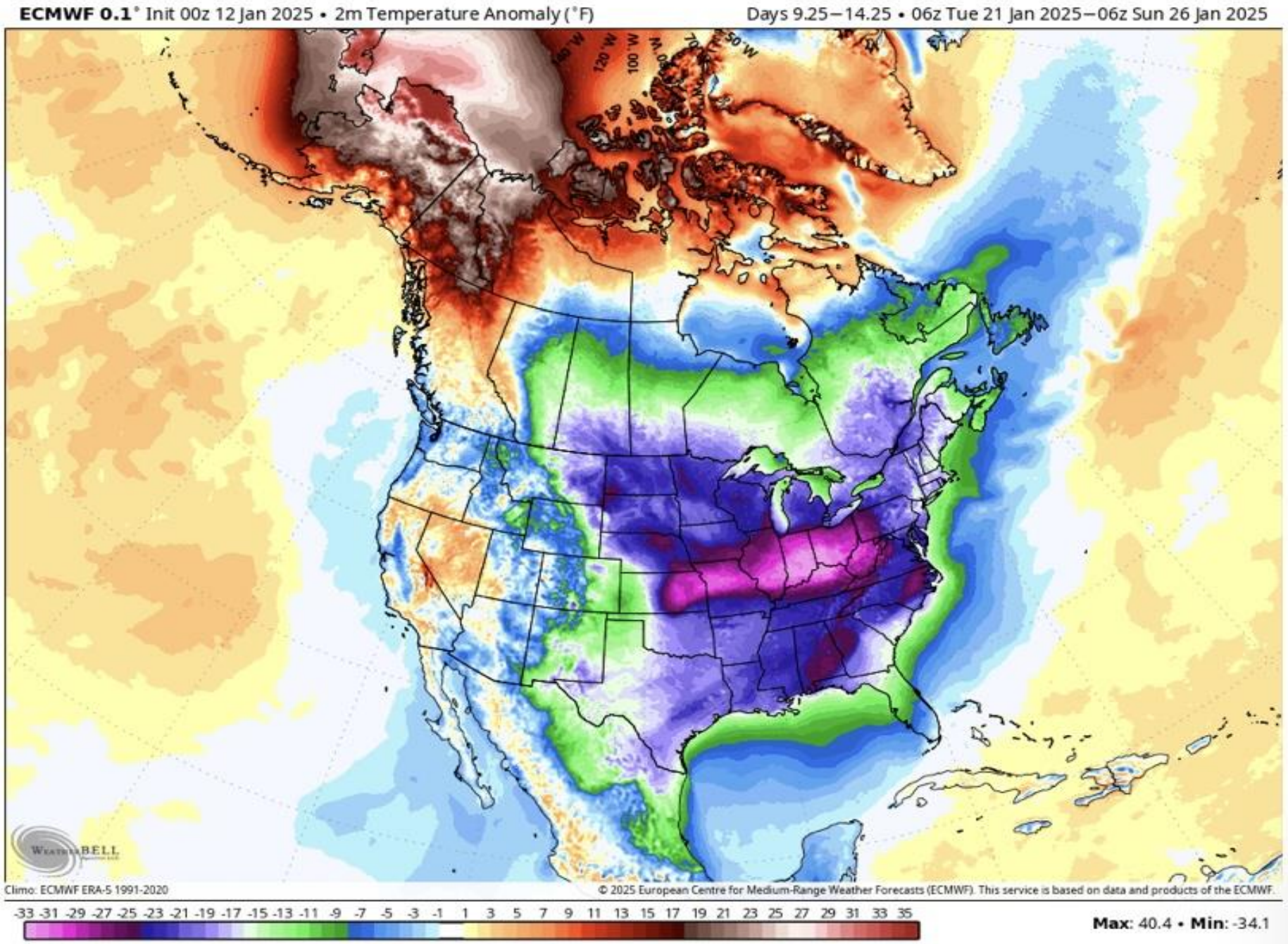
Cold is good
Major coldness will be
East of Continental Divide





