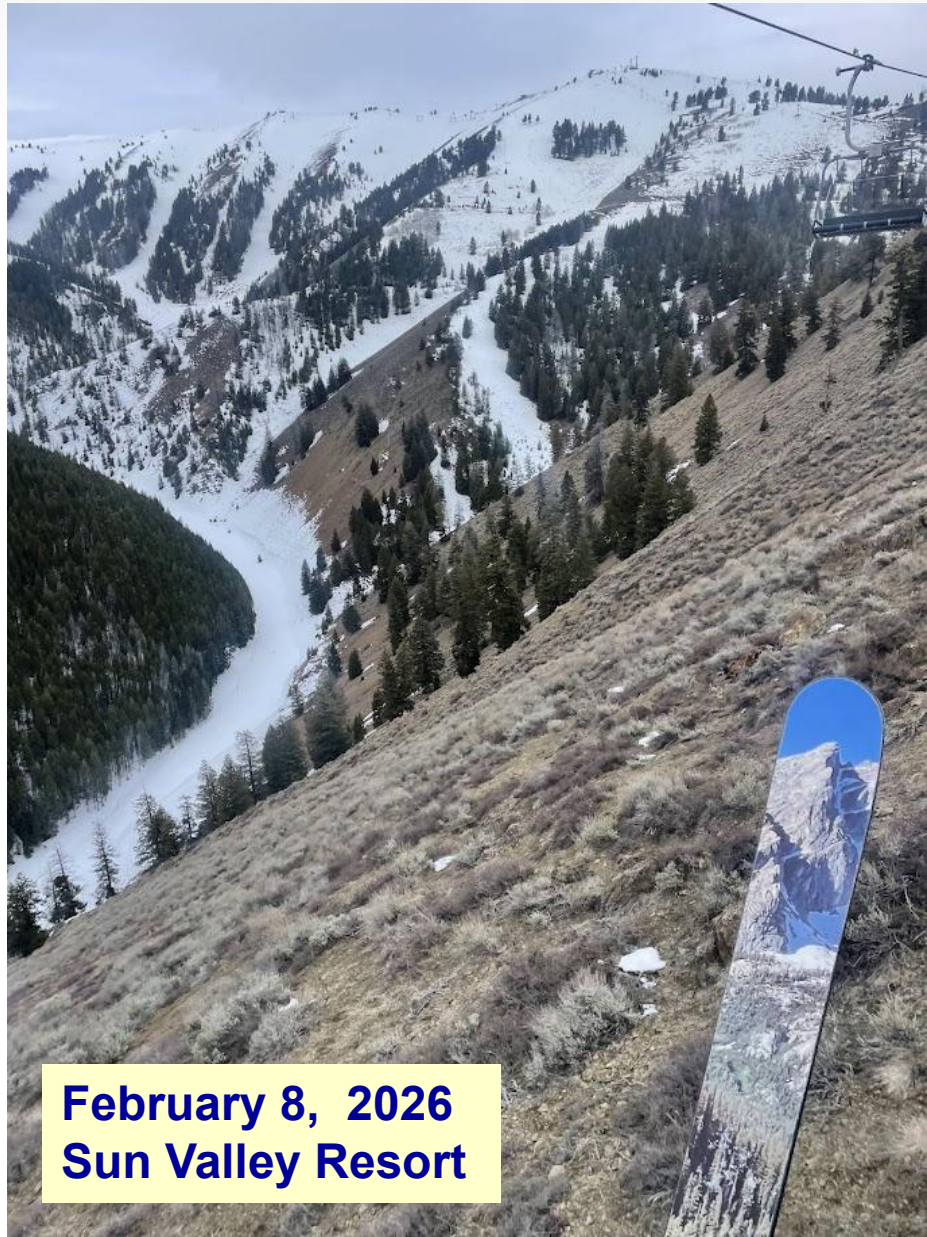
IDAHO MUSEUM OF MINING & GEOLOGY

Water, Snowpack and Drought

March 22, 2026

By Ron Abramovich
Mostly Retired….

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



February 8, 2026
Sun Valley Resort

Topics:

- El Nino / La Nina Review
- El Nino - Brewing for Winter 2026-27 & Beyond

- 2025 What Happened ?
  Good Snow + Dry Spring = Low Runoff

- Summer / Fall / Winter Precipitation
- December – Where's the Snow?

- Climate Teleconnections & Analog Years for this Winter
- Where's the Snow ? How Did We Get Here?

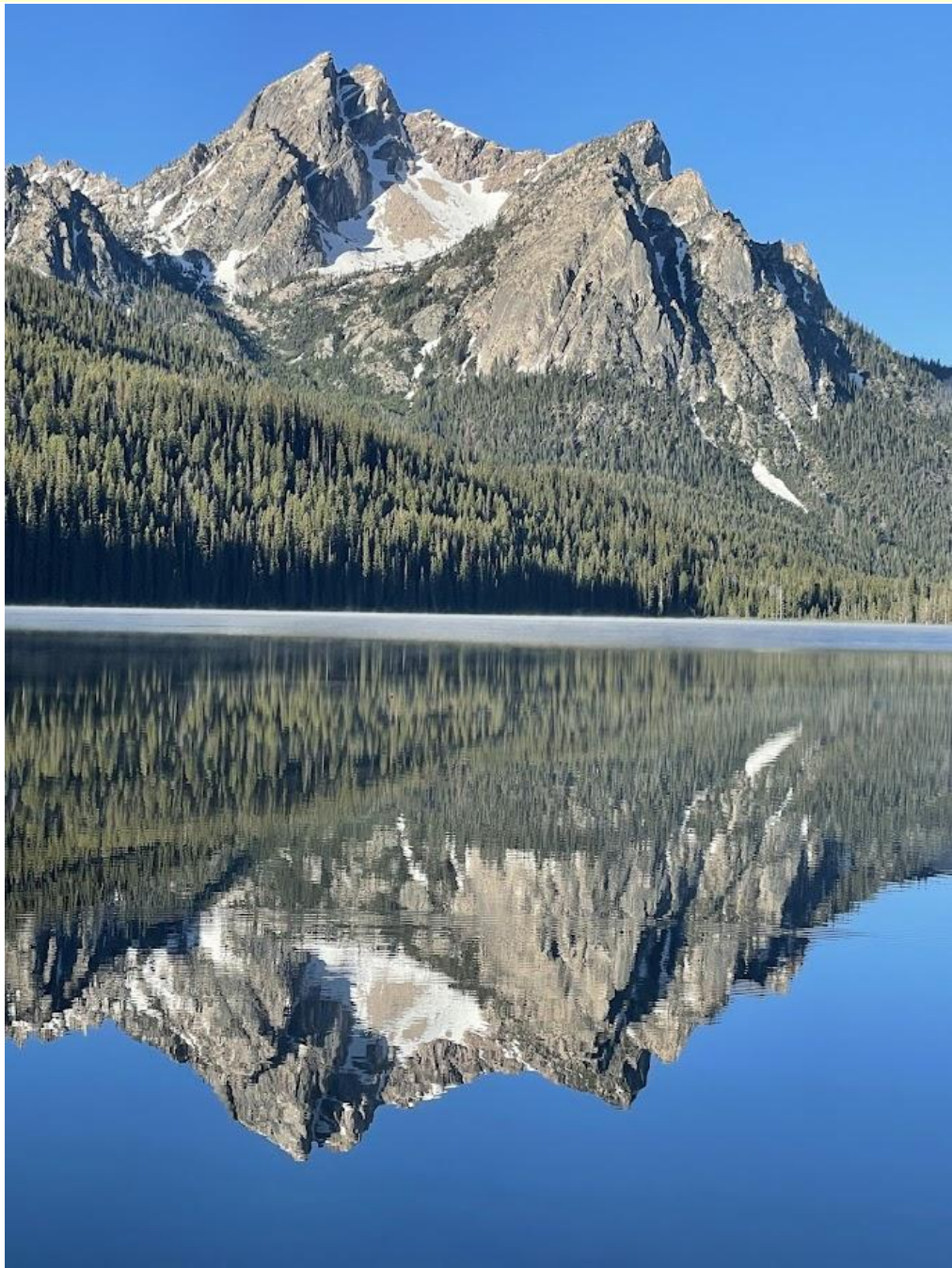
- 3-D Drought – Precipitation, Snow, Temperature

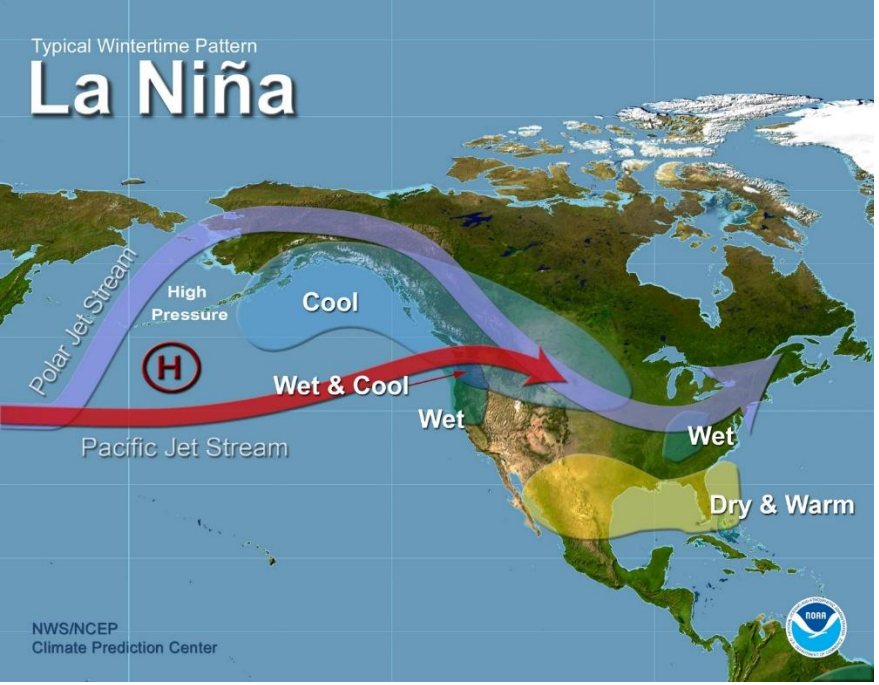
- Water Supply – Current Snow 2 Flow Conditions

- Weather Outlooks – What You See is What You Get
  Until the Weather Changes – Maybe Around April 1

- Final Run of an Amazing Excell Spreadsheet

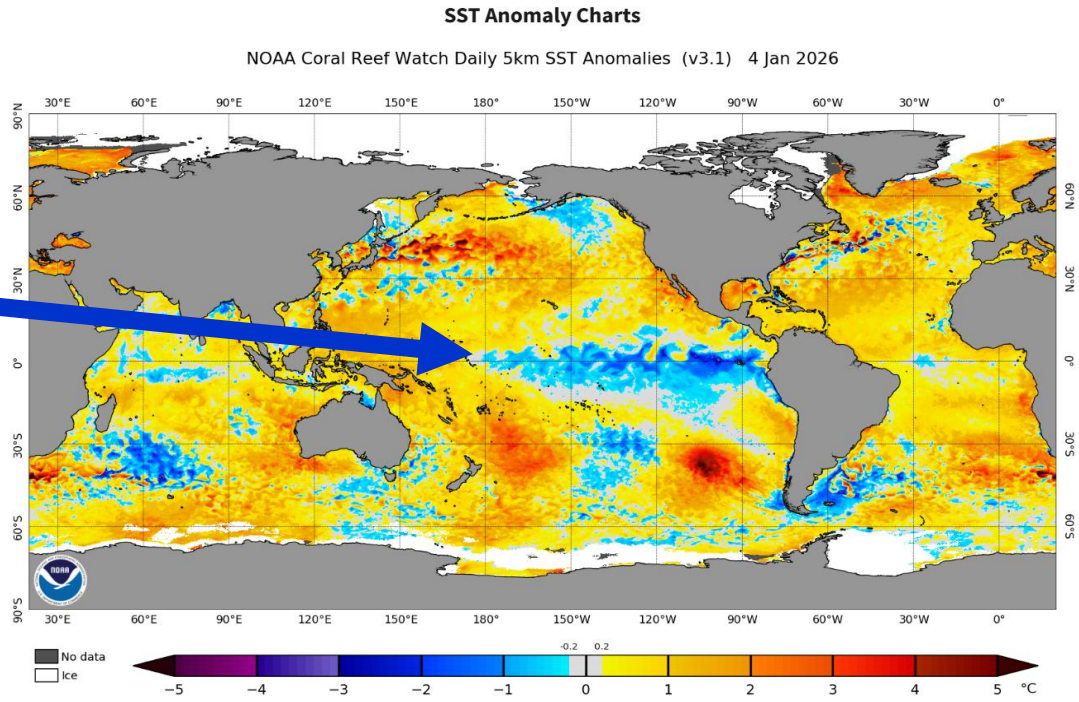
June 20, 2023 Mt McGowan & Stanley Lake

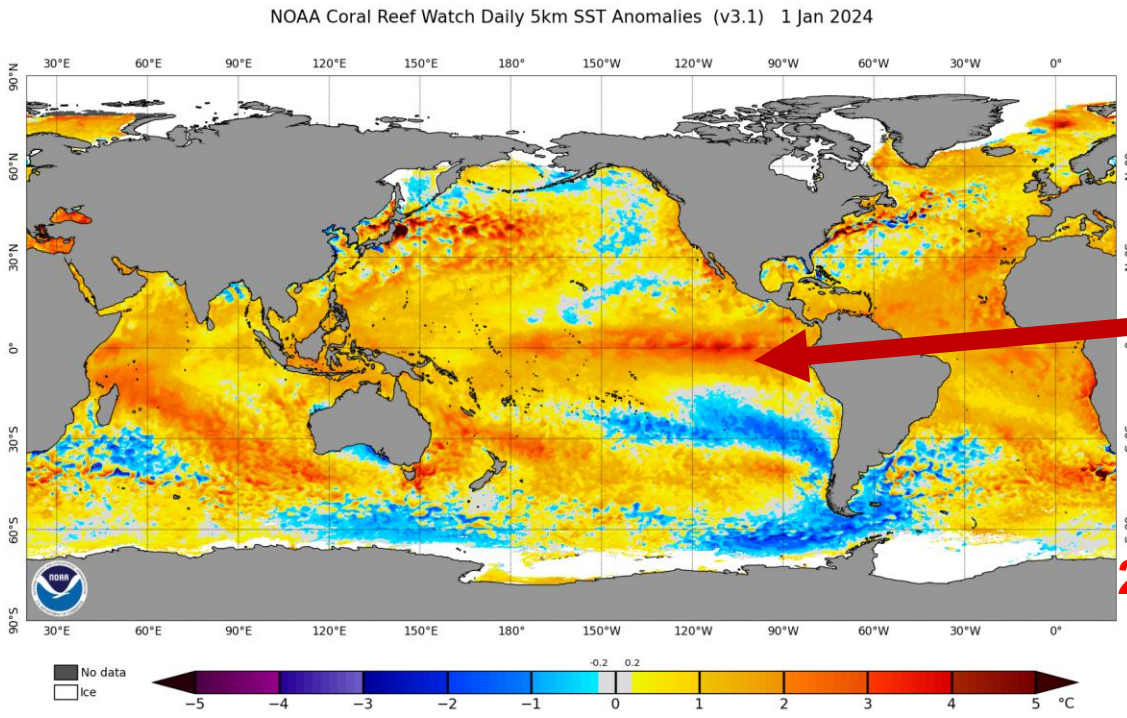




Sea Surface Temperatures

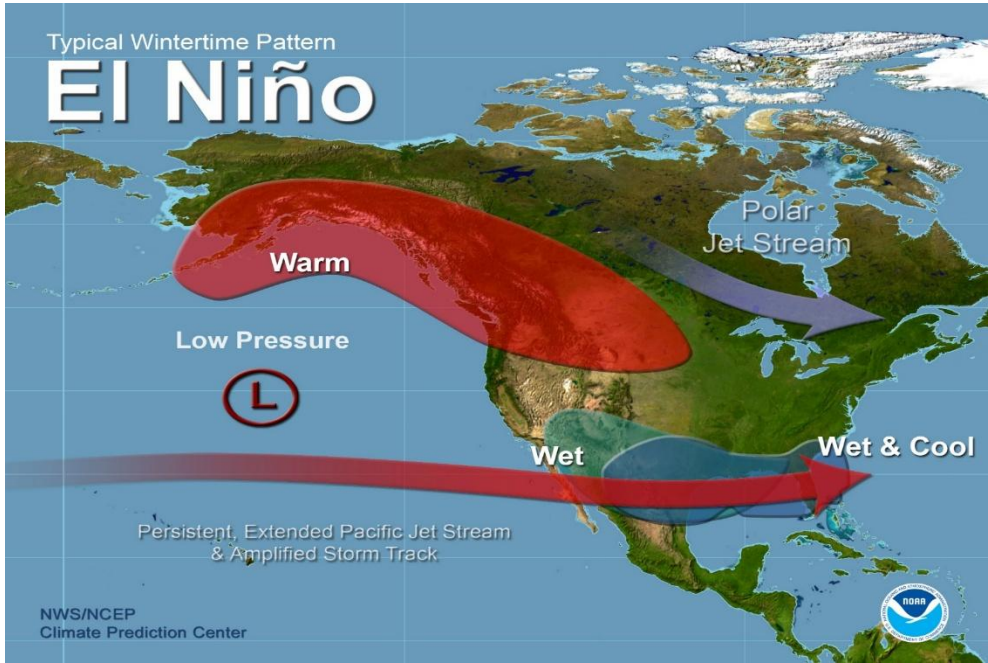
La Nina Conditions Jan 4, 2026





El Nino Conditions Jan 1, 2024

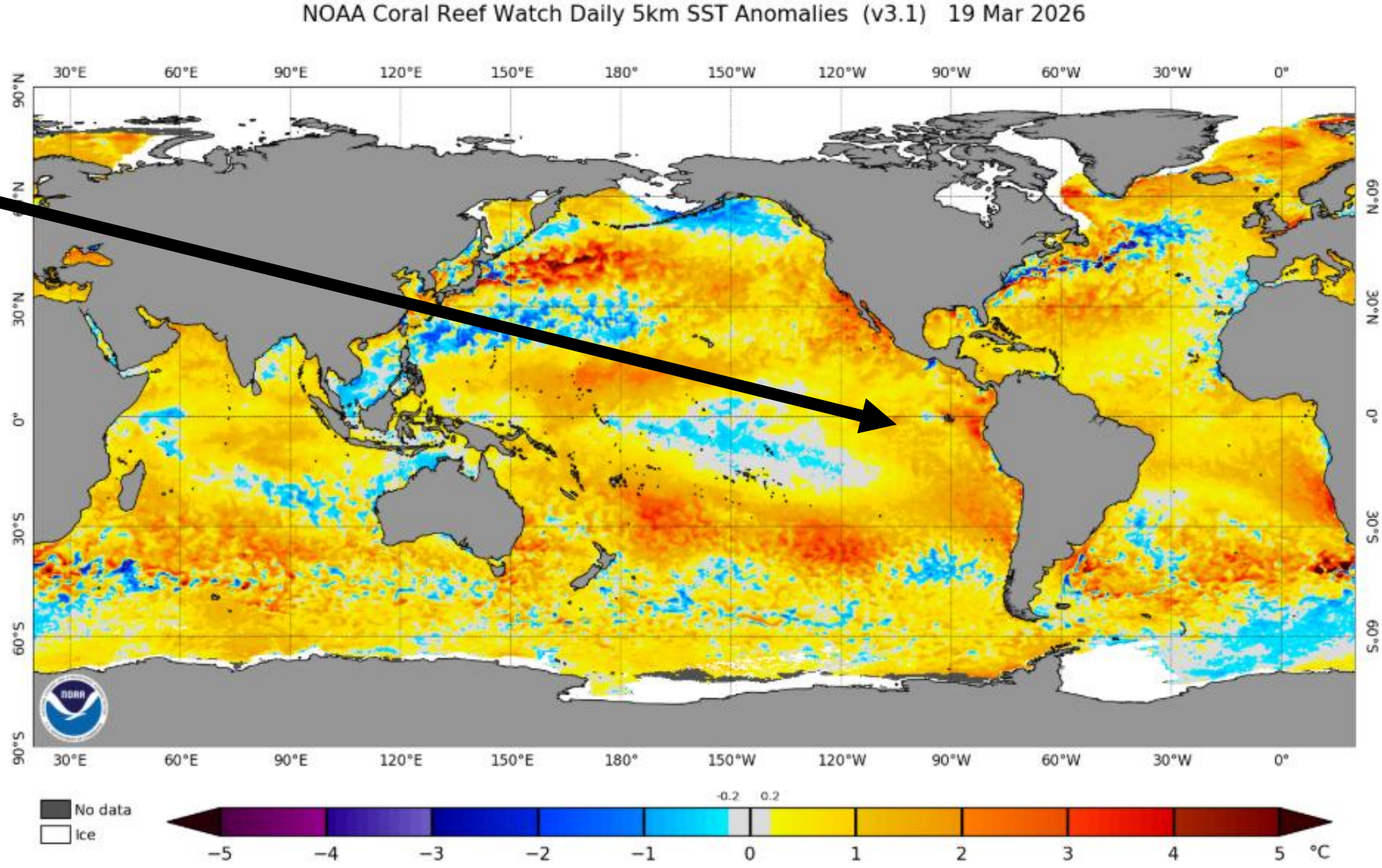
El Nino brewing for Winter 2026/27 & 28?



Current Sea Surface Temperatures Anomaly

Mar 19, 2026

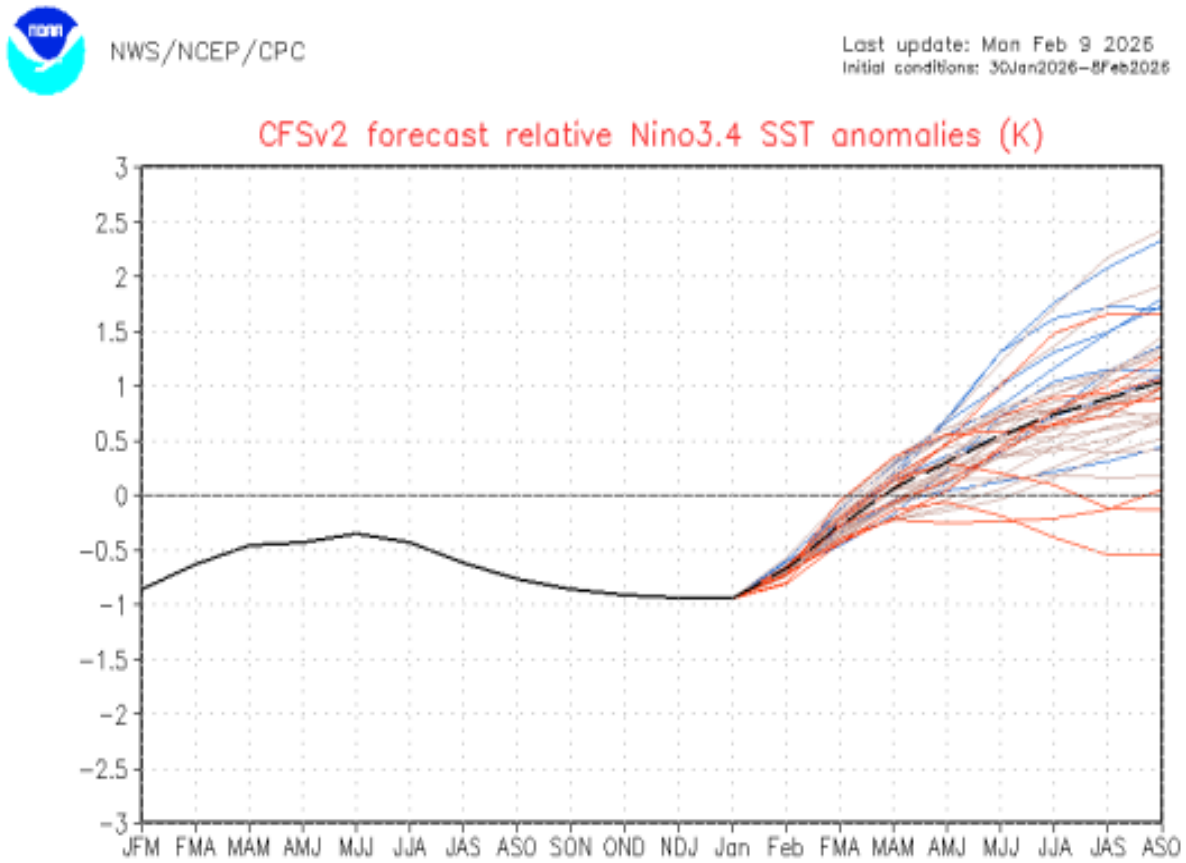
Current Operational SST Anomaly Charts



EL NINO 2026 IS COMING

The first hint of a possible El Niño is already visible in the latest extended range ocean forecasts for 2025/2026. These calculations show a rather rapid reversal in the oceans, which is usually fueled by significant global weather changes.