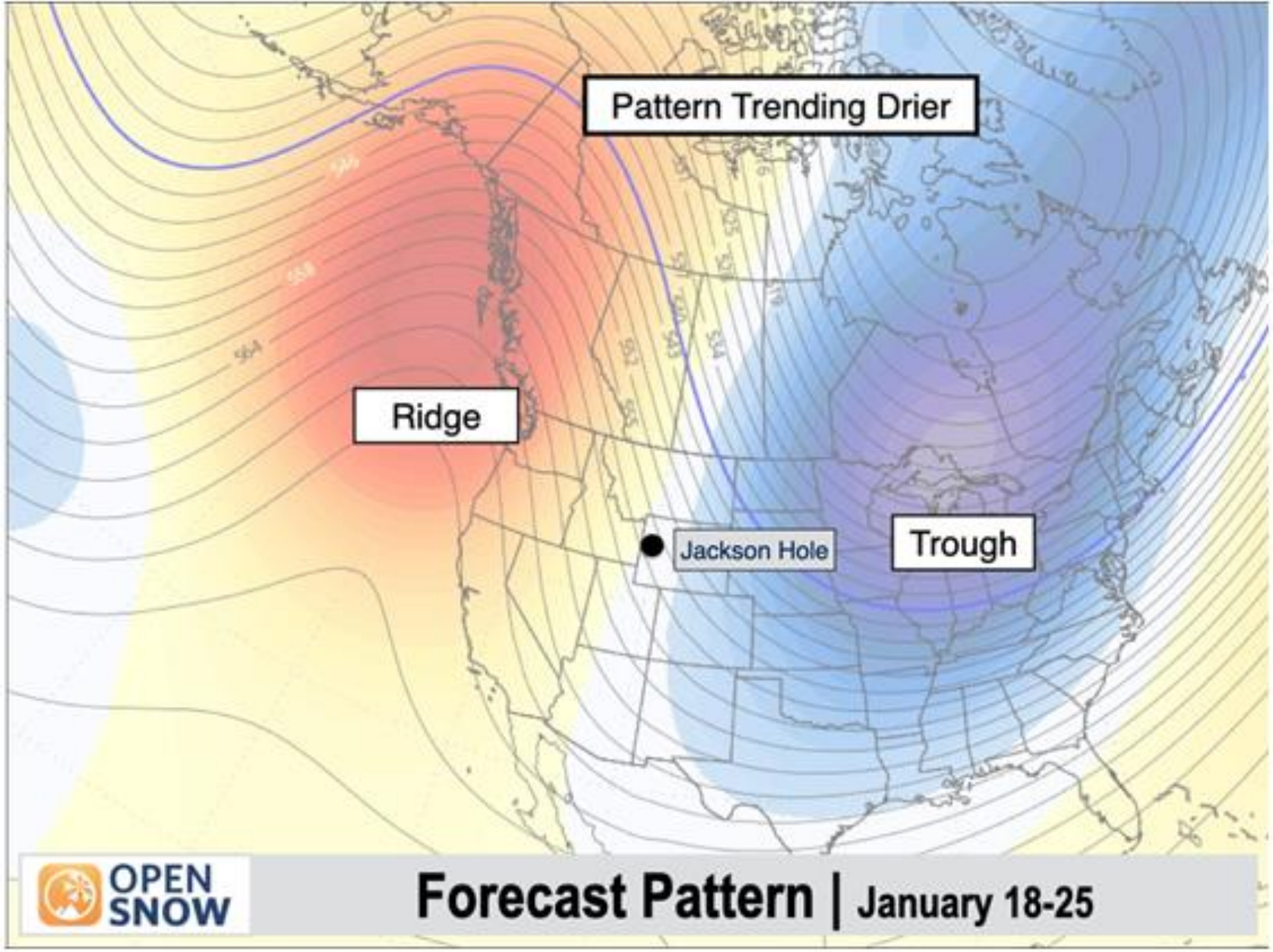
F Temperature Departure from Average

Issued Jan 12 for Jan 21-26



Next chance for major / more storms are near end of January.

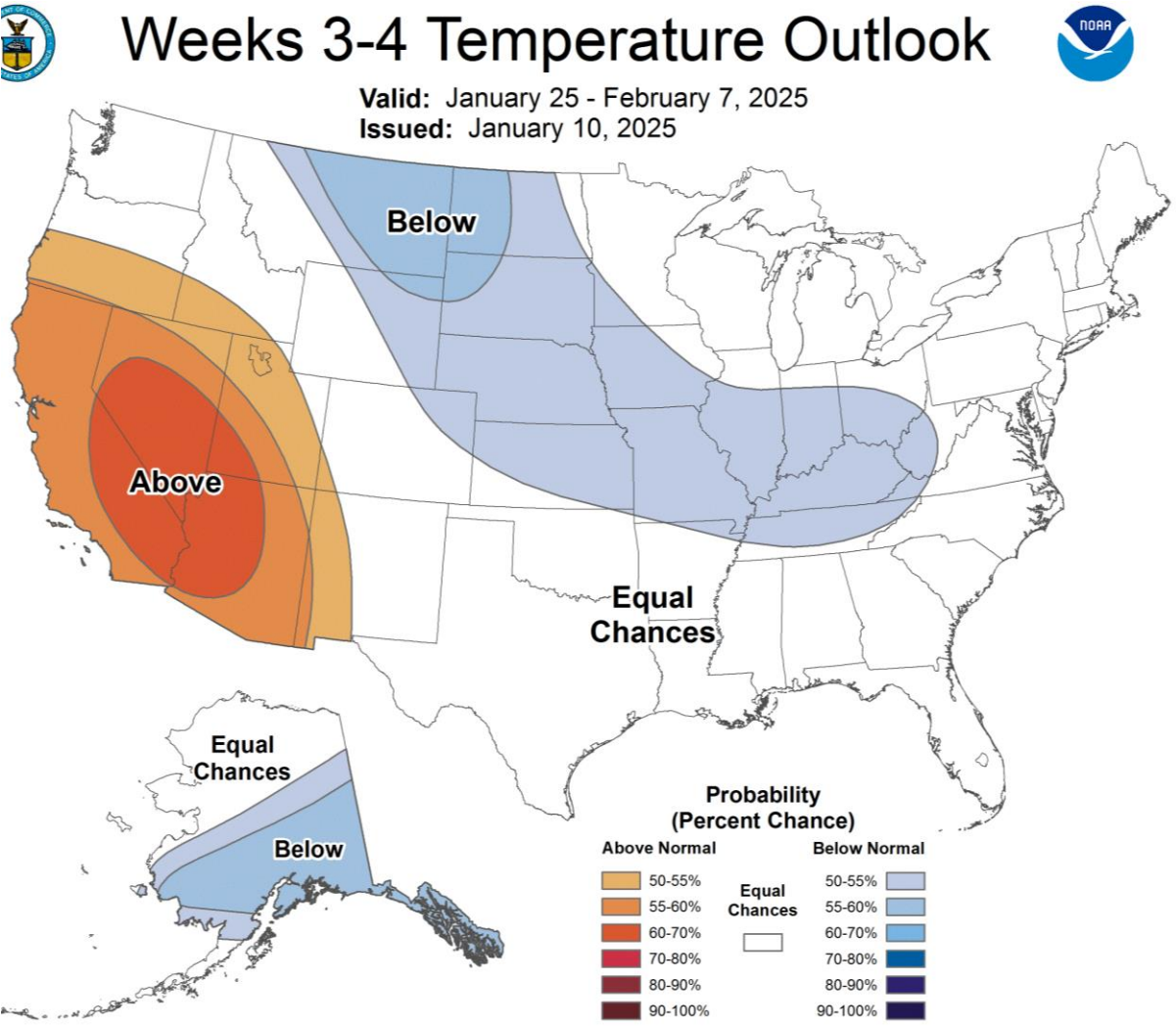
Weather pattern change could happen just like a week ago when 4 forecast outlooks were predicting storms this weekend.