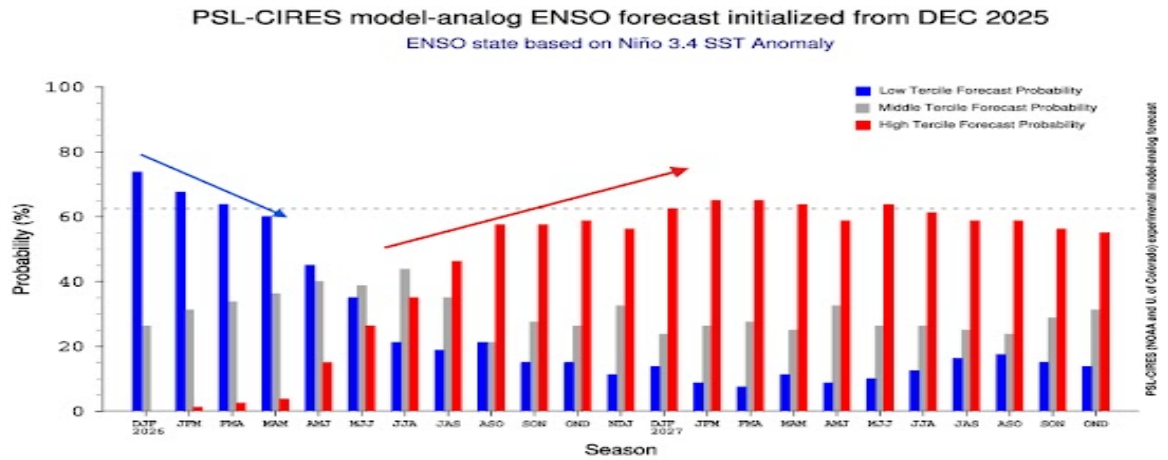
The long-range ensemble forecast below shows the forecast for the main ENSO region. The La Niña conditions (with a value of -0.5 or lower) will begin to dissipate during winter. But the extended forecast shows that most calculations shift into the warm anomalies and are also well above the 0.5 threshold of the El Niño event.



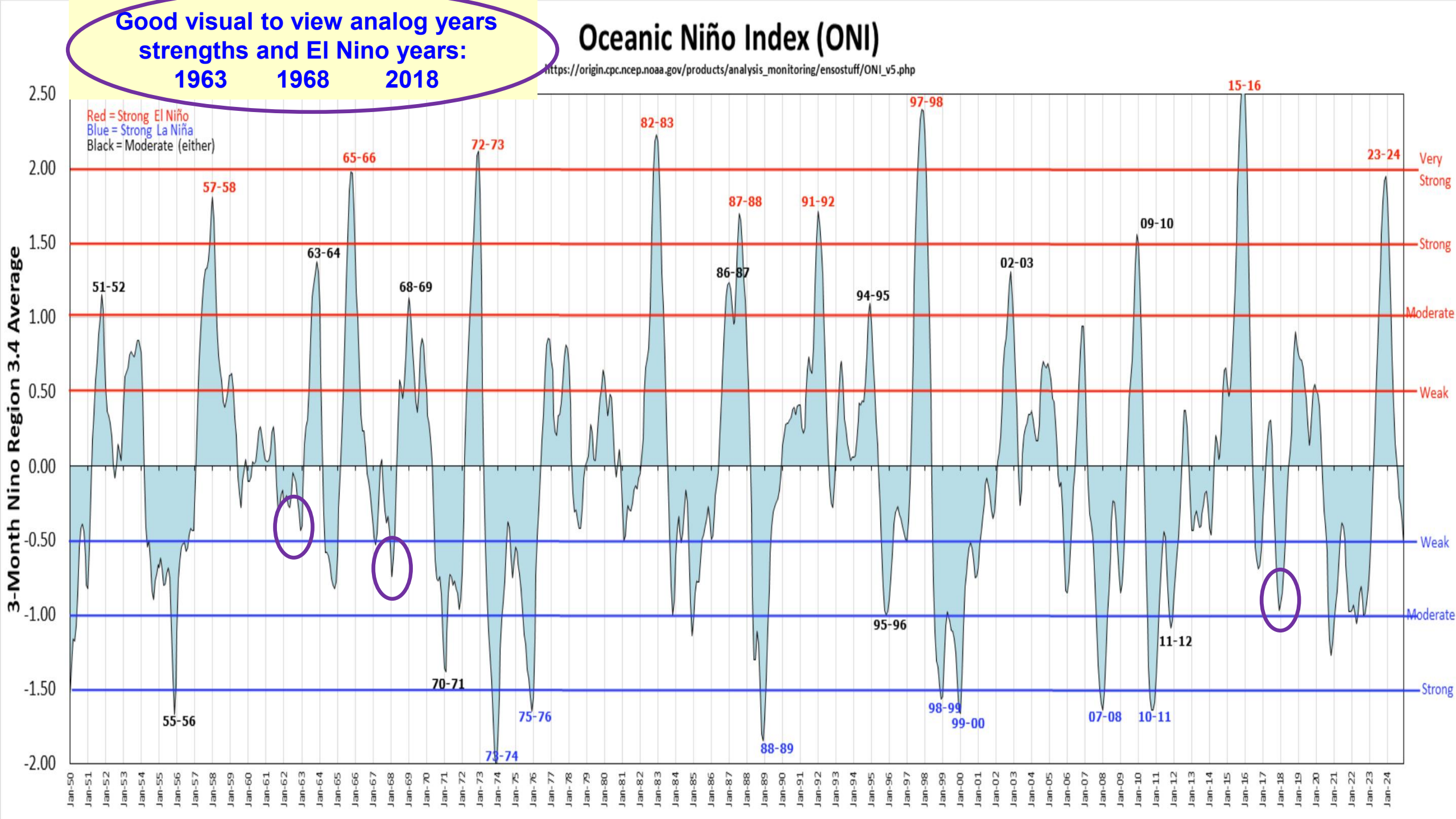
We could see an El Nino sooner than later…

Sep 2025 – El Nino is setting up for Winter 2026-27. Never seen them calling this out so early, so must be feeling confident.

The CPC official probabilistic ENSO forecast shows a clear shift into El Niño mode for 2026/2027, giving a full El Niño state by early Fall 2026. This shows the event peaking during Winter, potentially lasting for a second year. You can also see the rapid decline of the current La Niña event.

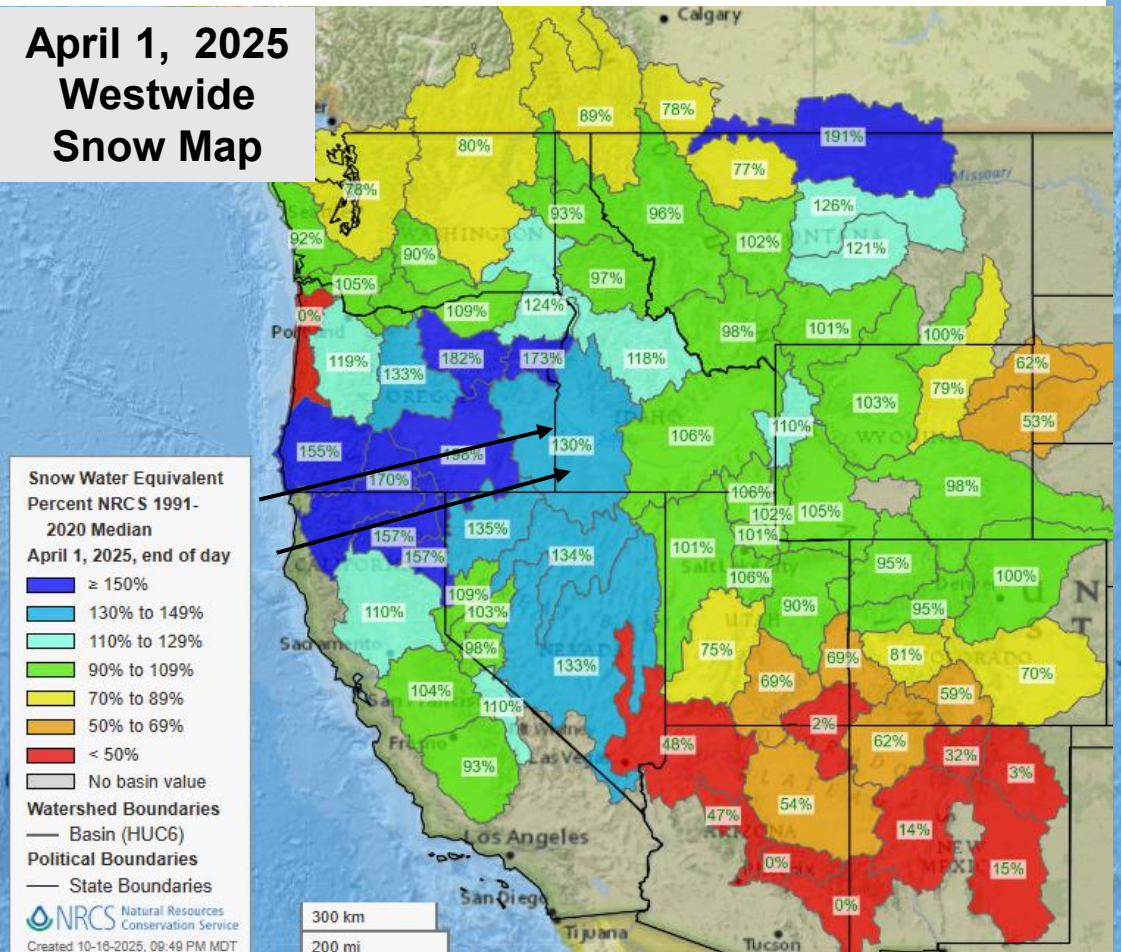


Good visual to view analog years strengths and El Nino years:
1963 1968 2018

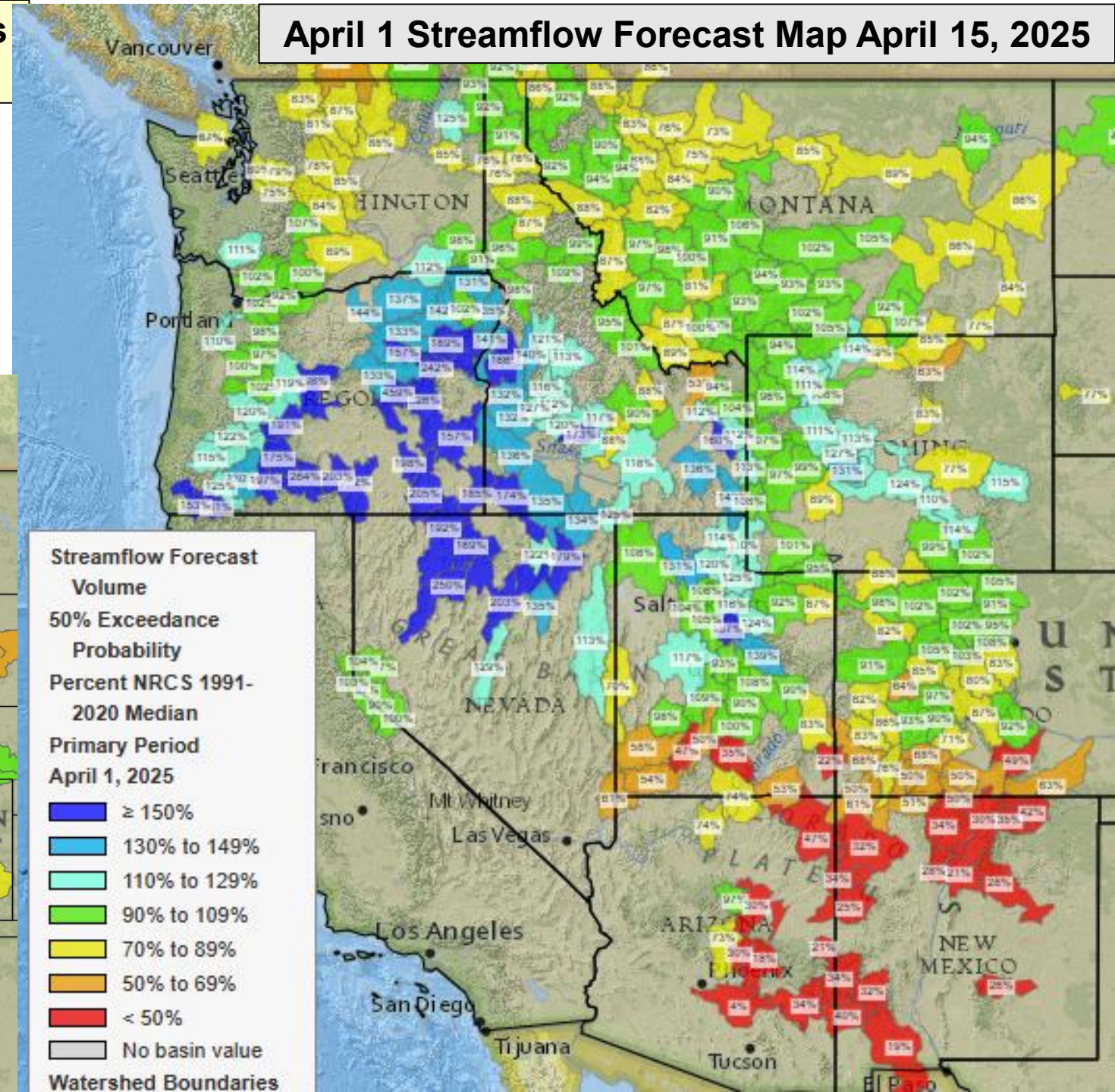


April 1, 2025 – Snow & Water Supply Forecasts were looking promising for PNW

April 1, 2025 Westwide Snow Map



April 1 Streamflow Forecast Map April 15, 2025



Years Following Strong El Nino Events.

2025 Runoff updated in Red box

2025 Runoff - only a few basins had near normal runoff, and a few less than 80% of average.

★ 2025 March Forecasts were looking good ! Now we must wait for another strong El Nino year to share again.

Strong & Very Strong El Nino Years	Year Following a Strong & Very Strong El Nino Year		Streamflow as % of 1991 - 2020 Average							
			Feb-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep
					Sorted high to low					
Very Strong		ENSO	Owyhee River below Dam	Bruneau River	Boise R nr Boise	Payette River nr Horseshoe Bend	MF Salmon River at MF Lodge	Salmon River at White Bird	Selway River	Spokane River nr Post Falls
2015-16	2017	LA	155	182	184	164	180	148	104	110
1982-83	1984	LA	363	343	162	146	NA	144	126	109
1997-98	1999	LA	100	116	138	140	121	124	112	126
					Sorted high to low					
Strong										
1972-73	1974	LA	120	104	185	188	182	164	145	189
1991-92	1993	N	165	125	124	128	NA	107	94	114
1965-66	1967	N	69	93	107	111	NA	119	109	110
1987-88	1989	LA	145	103	99	91	NA	78	102	114
1957-58	1959	EL	20	50	89	99	NA	101	124	136
2023-24	2025	LA	~100	66	90	101	88	84	80	~69
★ Mar 5 NWS 50% Exceedance Forecast			131%	121%	112%	115%	117%	103%	90%	83%
Mar 1 NRCS 50% Exceedance Forecast			127%	107%	117%	112%	104%	90%	108%	75%

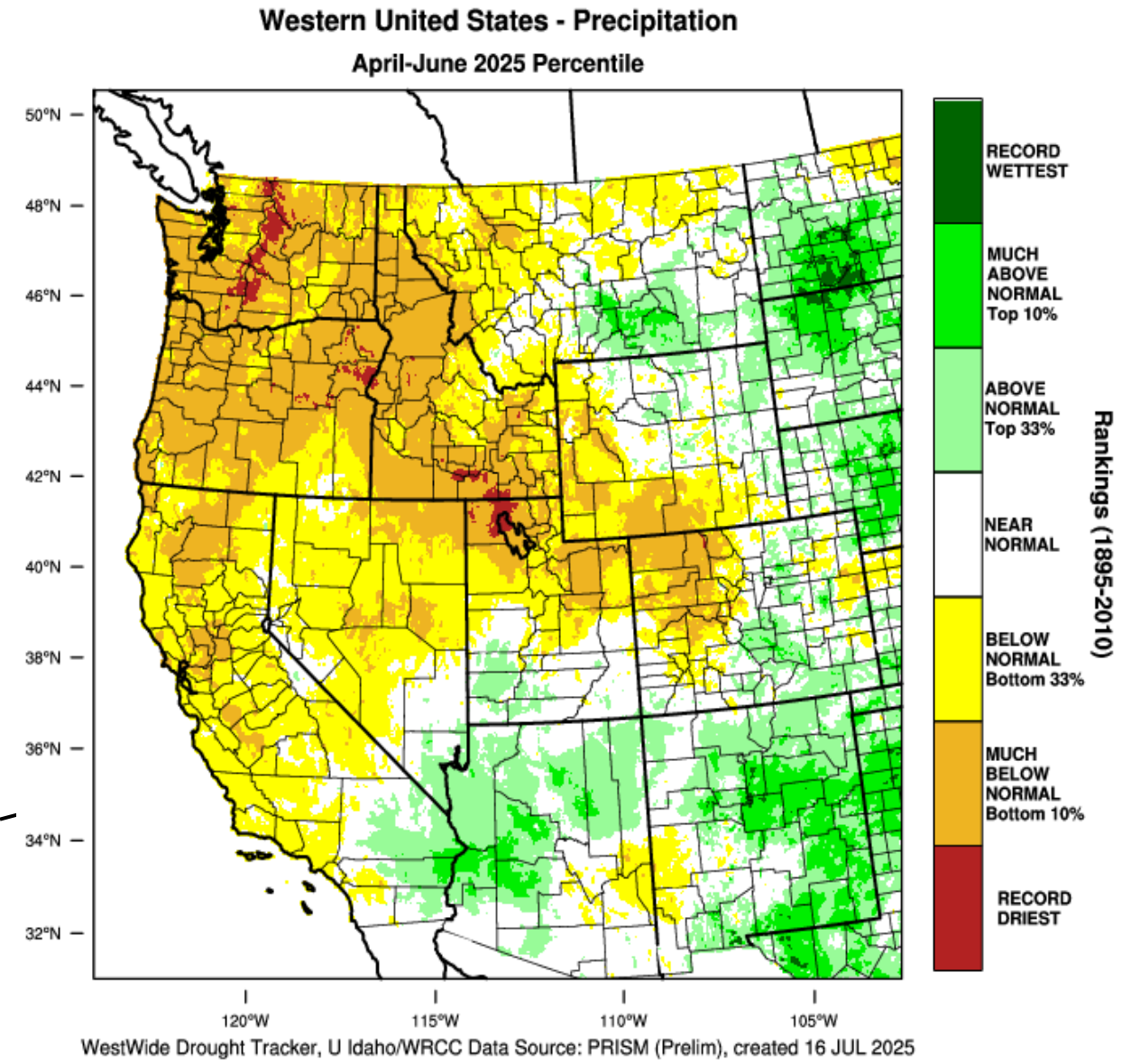
Sorted high to low	
	< 80%
	80-110%
	110-150%
	> 150%

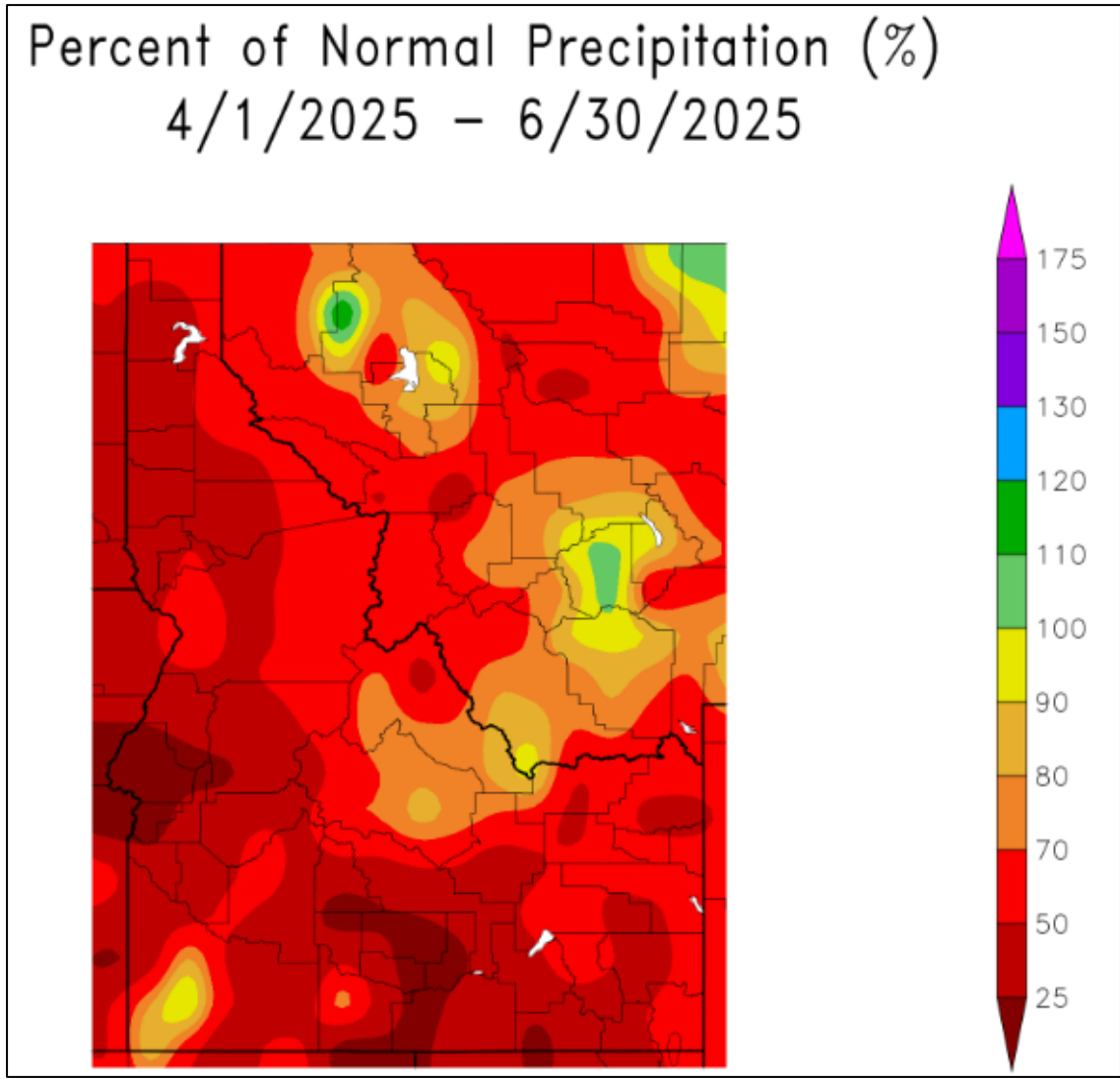
Color Code for Streamflow as % of Average

Good April 1, 2025 Snowpacks
+ Near Record Low Spring Precip
= Much Less Than Expected Runoff

Lesson Learned about Spring Precipitation Living in the Extremes

Idaho Apr-Jun precip was only 25 - 90% of average



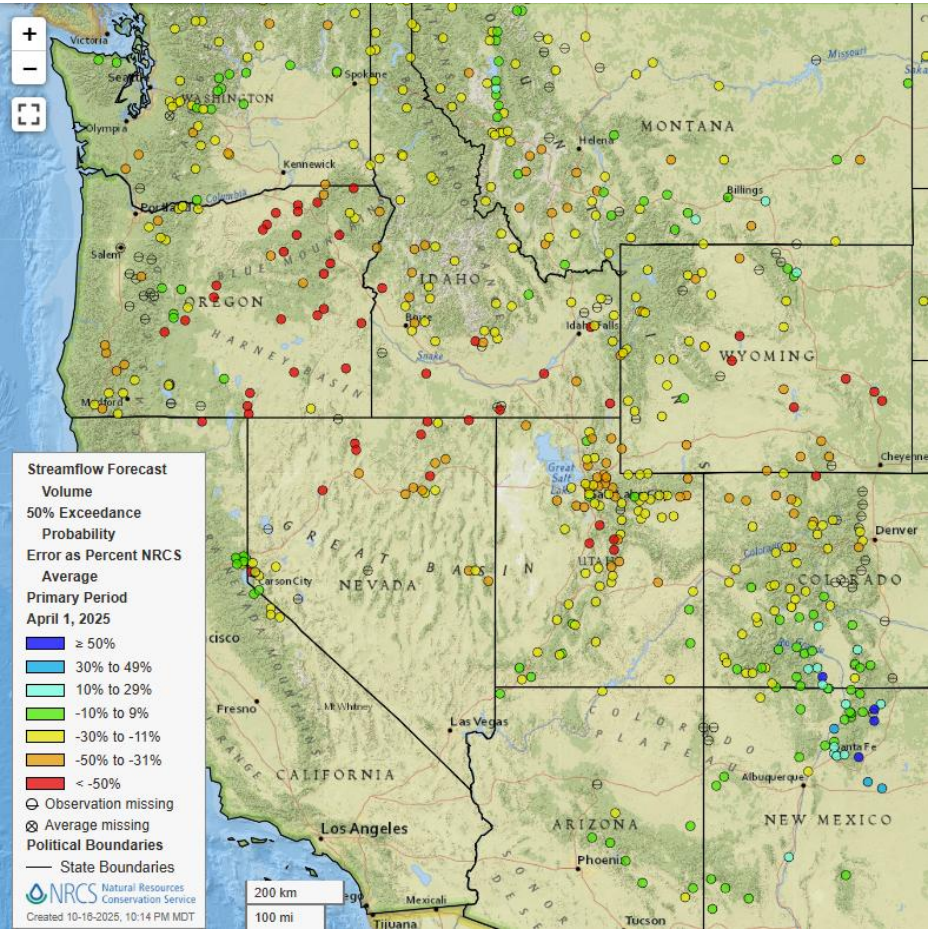


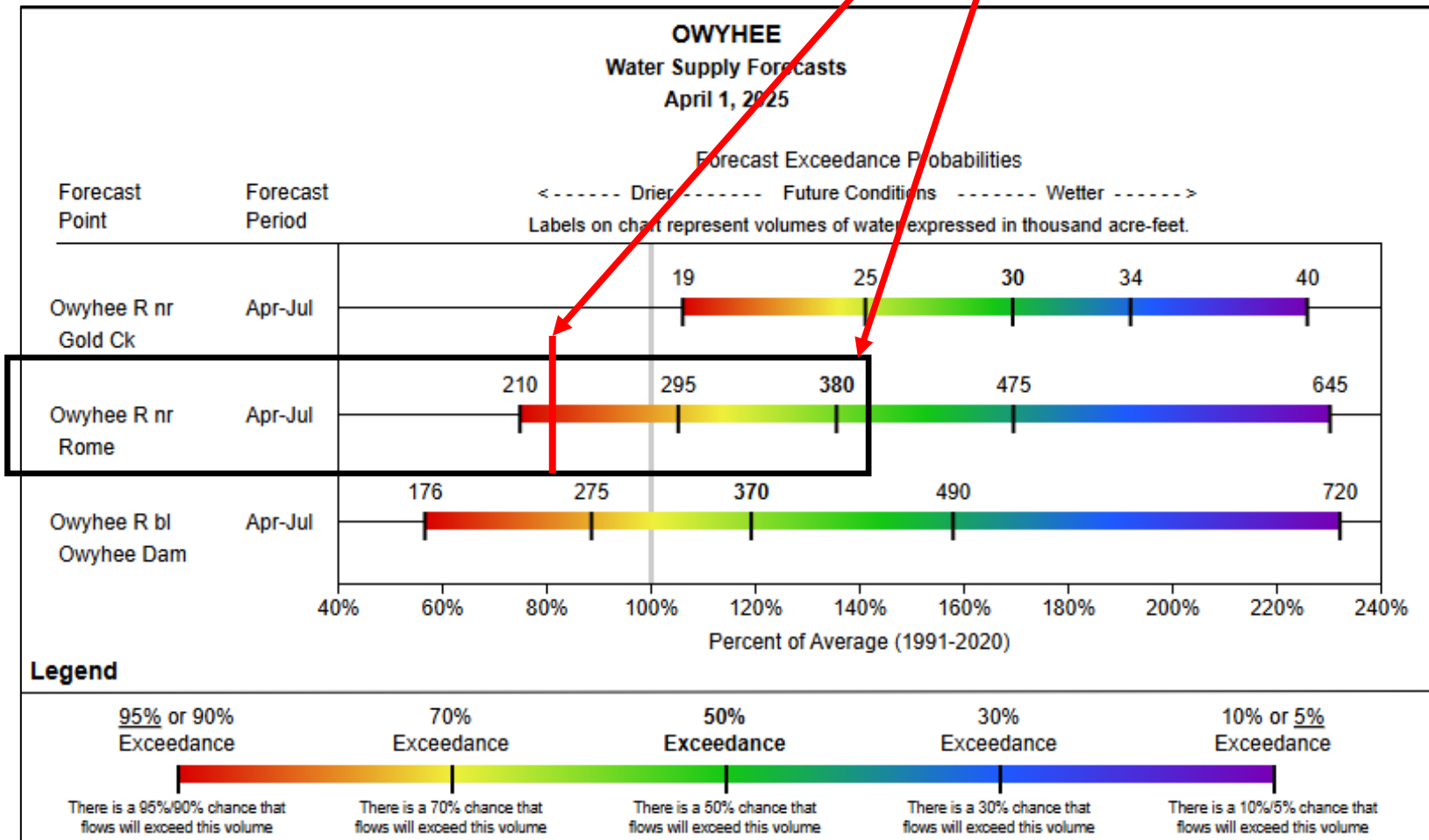
Lessons Known – Spring Precipitation can make or break the streamflow runoff forecasts.

April 1, 2025 Apr-Jul Owyhee River nr Rome Forecast Volume was 380 KAF
Minimum Forecast for 210 KAF

Observed Runoff was 217 KAF

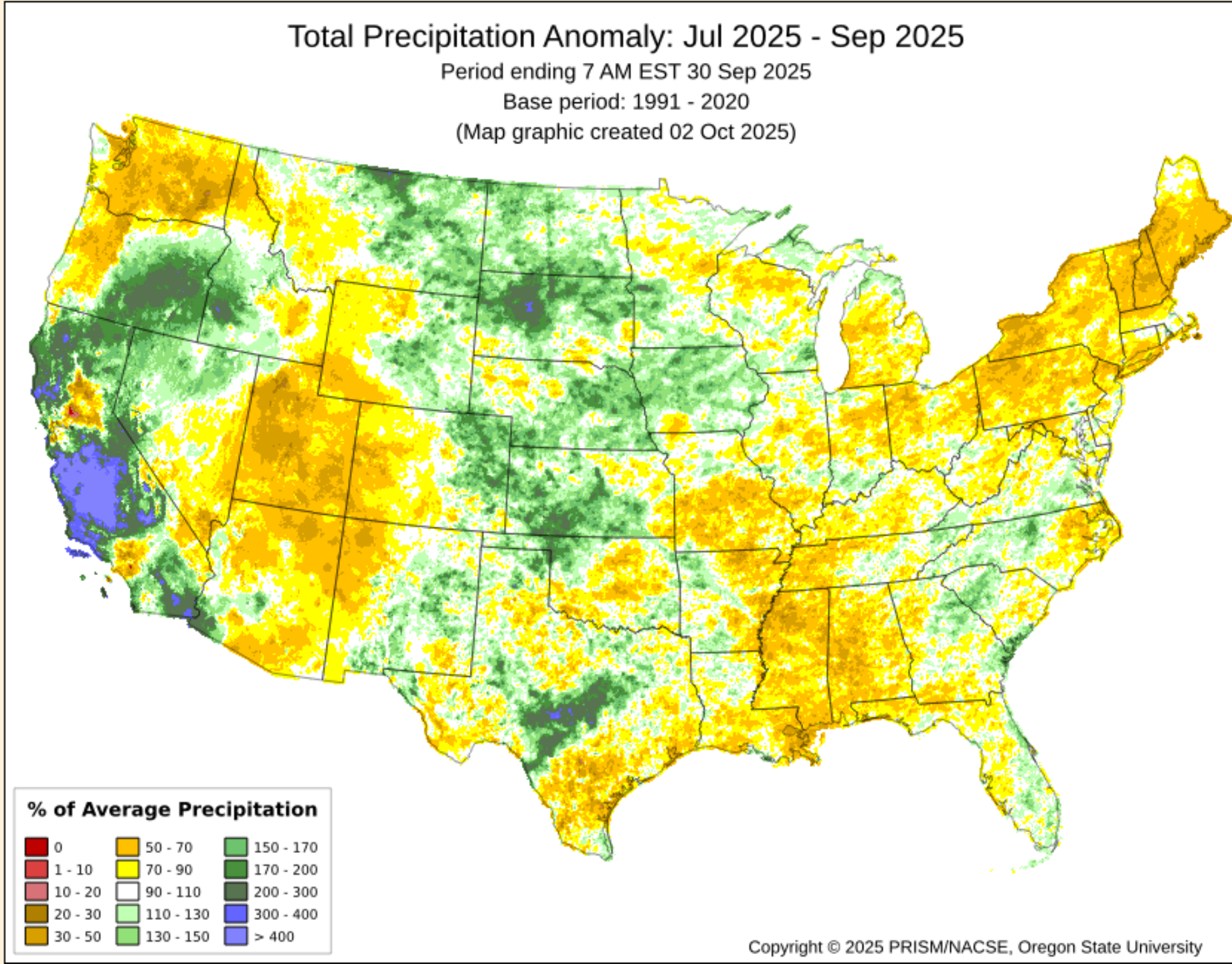
Lack of Apr-Jun Spring Precipitation pushed runoff volumes to the Minimum Forecast Volumes, 90% Exceedance Levels.

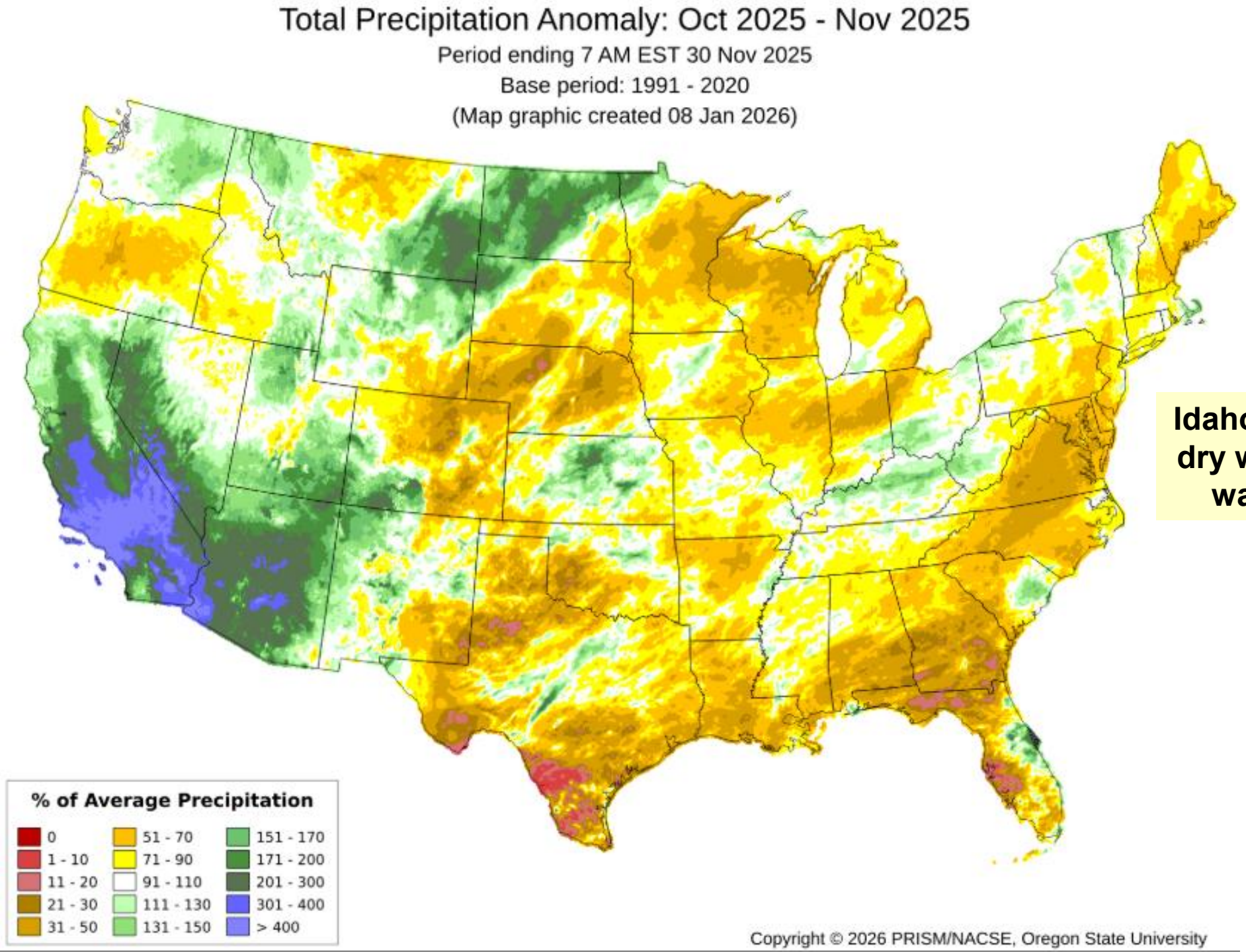




Summer Precipitation Near normal or better in SW Idaho.

Helped put damper on fires but too late to benefit spring runoff.





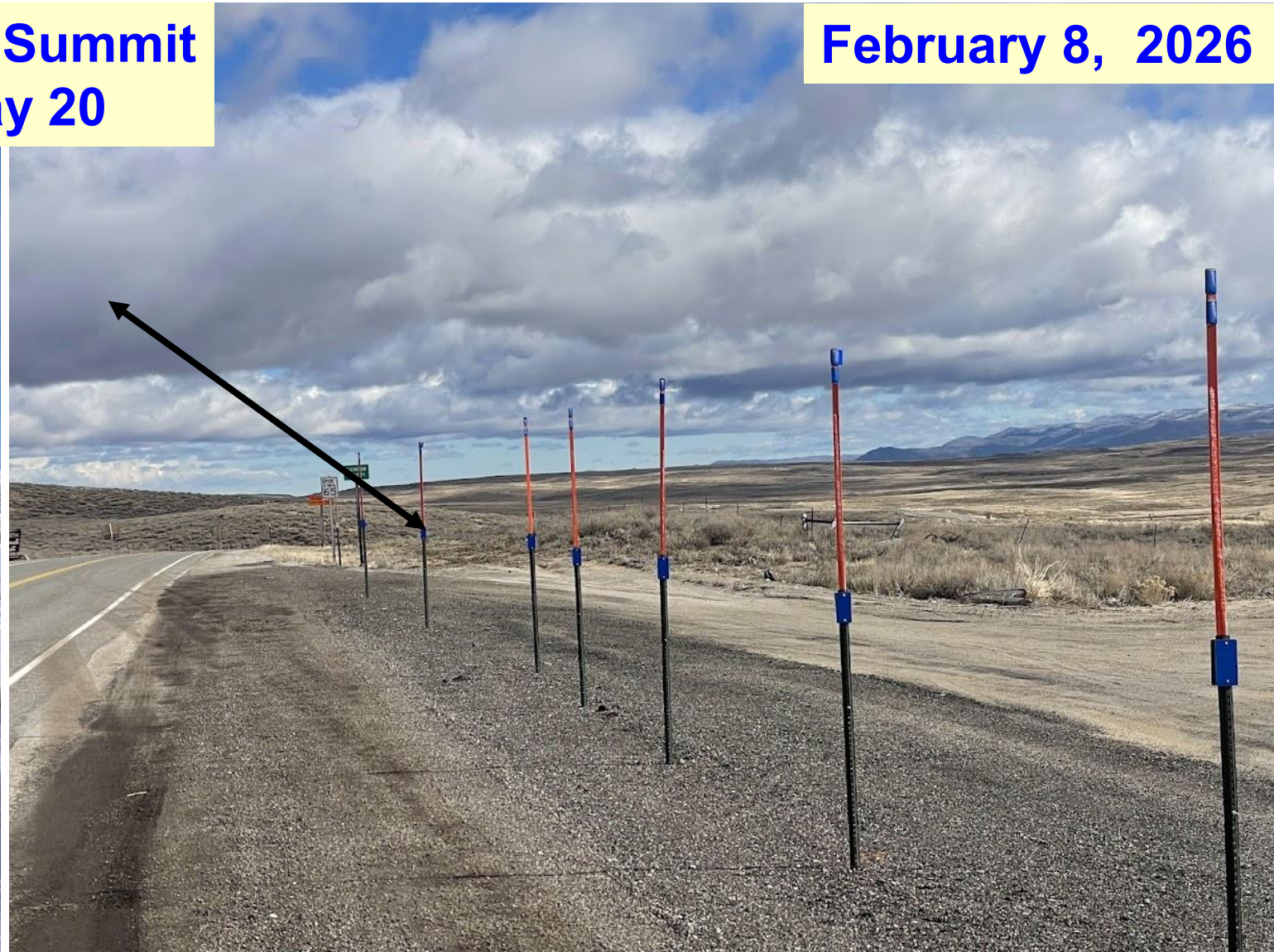
Idaho Oct-Nov Precipitation dry with warm temps as we waited for snow to fall.

December 2025 arrived and we're still asking: Where's the Snow ?

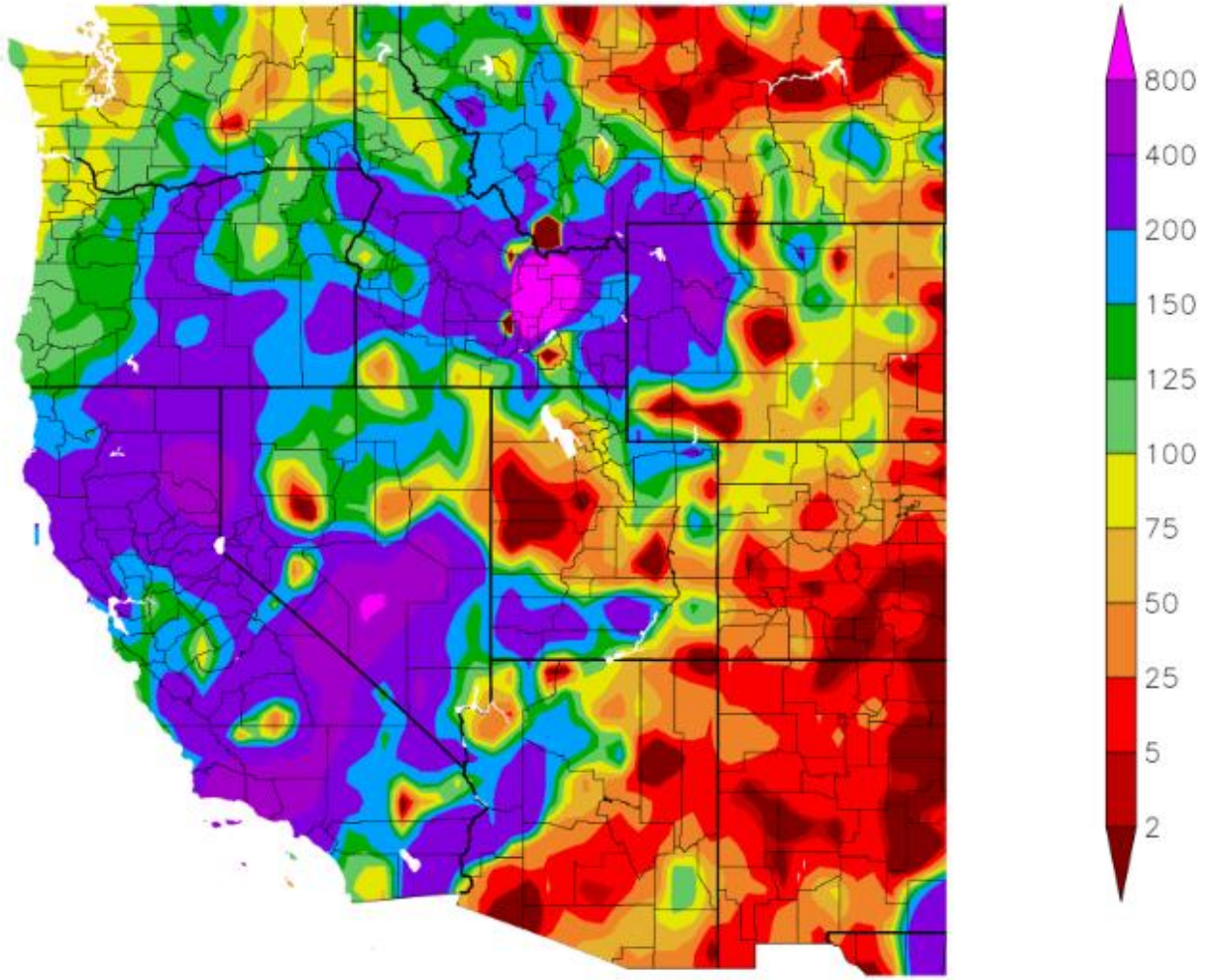
Cat Creek Summit Highway 20

April 6, 2023

February 8, 2026



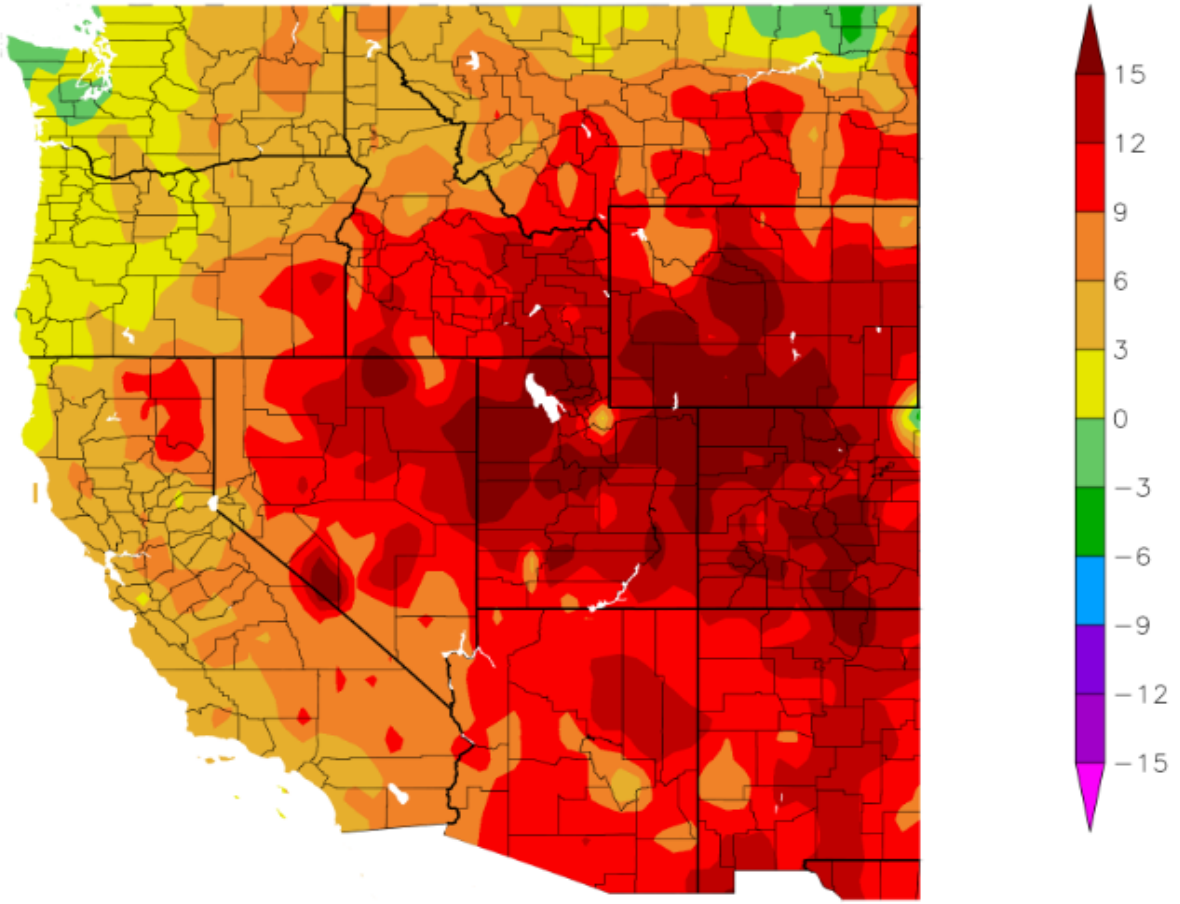
Percent of Normal Precipitation (%)
12/18/2025 – 12/31/2025



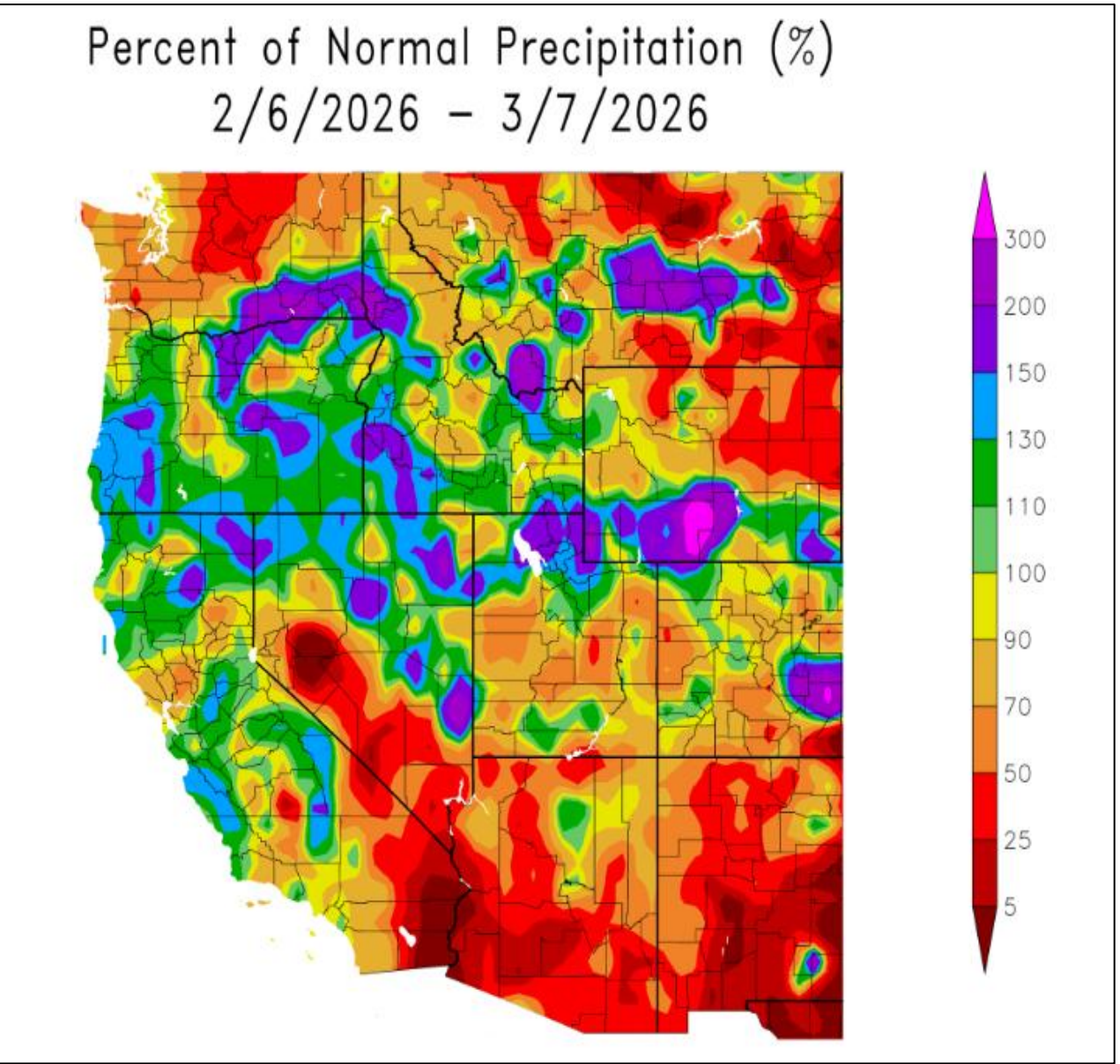
Dec 18 - Weather pattern change.
Pockets of well above normal precipitation fell across central Idaho Dec 18 - 31 with Big/Little Lost pushing 800% of normal.