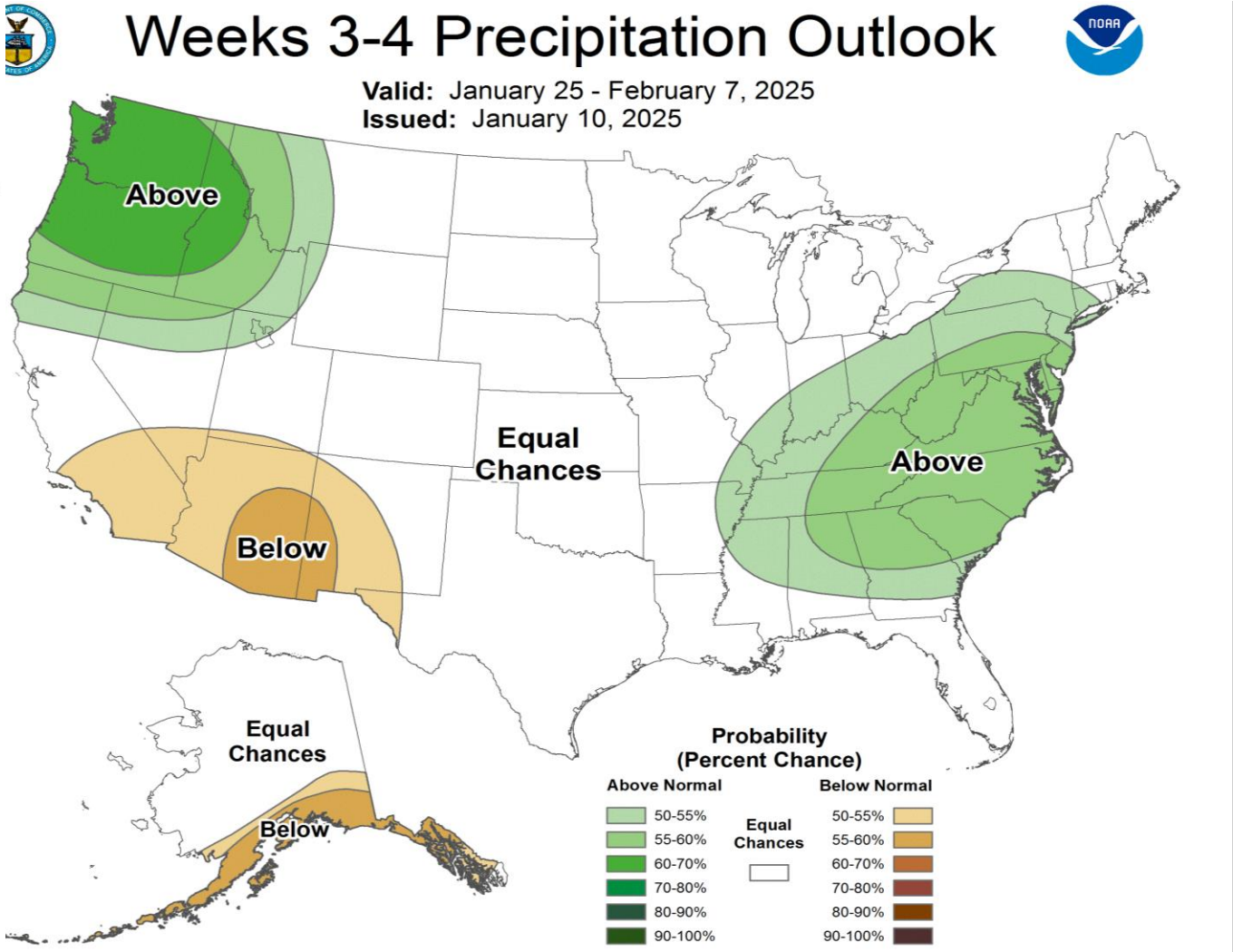


The European Ensemble Model (and other ensembles) are trending drier through at least the 24th.