But temps were above normal.

Departure from Normal Temperature (F)
12/18/2025 – 12/31/2025

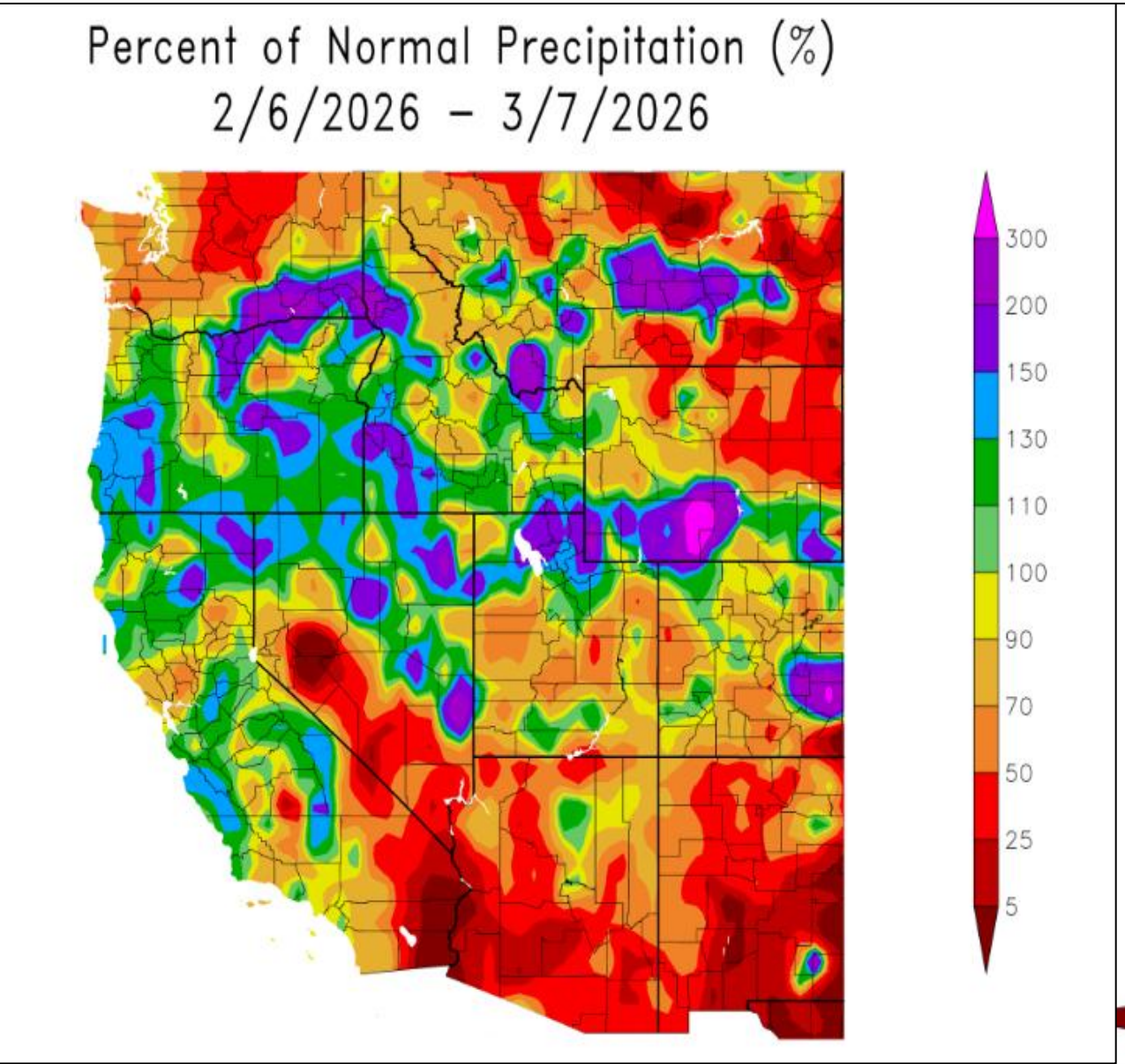


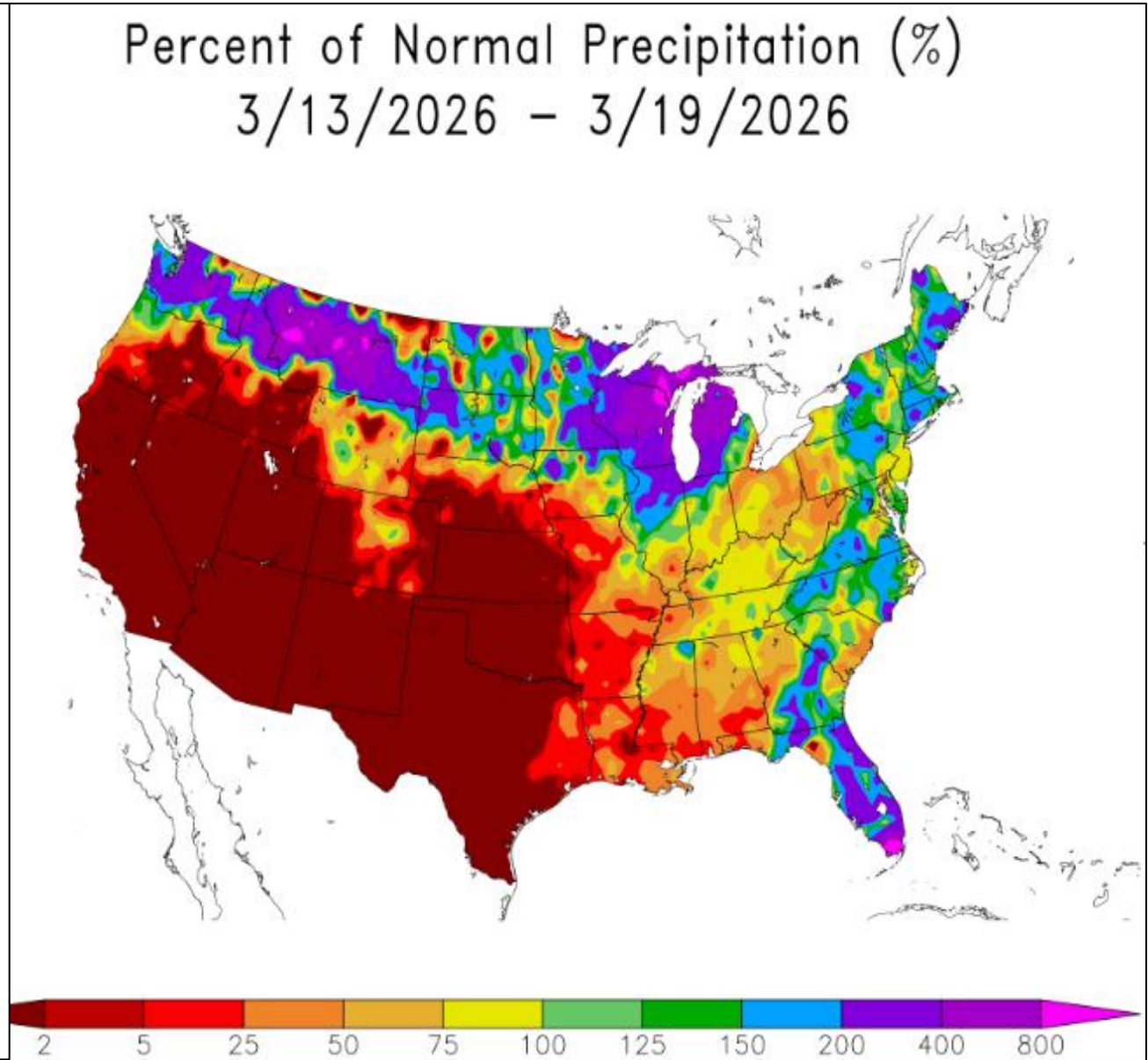
Dec 28, 2025 - Oregon Seed Crop Grower told me to expect snowstorm around Feb 14
=> it snows every calving season.



Dec 28, 2025 - Oregon Seed Crop Grower told me to expect snowstorm around Feb 14 => it snows every calving season.

Mid-March Event - brought abundant moisture, feet of snow, rain on snow, and flooding from WA Cascades to western MT.



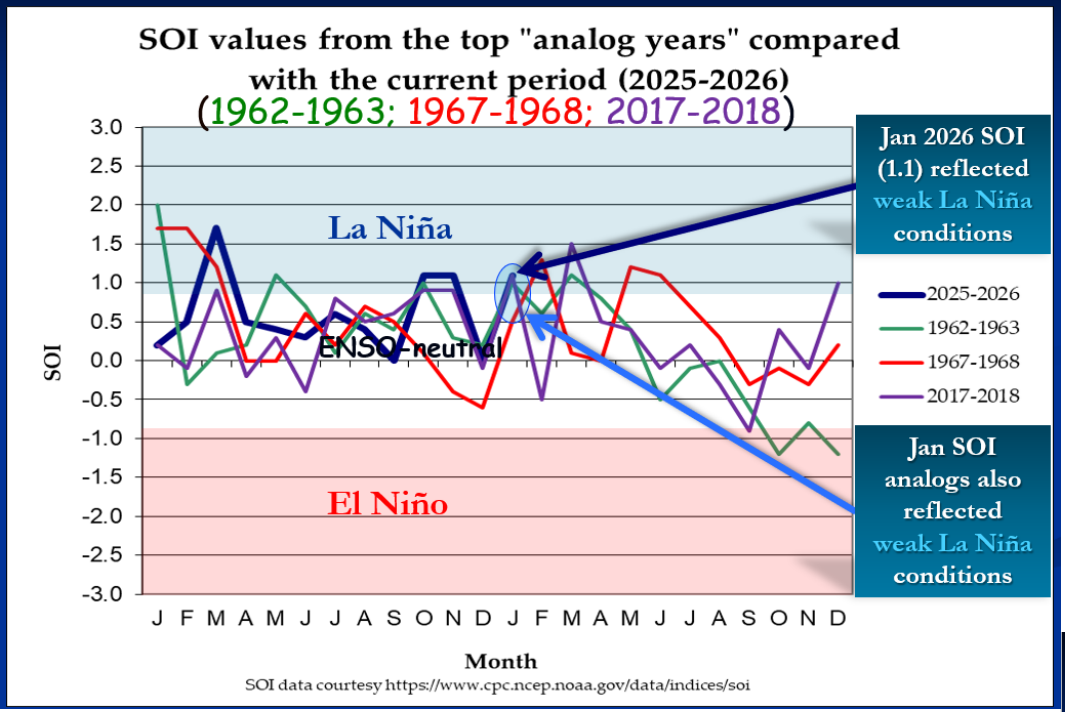


Forecast Highlights

- This forecast is based on weather that occurred during the 1963, 1968, & 2018 analog years (the 1982 analog was replaced by 1963 this month).
- 3-month signals show near near-average temperatures & precipitation. However, significant monthly departures from average are likely.
- All 3 of the top analog years had below-average peak snowpacks. However, some late-winter and early-spring snowpack recovery, from the current very low levels, is indicated.

Analog Years Based on SOI, ONI and PDO conditions:
1963 1968 2018

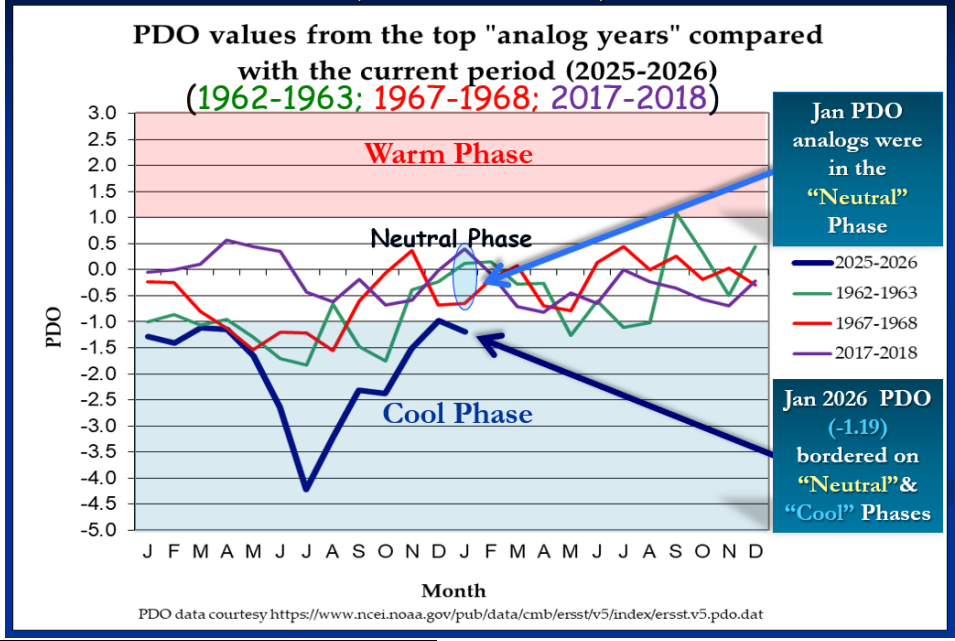
Southern Oscillation Index (SOI)



SOI data courtesy https://www.cpc.ncep.noaa.gov/data/indices/soi

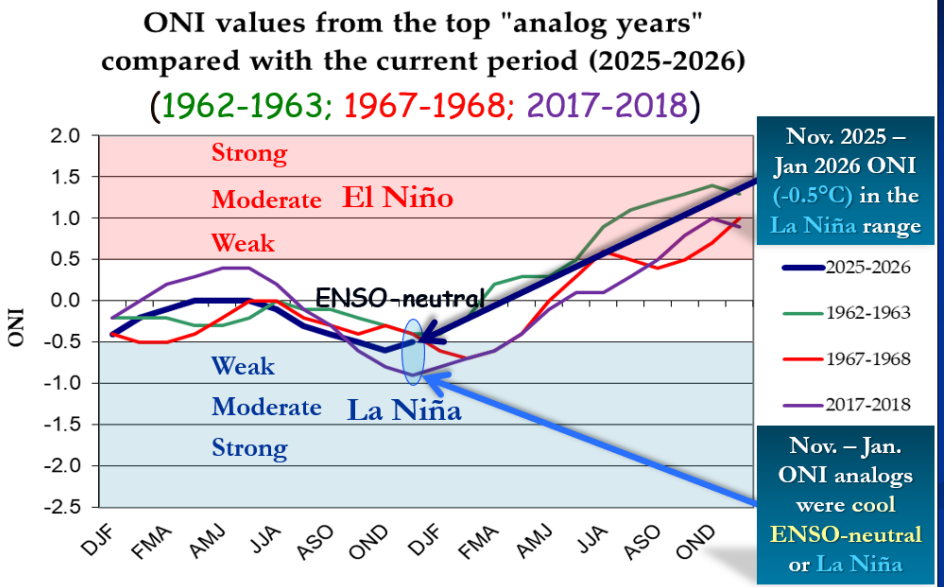
North Pacific Ocean

(Poleward of 20°N Latitude)



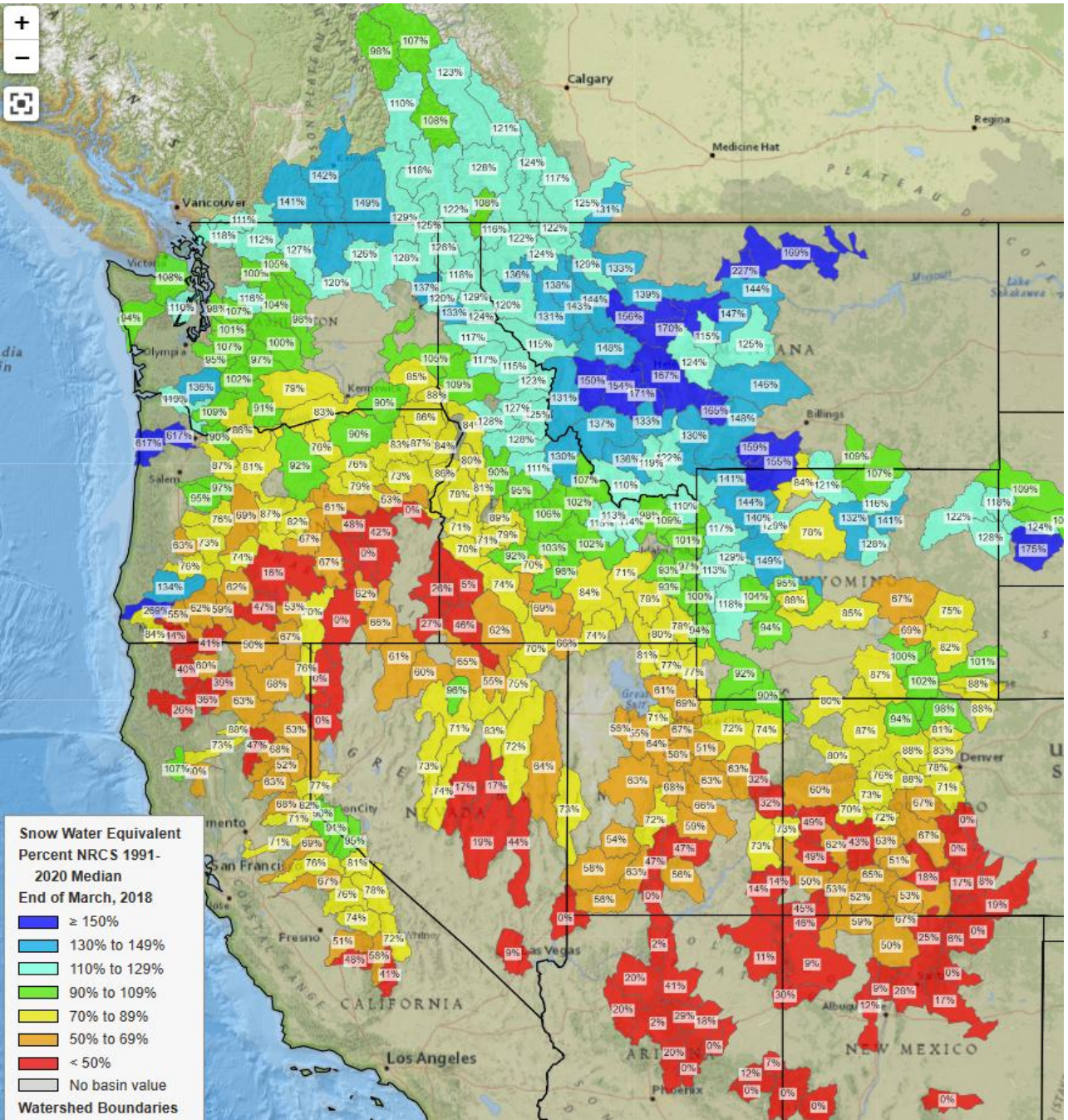
PDO data courtesy https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/index/ersst.v5.pdo.dat

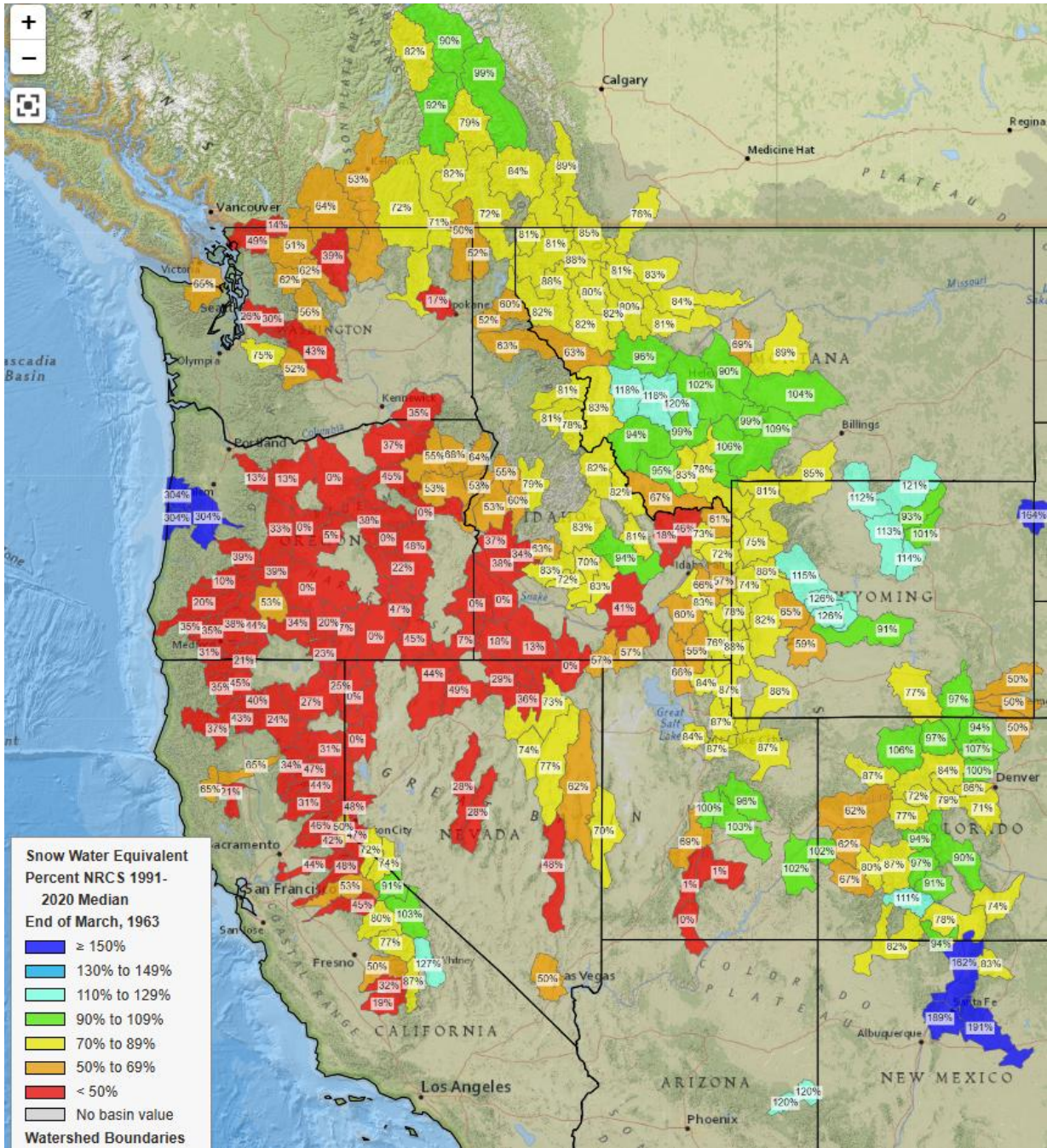
Oceanic Niño Index (ONI)



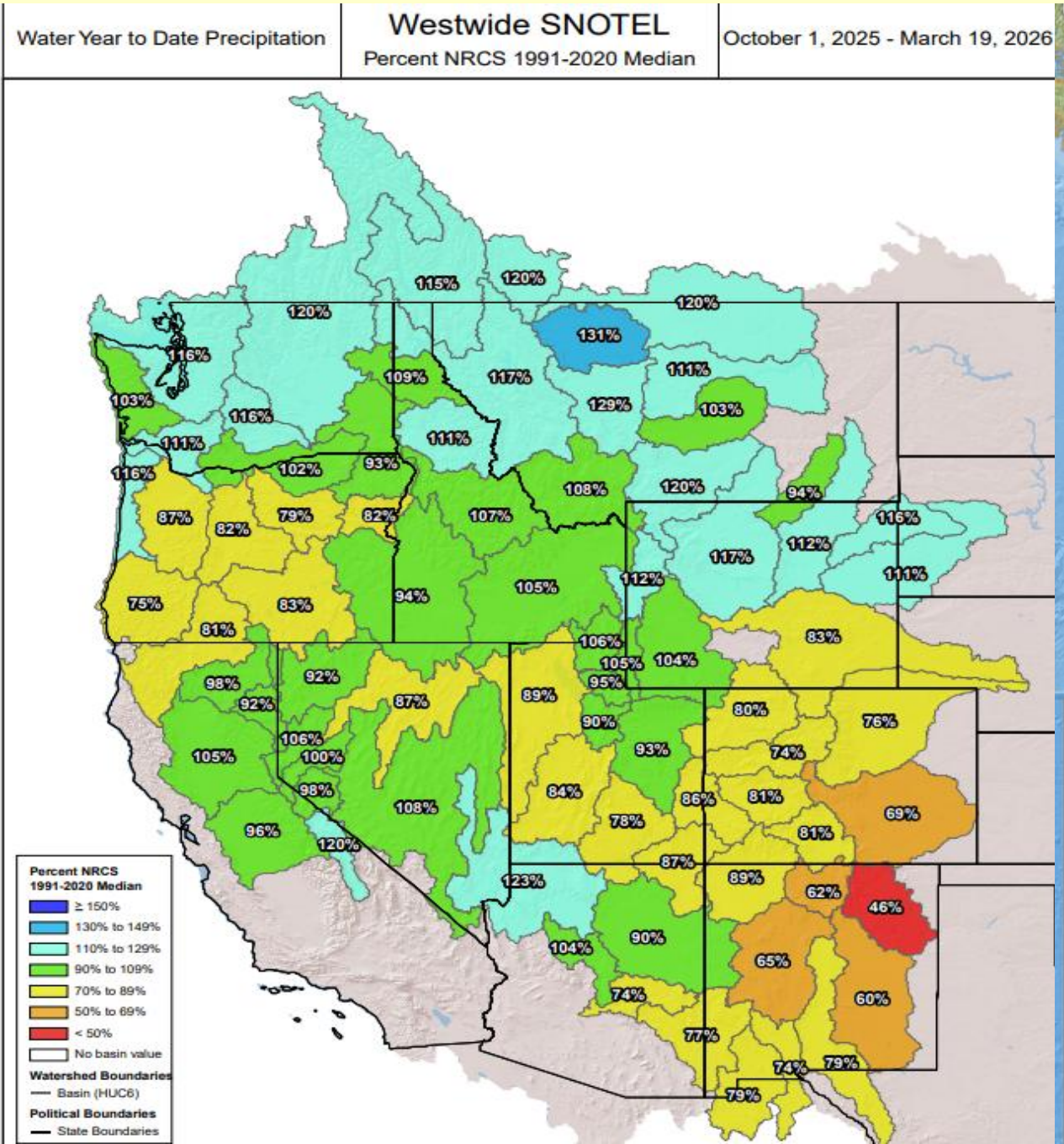
ONI data courtesy https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php

April 1 2018 Snowpack Based on SNOTEL & Snow Course April 1 1963

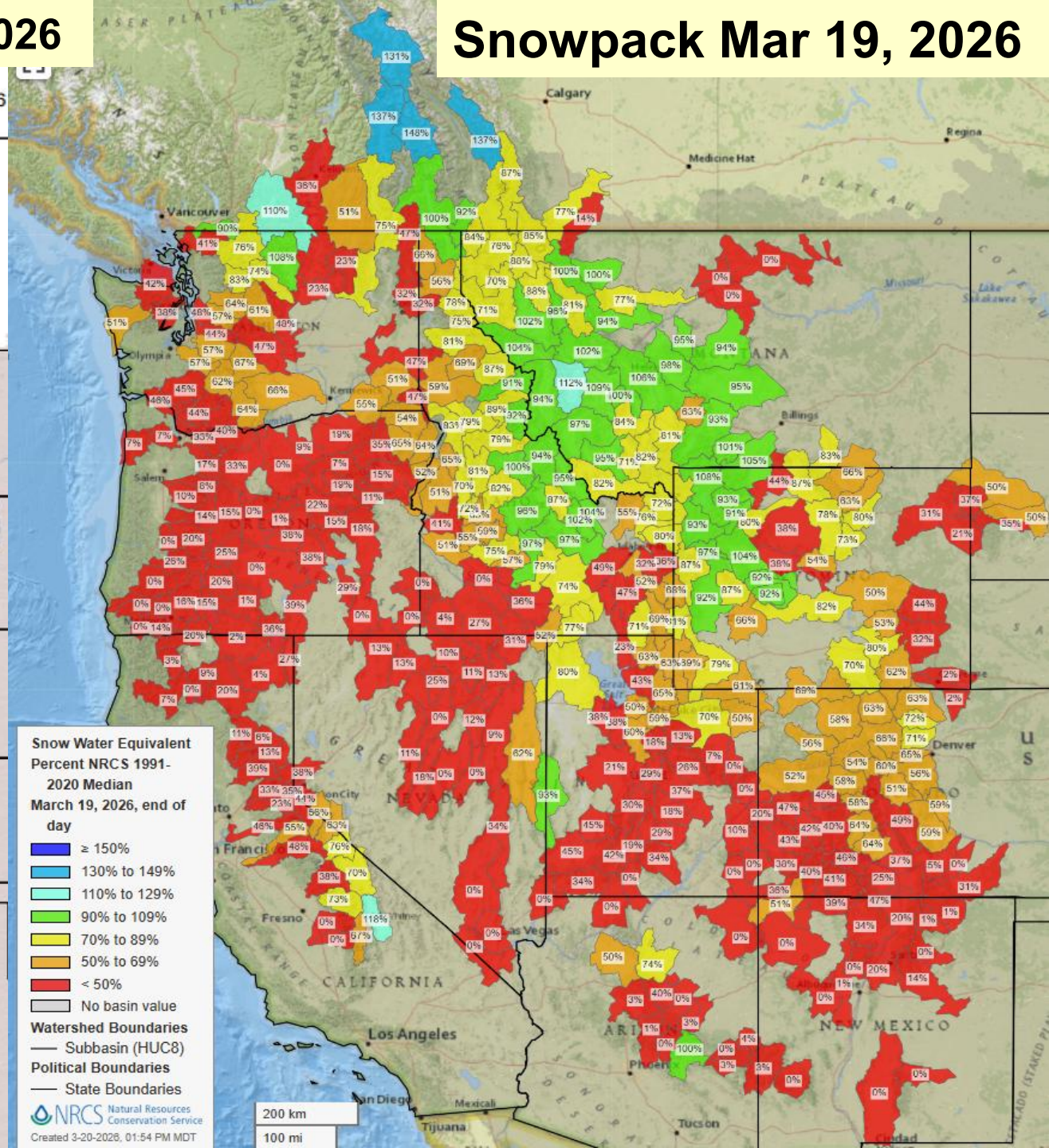




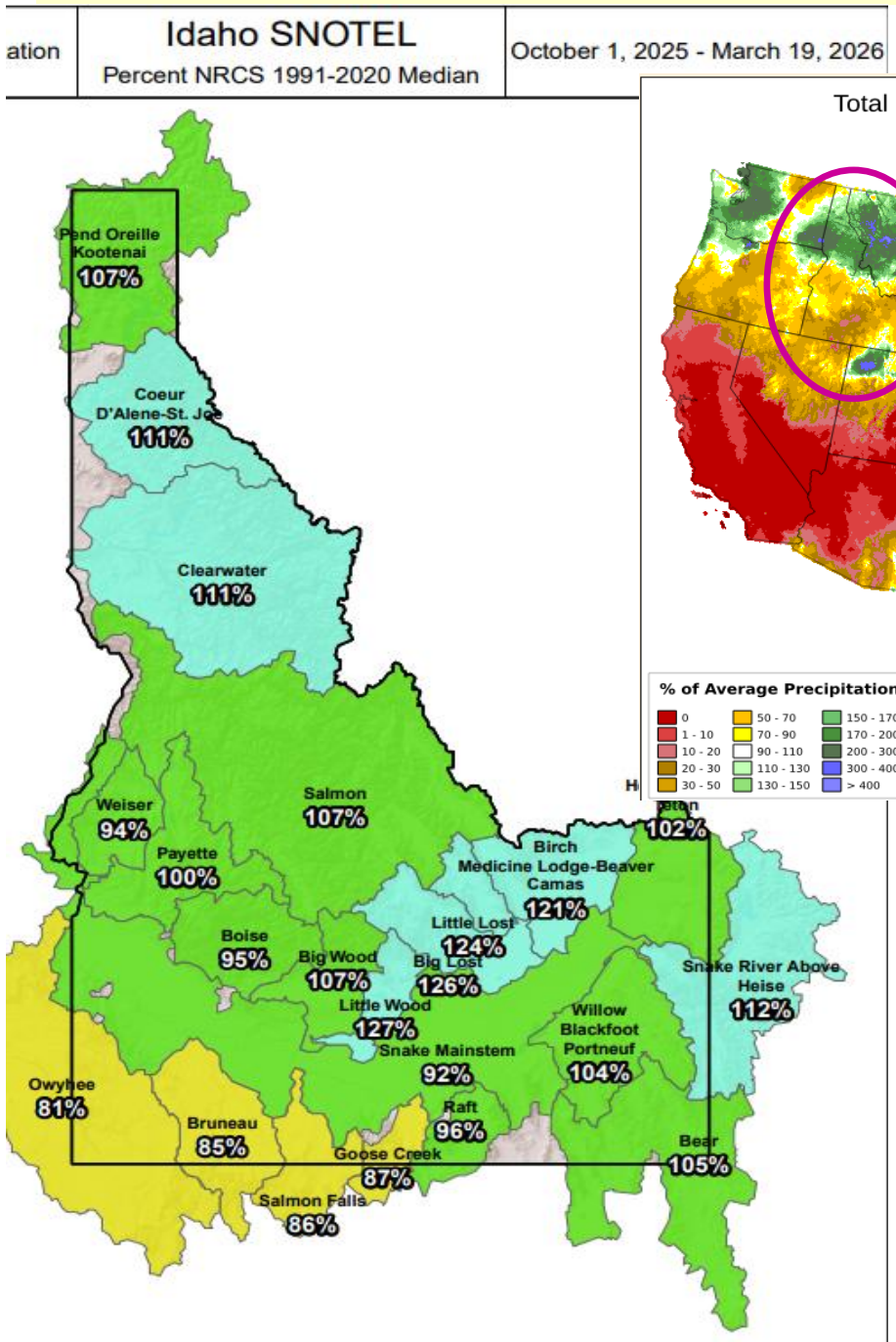
Water Year to Date Precipitation Oct 1-Mar 19, 2026

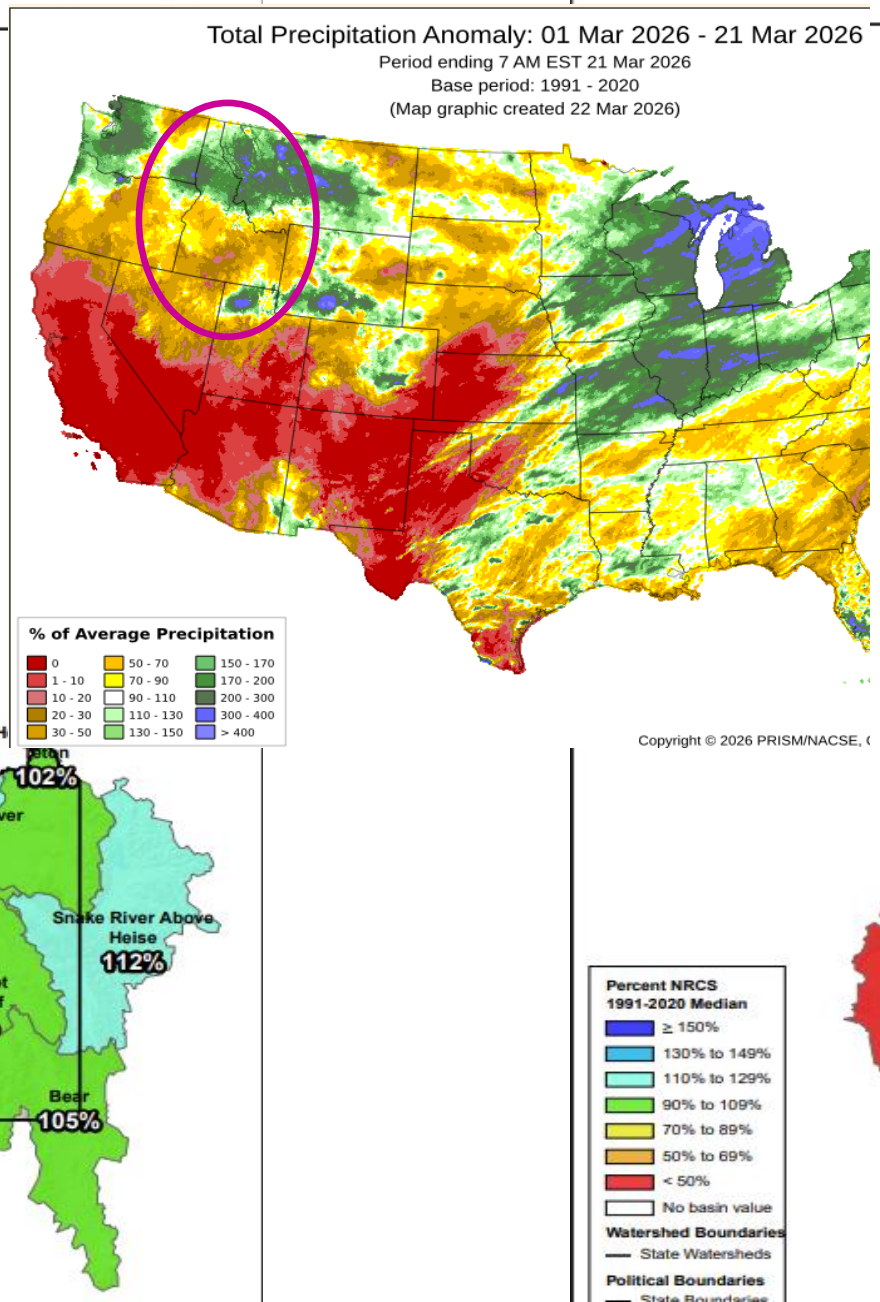


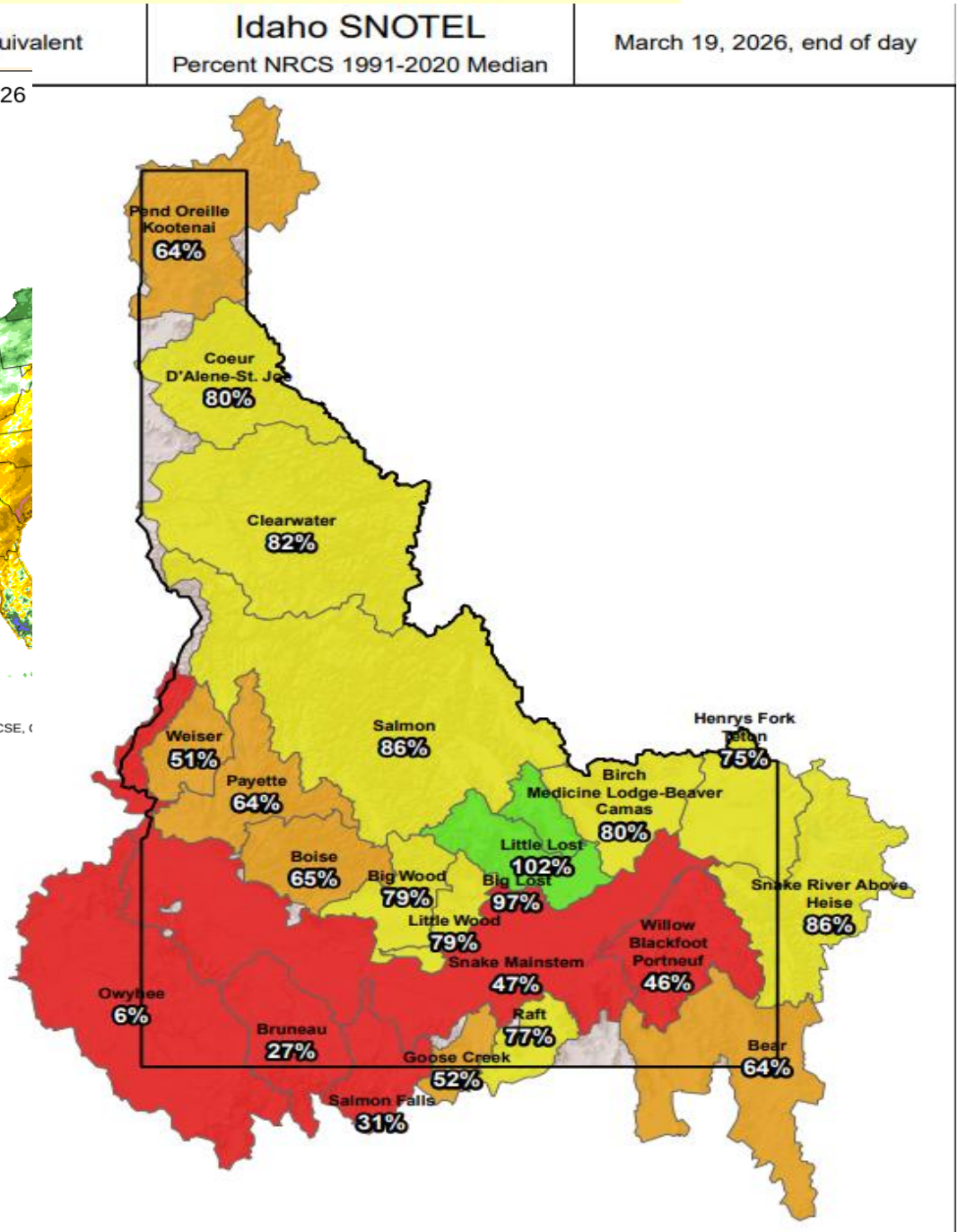
Snowpack Mar 19, 2026



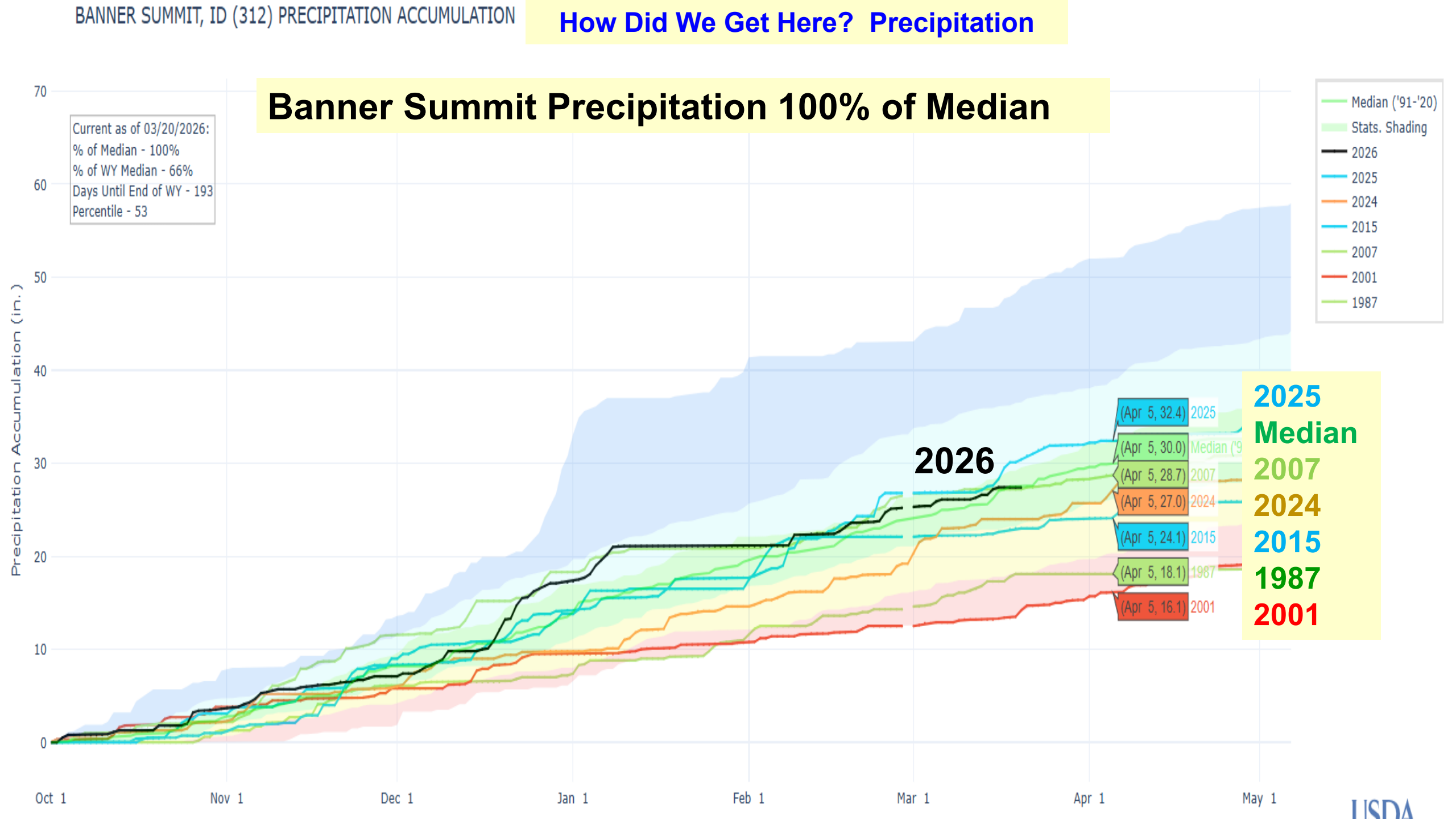
Water Year to Date Precipitation Oct 1 - Mar 19 Idaho Snowpack Mar 19, 2026