3 - 4 Week Outlook
Issued Jan 10 for Jan 25-Feb 7

Temperature & Precipitation Outlook

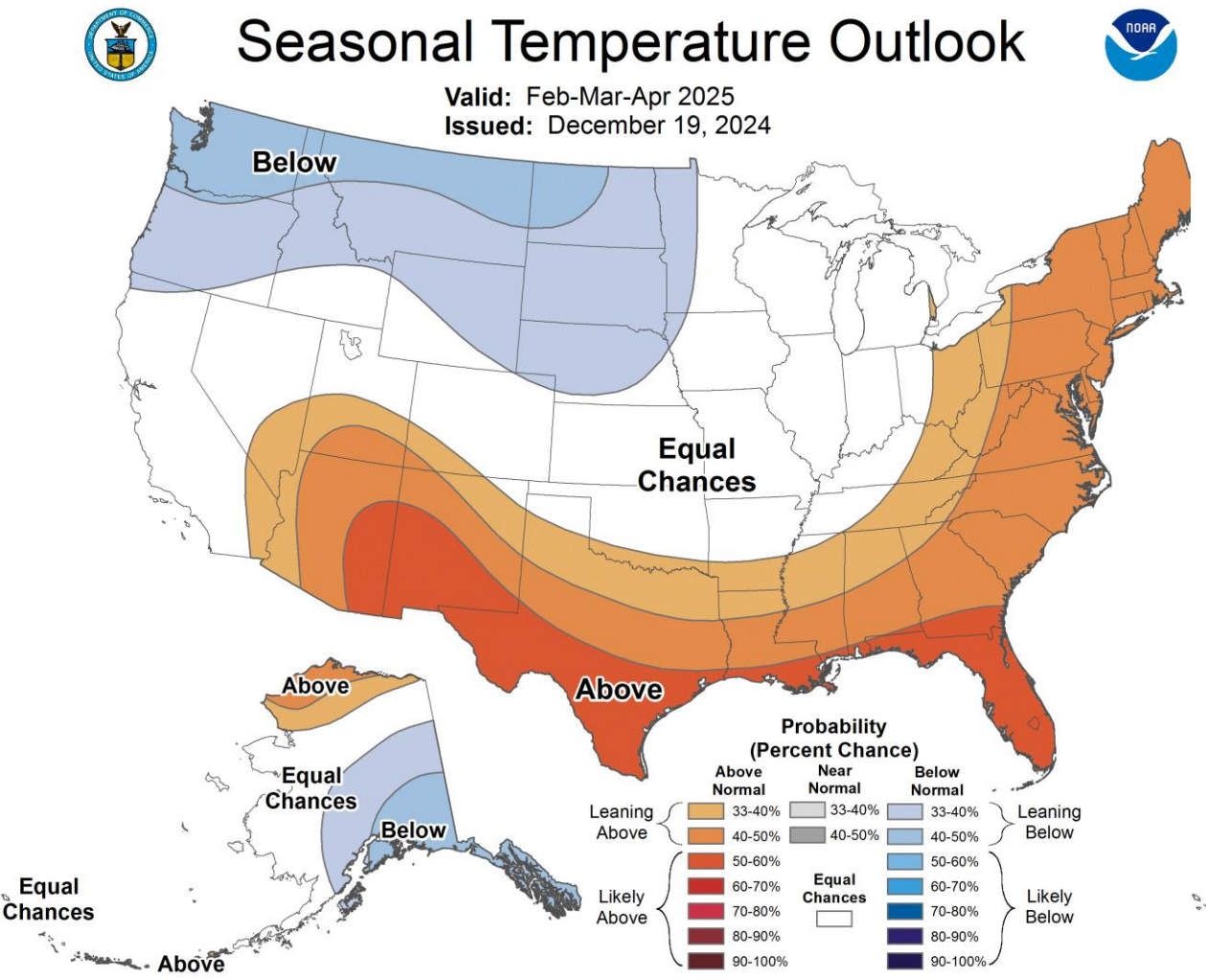




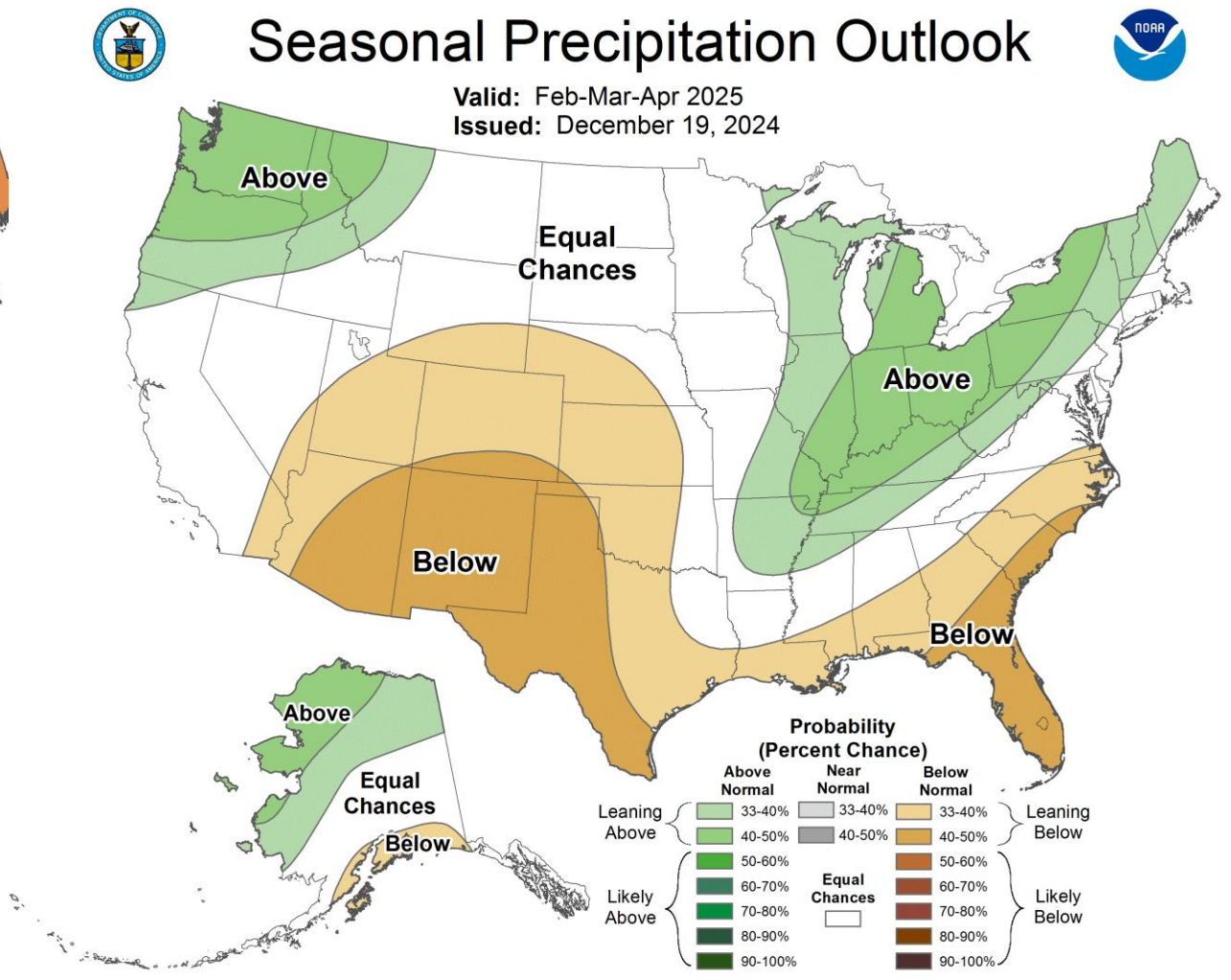
Seasonal Outlook Feb-Mar-Apr from Dec 19, 2024

Typical La Nina Pattern – we'll see if outlook changes after January's dry weather in PNW and cold in mid-west/east.

Temperature



Precipitation




Northern Lights seen from
Owyhee River Canyon
May 11, 2024 at 12:12AM