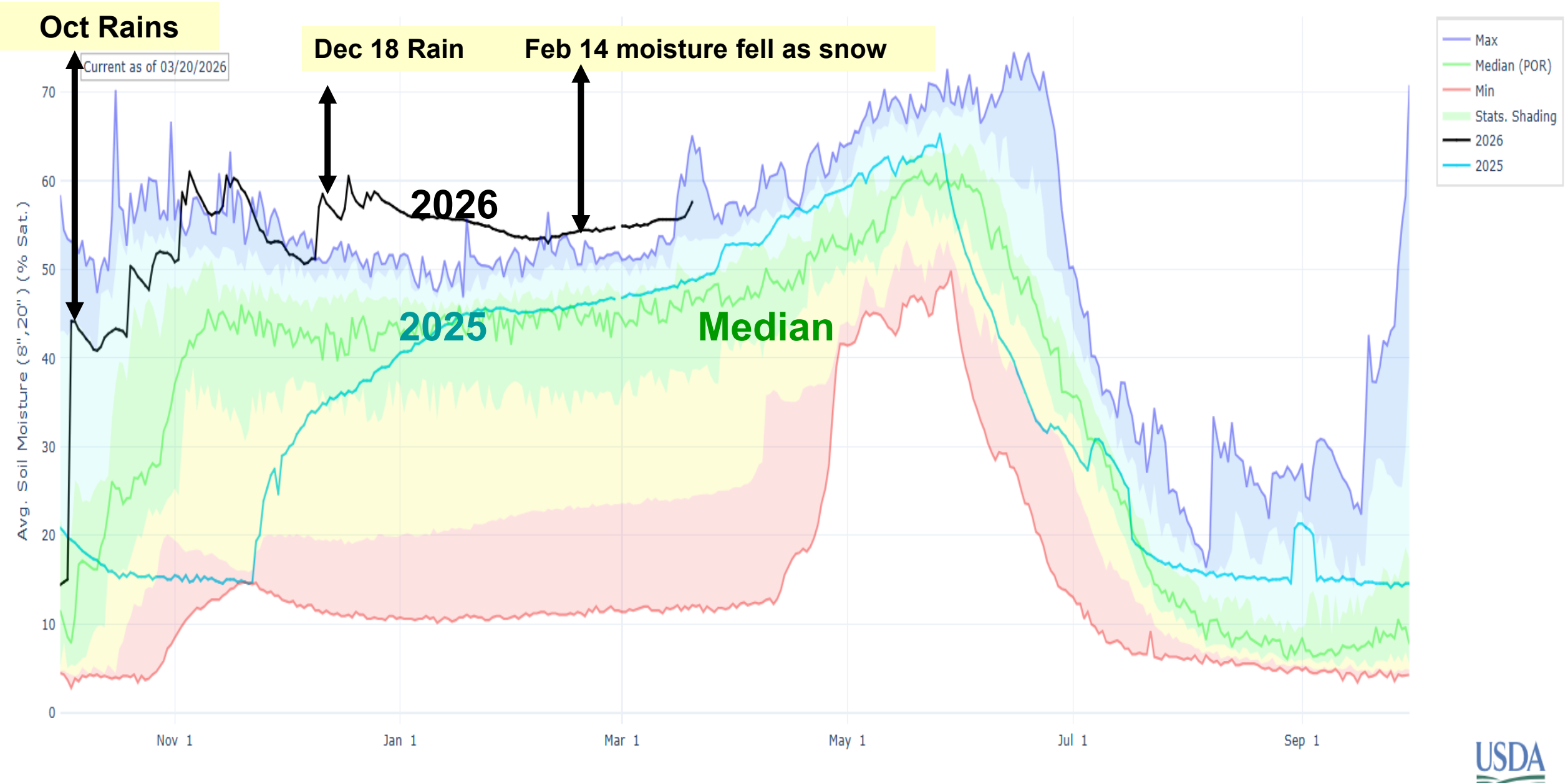


How Did We Get Here? Precipitation



How Did We Get Here? Soil Moisture

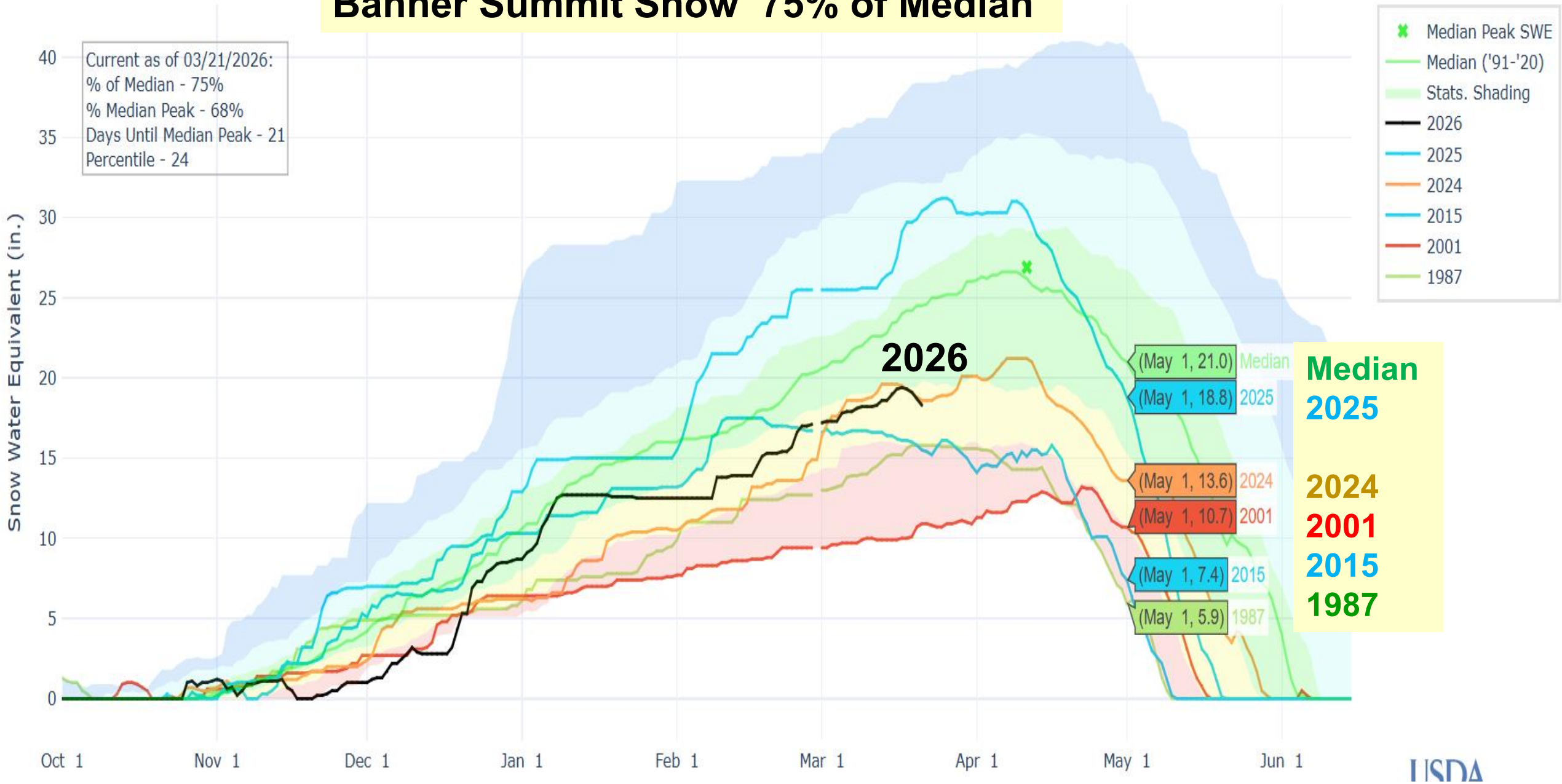
October rains increased soil moisture in mountains around Banner Summit. Good for improving spring runoff conditions.



BANNER SUMMIT, ID (312) SNOW WATER EQUIVALENT

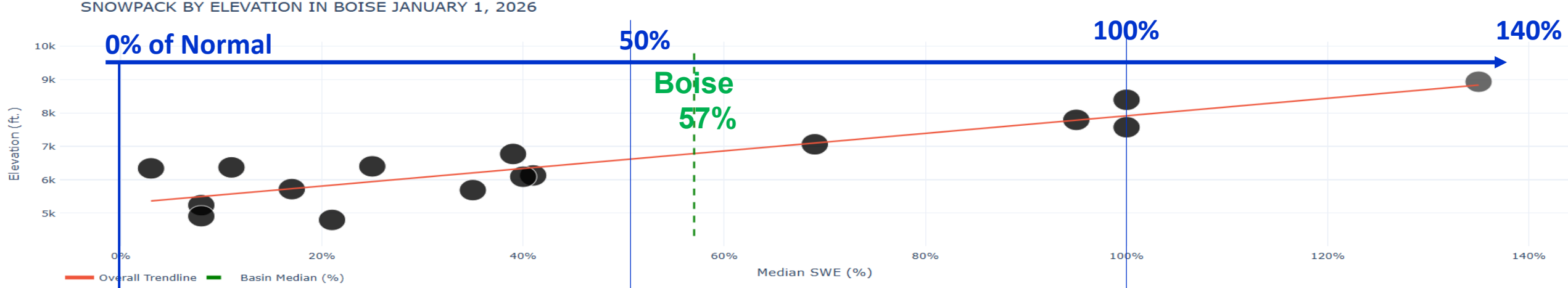
How Did We Get Here? Snow

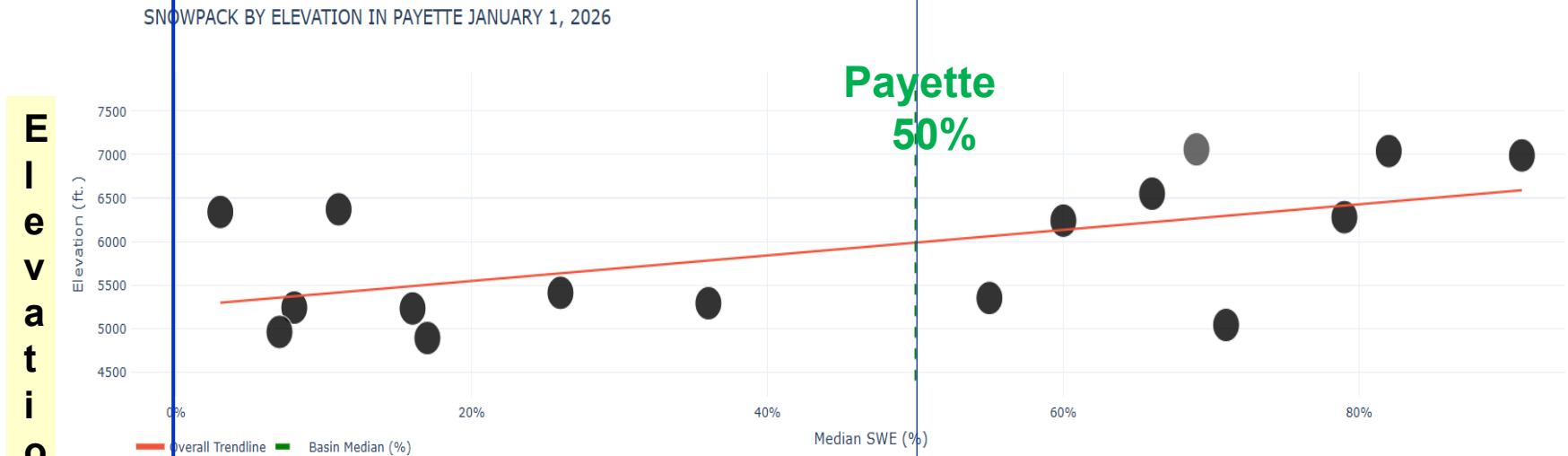
Banner Summit Snow 75% of Median

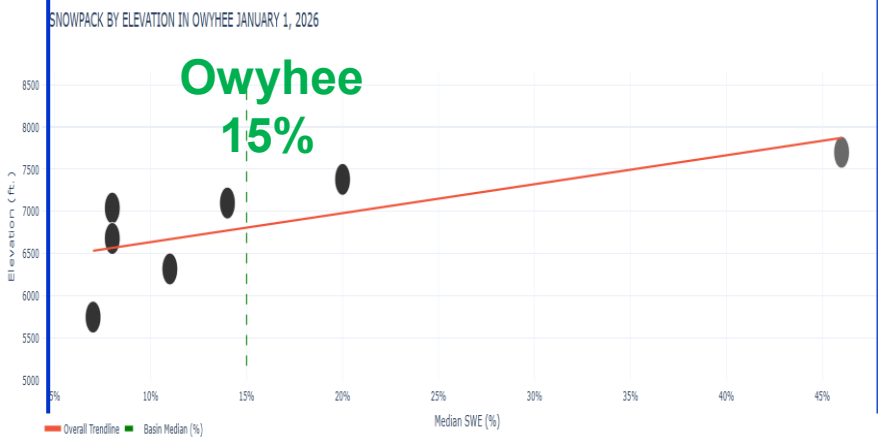


Median
2025
2024
2001
2015
1987

USDA







Elevation

Jan 1, 2026 Snowpack by Elevation

Overall Snowpack:

Boise 57%

Payette 50%

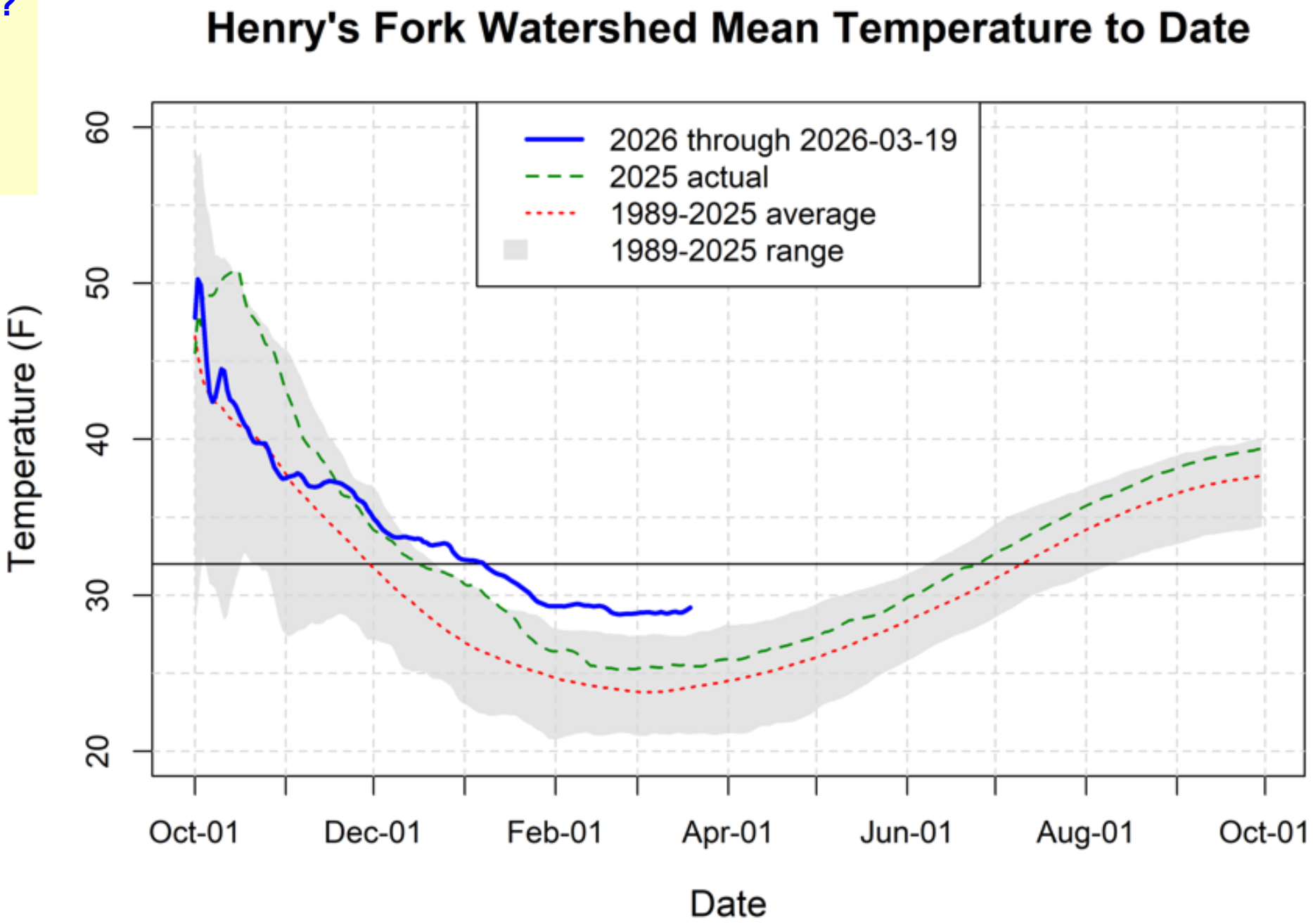
Owyhee 15%

How Did We Get Here? Snow


SNOWPACK BY ELEVATION IN BIG LOST MARCH 1, 2026
0% of Normal
50%
100%
Big Lost
118%
150%
Elevation
Density (%)
Elevation (ft.)
Median SWE (%)
Overall Trendline
Basin Median (%)
SNOWPACK BY ELEVATION IN BOISE MARCH 1, 2026
Boise
60%
Density (%)
Elevation (ft.)
Median SWE (%)
Overall Trendline
Basin Median (%)
SNOWPACK BY ELEVATION IN OWYHEE MARCH 1, 2026
Owyhee
17%
Density (%)
Elevation (ft.)
Median SWE (%)
How Did We Get Here? Snow
March 1, 2026
Snowpack by
Elevation
Overall Snowpack:
Big Lost 118%
Boise 60%
Owyhee 17%

How Did We Get Here?
Temperatures

From Henrys Fork Foundation

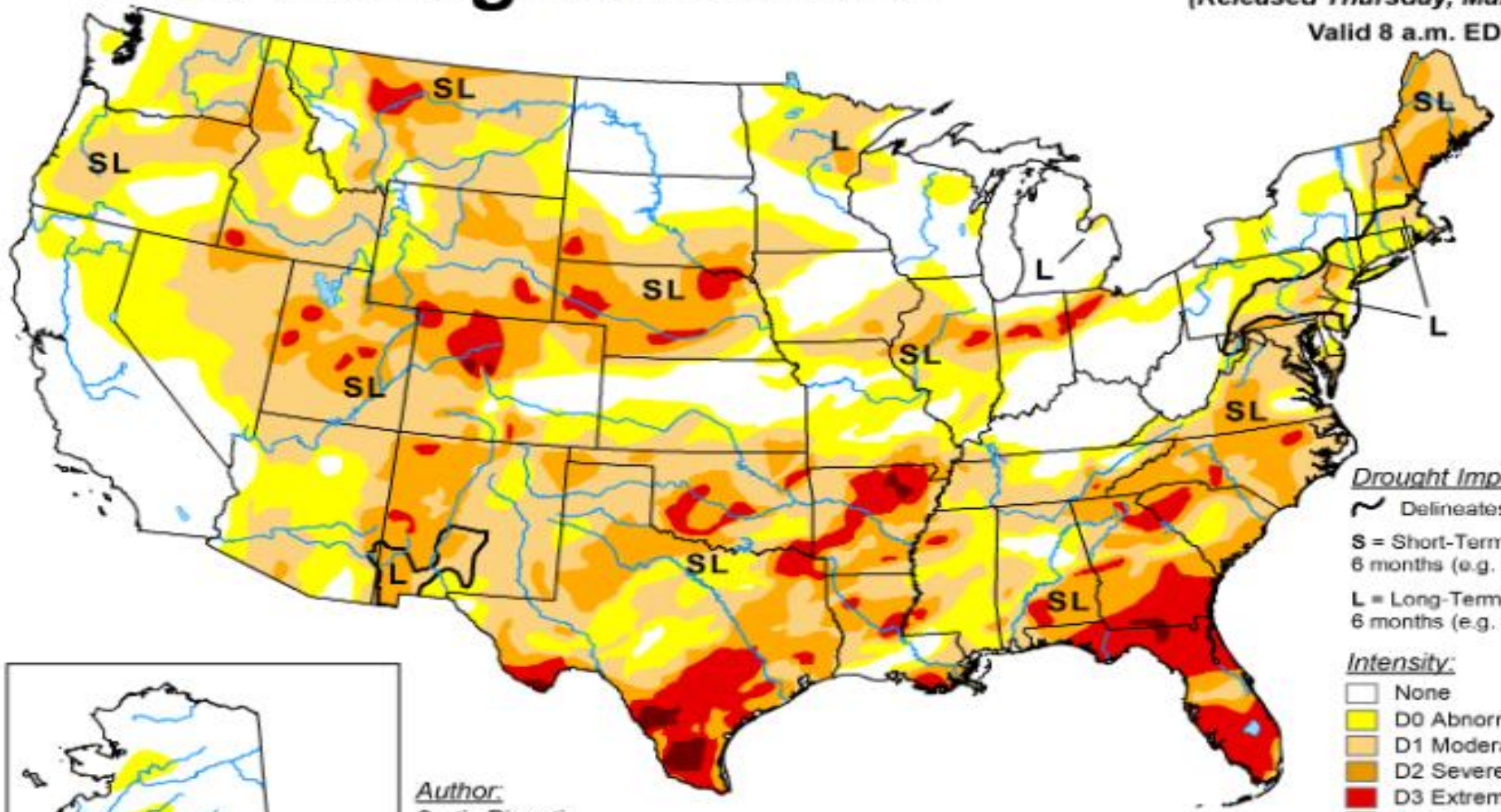


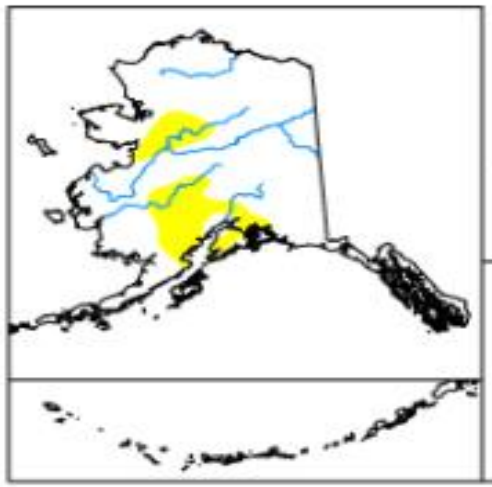
U.S. Drought Monitor

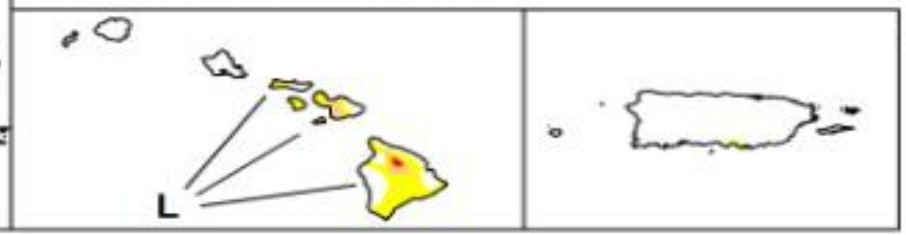
March 17, 2026

(Released Thursday, Mar. 19, 2026)

Valid 8 a.m. EDT







Drought Impact Types:

Delineates dominant impacts

S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

Author:

Curtis Riganti

National Drought Mitigation Center

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

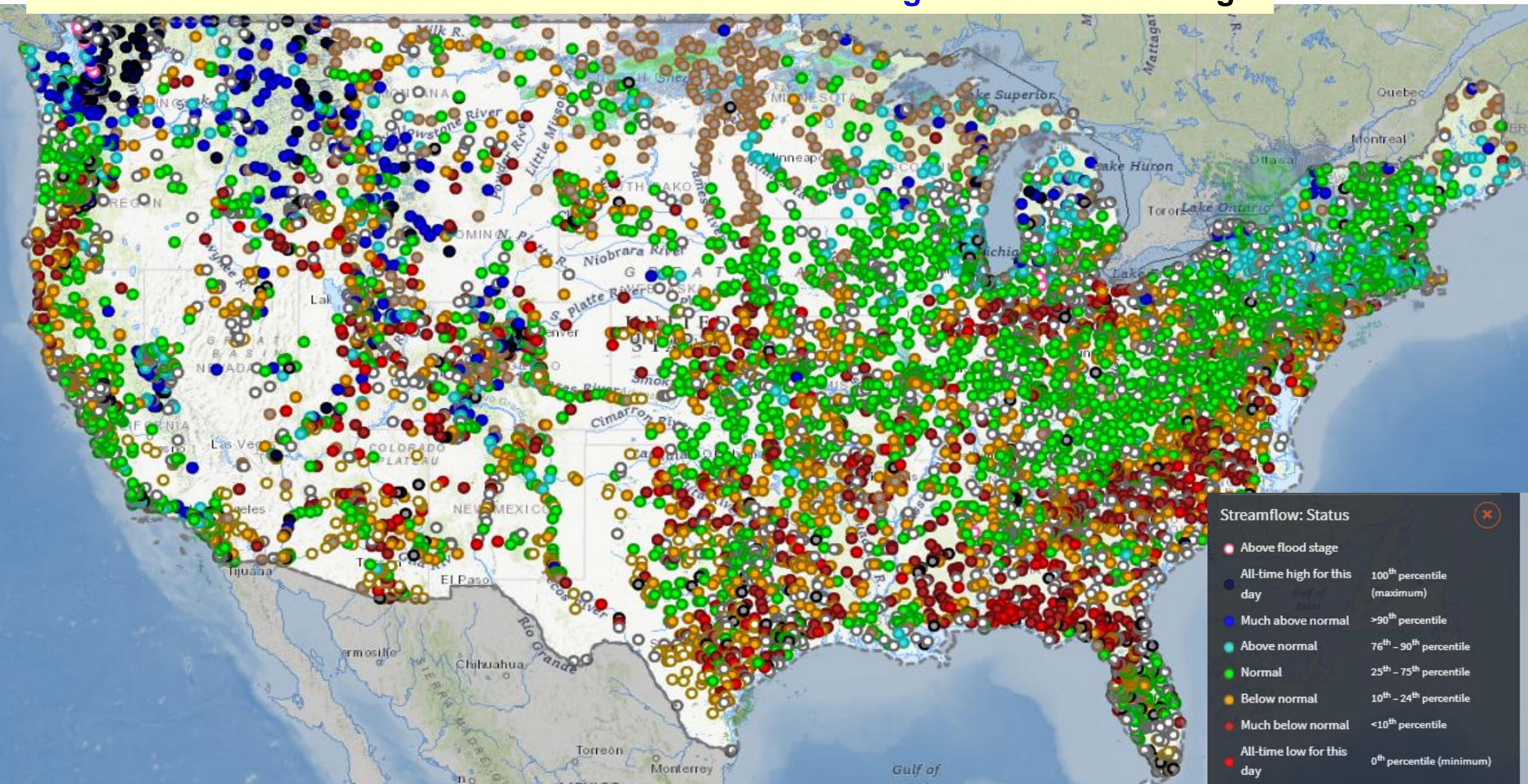
USDA NDMC NOAA NASA

droughtmonitor.unl.edu

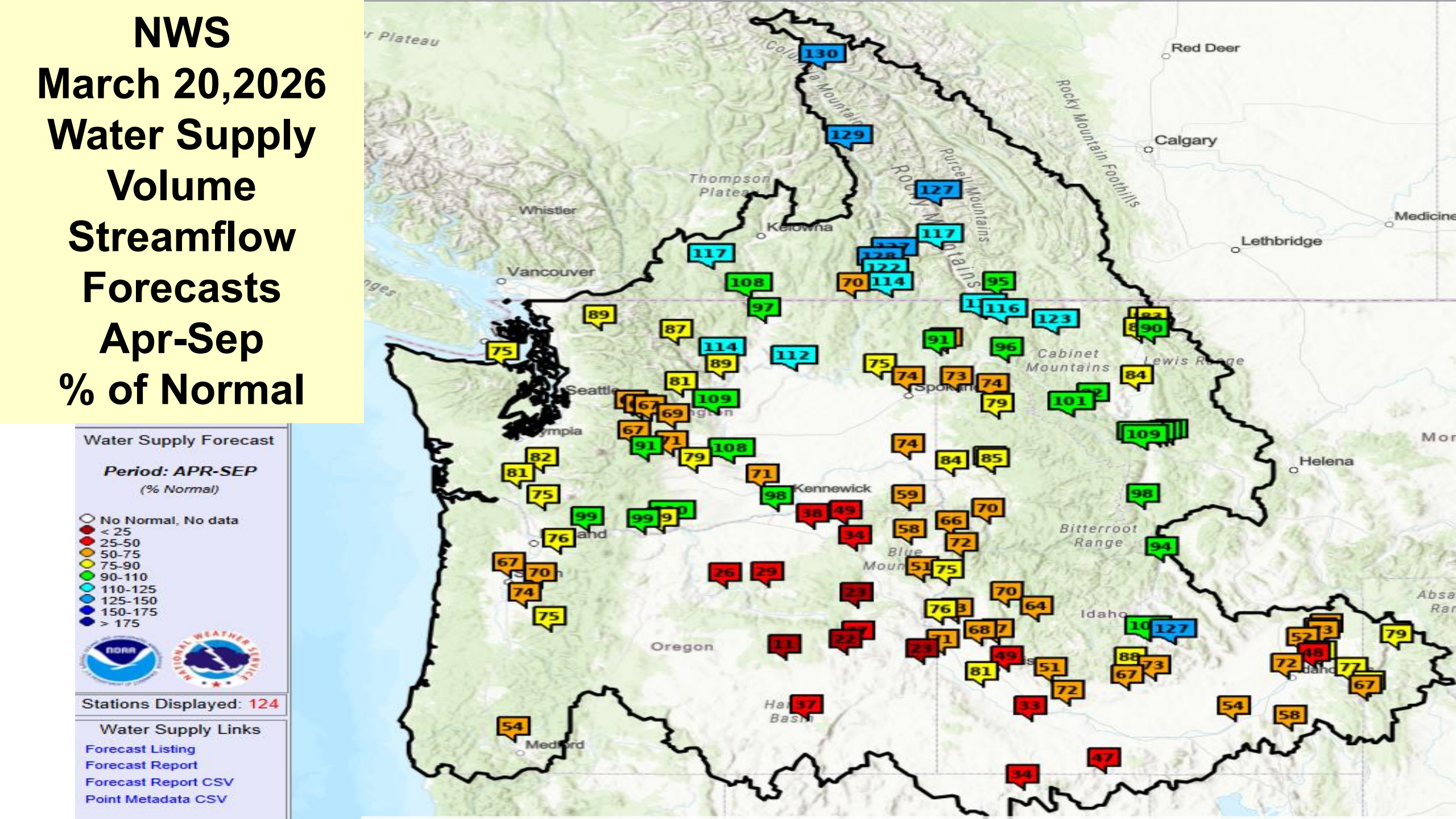
Let's Go Boating…
and try to figure all this out

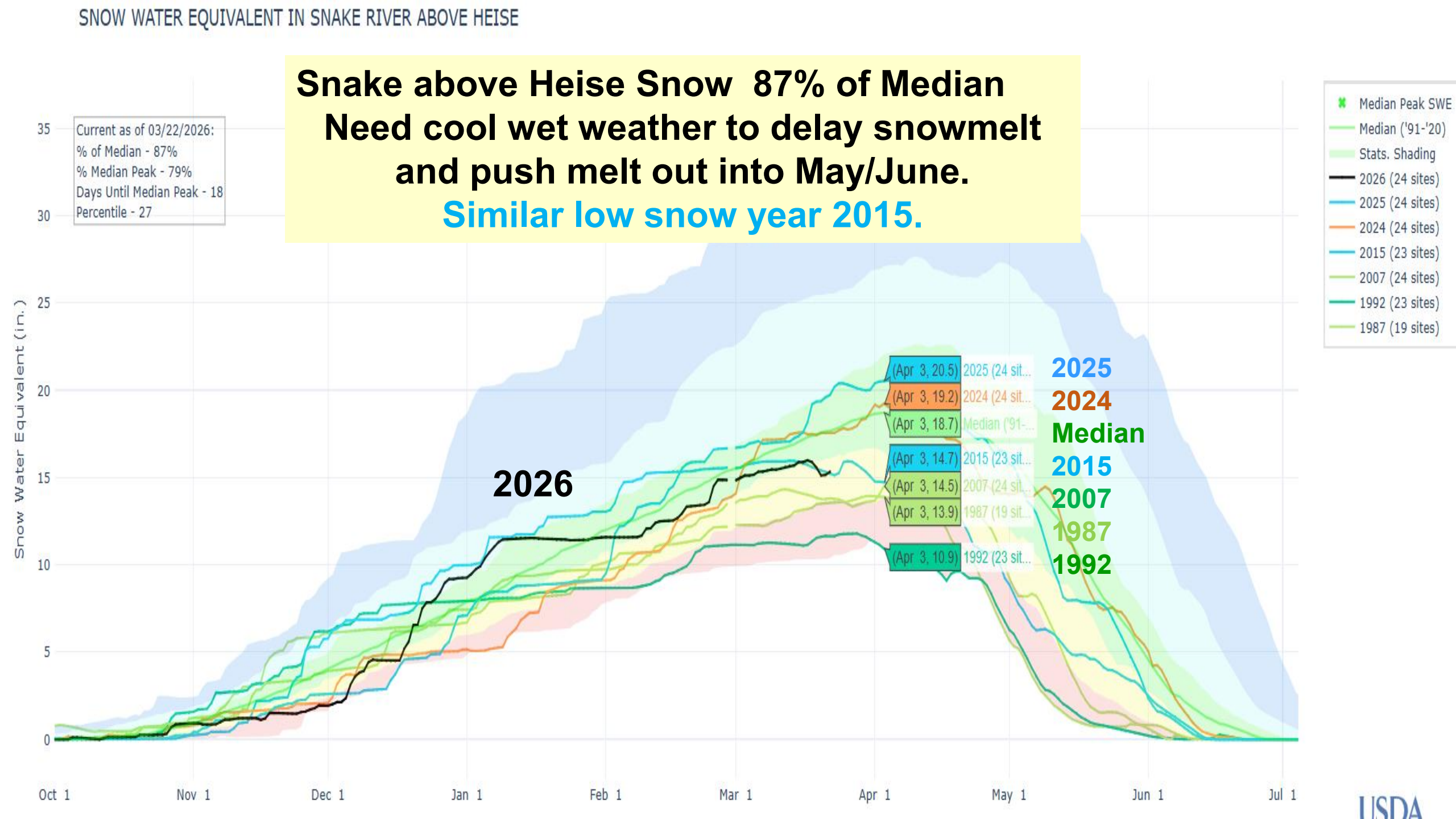
Snapshot of Current River Flow for Mar 21, 2026

Red Much Below or Record Low --- Blue Much Above Avg --- Black Record High



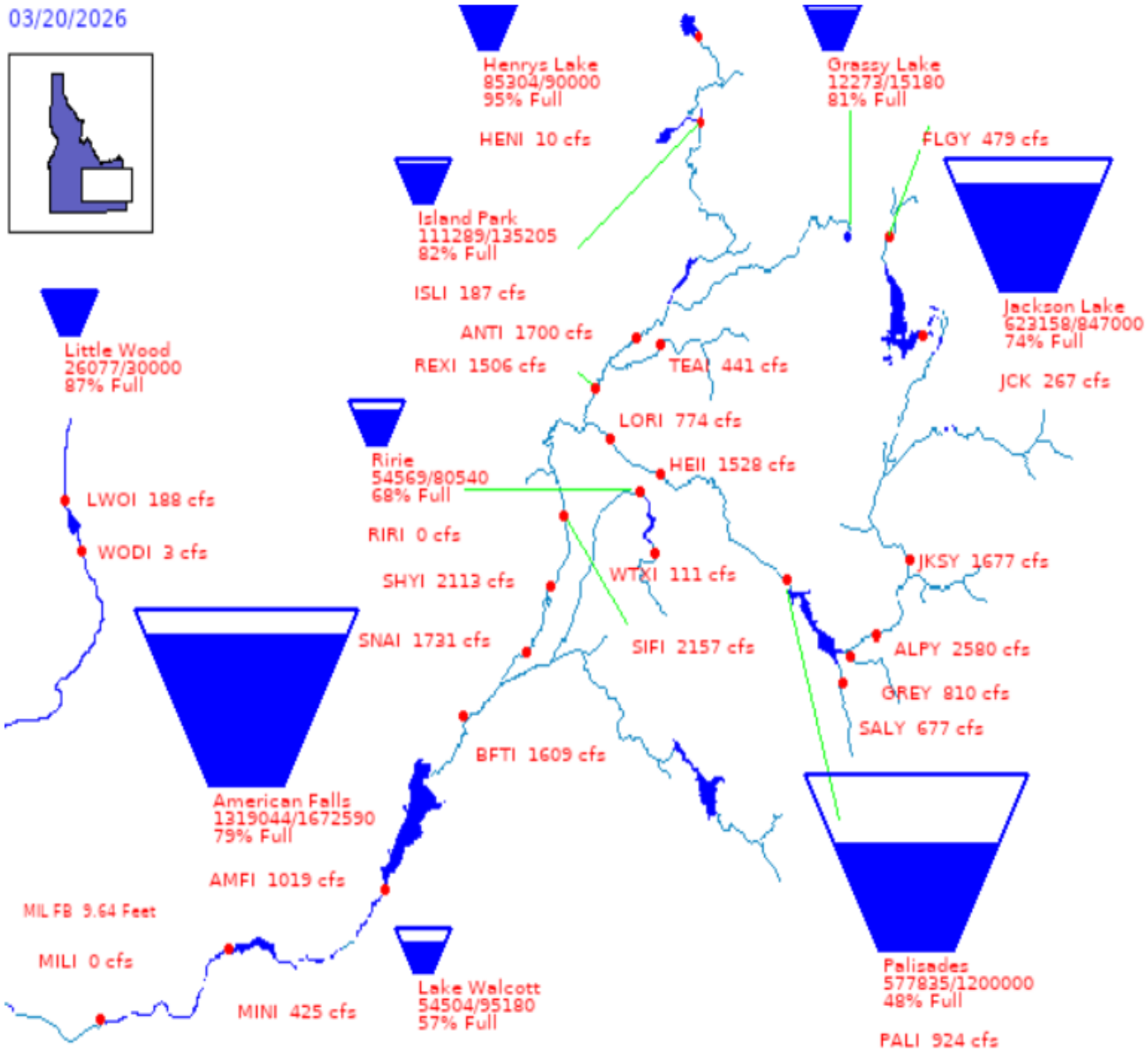
NWS
March 20,2026
Water Supply
Volume
Streamflow
Forecasts
Apr-Sep
% of Normal




SNOW WATER EQUIVALENT IN SNAKE RIVER ABOVE HEISE
Snake above Heise Snow 87% of Median
Need cool wet weather to delay snowmelt
and push melt out into May/June.
Similar low snow year 2015.
Current as of 03/22/2026:
% of Median - 87%
% Median Peak - 79%
Days Until Median Peak - 18
Percentile - 27
Median Peak SWE
Median ('91-'20)
Stats. Shading
2026 (24 sites)
2025 (24 sites)
2024 (24 sites)
2015 (23 sites)
2007 (24 sites)
1992 (23 sites)
1987 (19 sites)
Snow Water Equivalent (in.)
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
Jul 1
2026
(Apr 3, 20.5) 2025 (24 sit...
(Apr 3, 19.2) 2024 (24 sit...
(Apr 3, 18.7) Median ('91-...
(Apr 3, 14.7) 2015 (23 sit...
(Apr 3, 14.5) 2007 (24 sit...
(Apr 3, 13.9) 1987 (19 sit...
(Apr 3, 10.9) 1992 (23 sit...
2025
2024
Median
2015
2007
1987
1992

Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Upper Snake River Basin

Upper Snake Reservoir System 68% Full
Palisades is 48% full



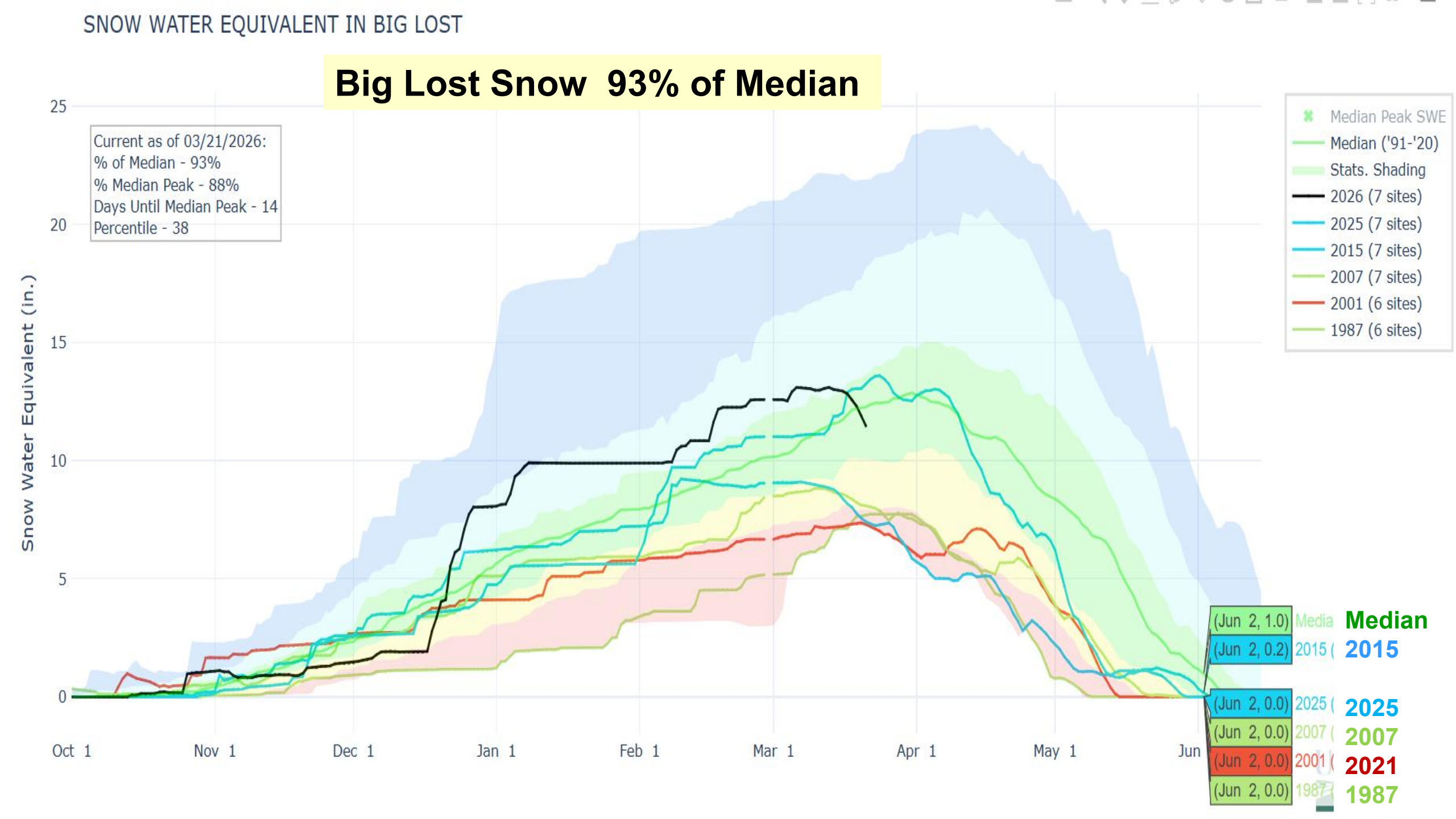
From Dr Rob Van Kirk Friday Mar 20, 2026

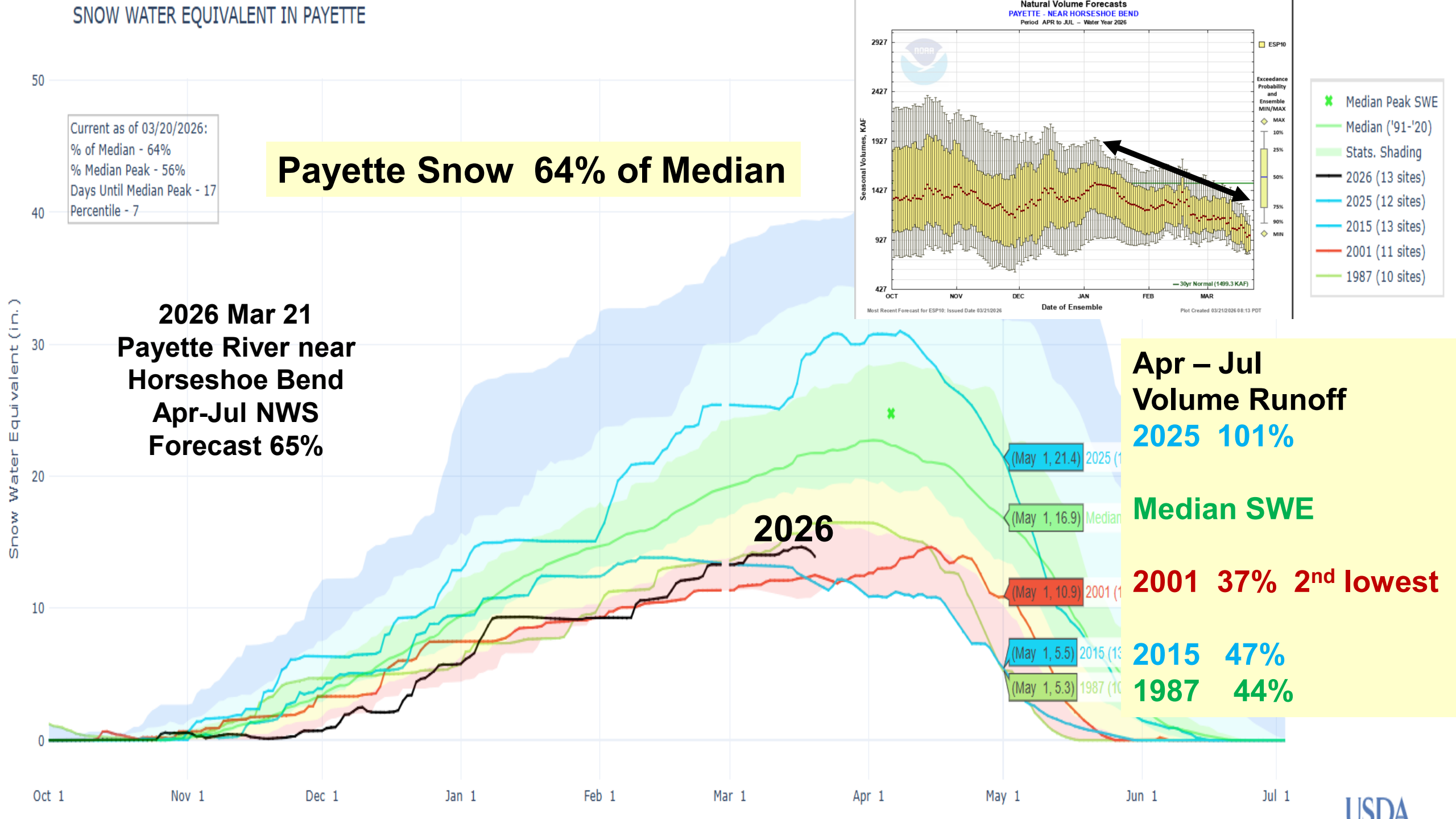
…. it is safe to say right now that the upper Snake River reservoir system will not fill, junior storage-rights holders such as Fremont-Madison Irrigation District will not receive their full allocations,

natural-flow water-rights priorities will drop several weeks to a month ahead of average, reservoir draft will start very early,

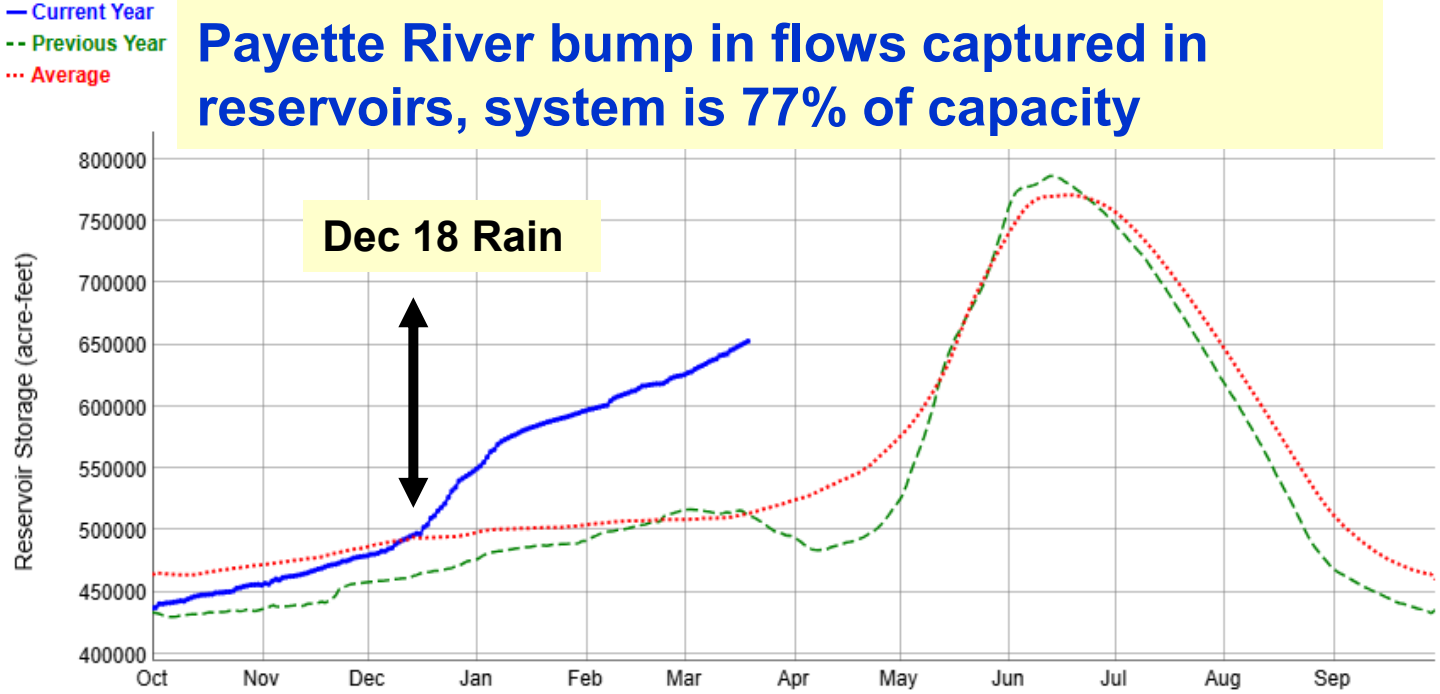
aquatic insect hatches will be 3–5 weeks earlier than average, and the period of poor water quality in and downstream of Island Park Reservoir will start as early as mid-June.

System-wide reservoir draft will be high again this year, resulting in very low reservoir carryover again next year.


SNOW WATER EQUIVALENT IN BIG LOST
Big Lost Snow 93% of Median
Current as of 03/21/2026:
% of Median - 93%
% Median Peak - 88%
Days Until Median Peak - 14
Percentile - 38
Median Peak SWE
Median ('91-'20)
Stats. Shading
2026 (7 sites)
2025 (7 sites)
2015 (7 sites)
2007 (7 sites)
2001 (6 sites)
1987 (6 sites)
Snow Water Equivalent (in.)
25
20
15
10
5
0
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun
(Jun 2, 1.0) Media
Median
(Jun 2, 0.2) 2015 (
2015
(Jun 2, 0.0) 2025 (
2025
(Jun 2, 0.0) 2007 (
2007
(Jun 2, 0.0) 2001 (
2021
(Jun 2, 0.0) 1987
1987

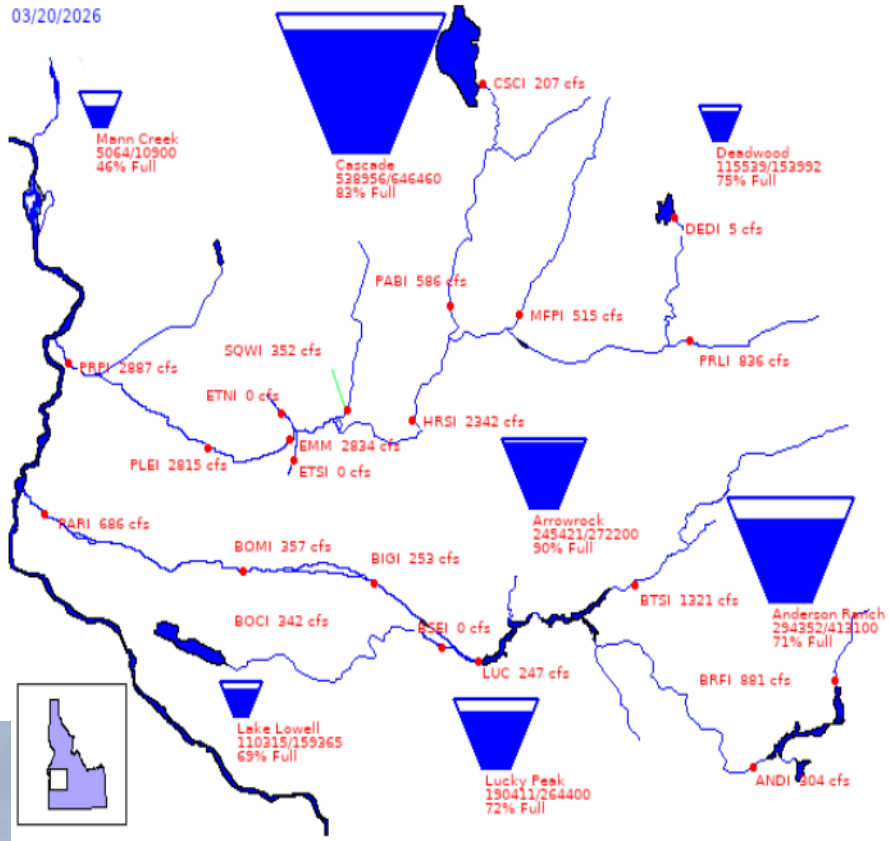

SNOW WATER EQUIVALENT IN PAYETTE
Current as of 03/20/2026:
% of Median - 64%
% Median Peak - 56%
Days Until Median Peak - 17
Percentile - 7
Payette Snow 64% of Median
2026 Mar 21
Payette River near
Horseshoe Bend
Apr-Jul NWS
Forecast 65%
Snow Water Equivalent (in.)
2026
(May 1, 21.4) 2025
(May 1, 16.9) Median
(May 1, 10.9) 2001
(May 1, 5.5) 2015
(May 1, 5.3) 1987
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
Natural Volume Forecasts
PAYETTE - NEAR HORSESHOE BEND
Period APR to JUL -- Water Year 2026
Seasonal Volumes, KAF
Date of Ensemble
ESP10
Exceedance Probability and Ensemble MIN/MAX
30yr Normal (1499.3 KAF)
Median Peak SWE
Median ('91-'20)
Stats. Shading
2026 (13 sites)
2025 (12 sites)
2015 (13 sites)
2001 (11 sites)
1987 (10 sites)
Apr – Jul
Volume Runoff
2025 101%
Median SWE
2001 37% 2nd lowest
2015 47%
1987 44%

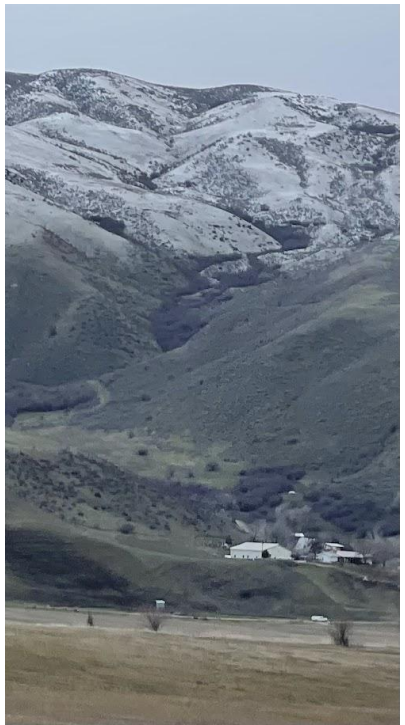
Payette River bump in flows captured in reservoirs, system is 77% of capacity



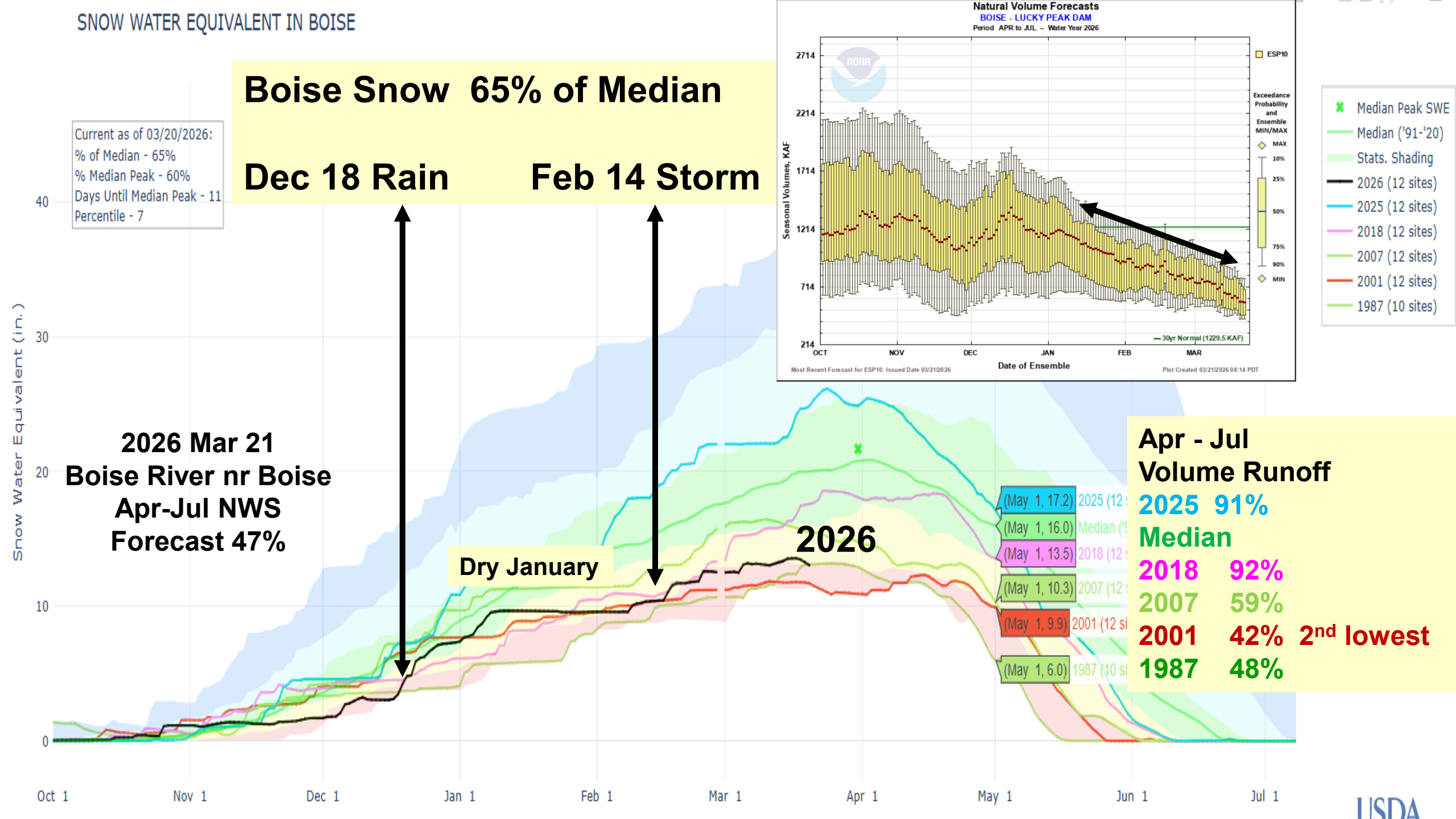
As of March 7, Payette System should fill either from low/mid snow or higher elevation snow runoff.

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



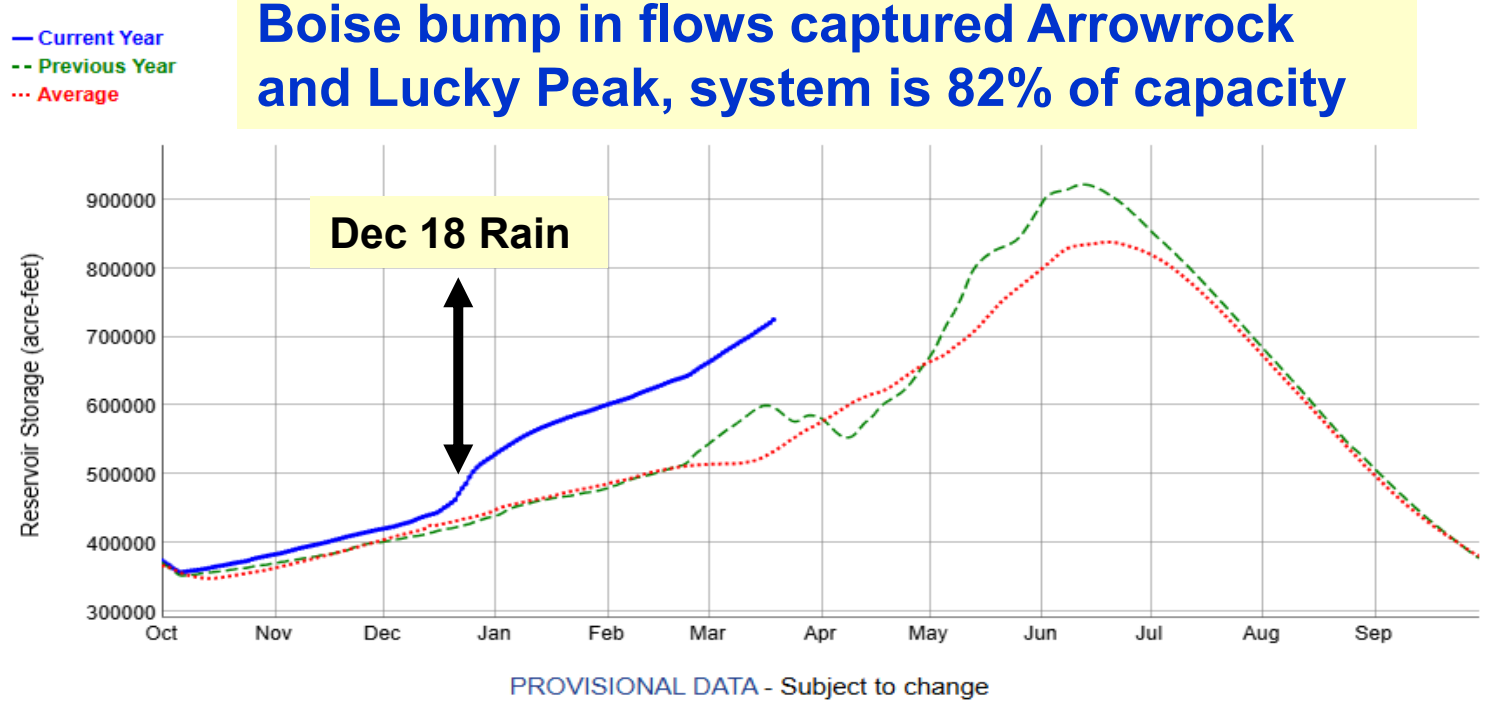


Green grass in Horseshoe Bend Jan 8, 2026


SNOW WATER EQUIVALENT IN BOISE
Boise Snow 65% of Median
Dec 18 Rain
Feb 14 Storm
Current as of 03/20/2026:
% of Median - 65%
% Median Peak - 60%
Days Until Median Peak - 11
Percentile - 7
2026 Mar 21
Boise River nr Boise
Apr-Jul NWS
Forecast 47%
Dry January
2026
Snow Water Equivalent (in.)
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
Natural Volume Forecasts
BOISE - LUCKY PEAK DAM
Period APR to JUL -- Water Year 2026
Seasonal Volumes, KAF
Date of Ensemble
ESP10
Exceedance Probability and Ensemble MIN/MAX
30yr Normal (1229.5 KAF)
Median Peak SWE
Median ('91-'20)
Stats. Shading
2026 (12 sites)
2025 (12 sites)
2018 (12 sites)
2007 (12 sites)
2001 (12 sites)
1987 (10 sites)
Apr - Jul
Volume Runoff
2025 91%
Median
2018 92%
2007 59%
2001 42% 2nd lowest
1987 48%

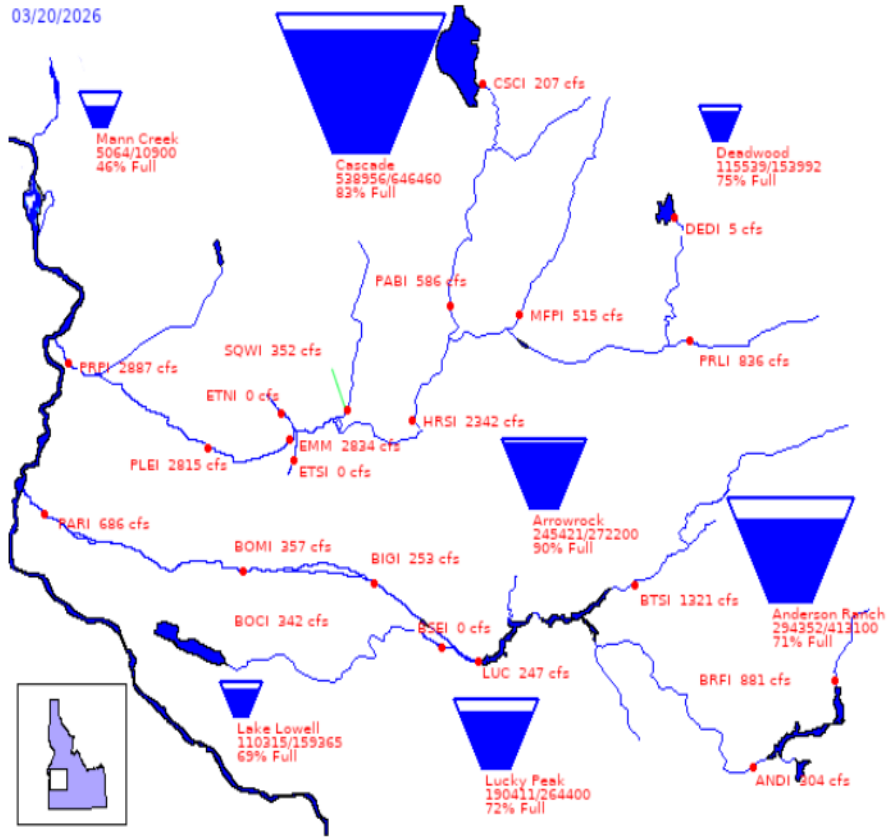
Paving the NY Canal Ready and waiting for water

Water Year Graph

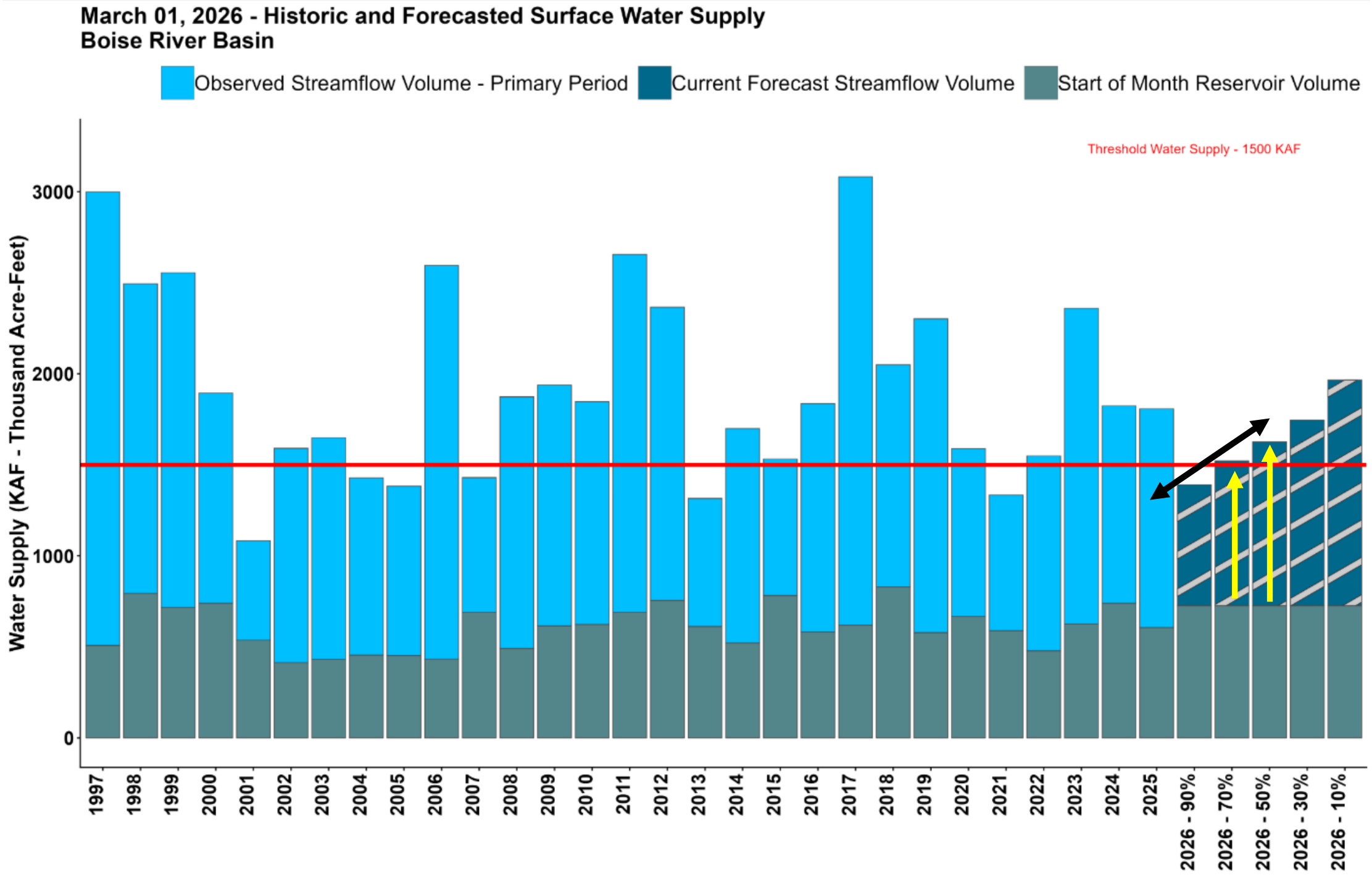


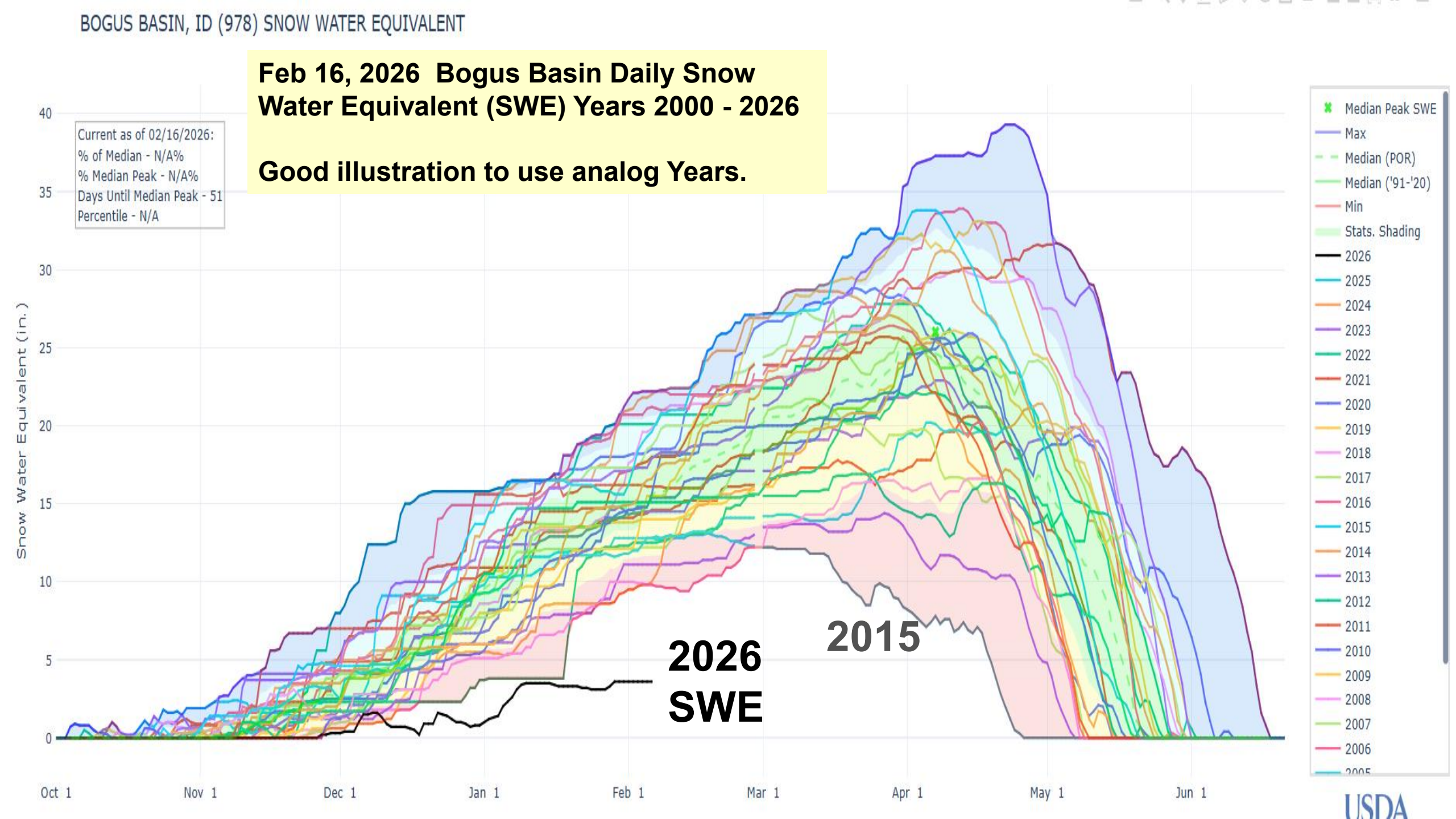
Boise bump in flows captured Arrowrock and Lucky Peak, system is 82% of capacity

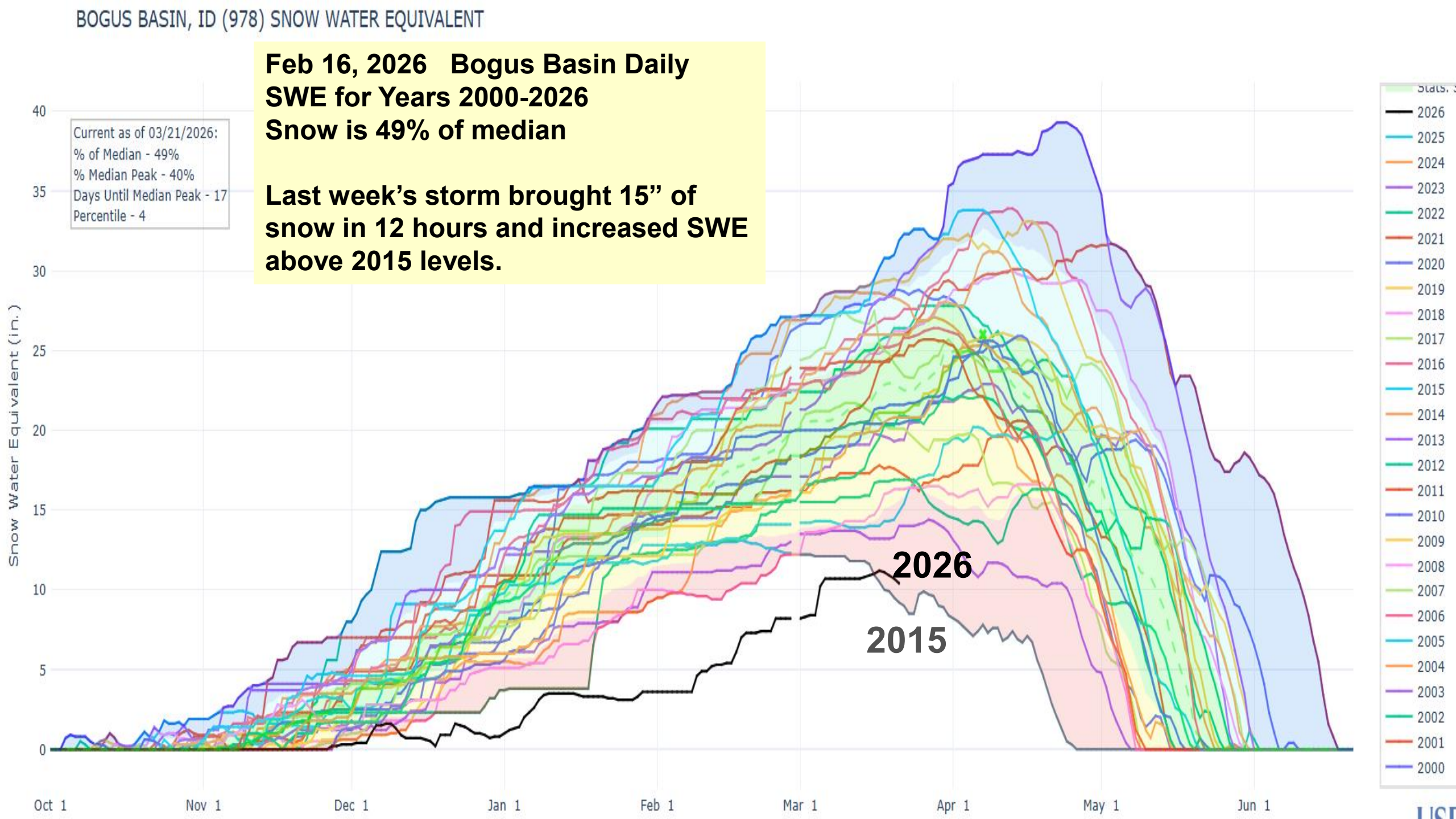
Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Boise & Payette River Basins



Boise challenge - filling reservoirs but not too early depending upon future weather. Any updates ?


March 01, 2026 - Historic and Forecasted Surface Water Supply
Boise River Basin
Observed Streamflow Volume - Primary Period
Current Forecast Streamflow Volume
Start of Month Reservoir Volume
Threshold Water Supply - 1500 KAF
Water Supply (KAF - Thousand Acre-Feet)
0
1000
2000
3000
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
2025
2026 - 90%
2026 - 70%
2026 - 50%
2026 - 30%
2026 - 10%


BOGUS BASIN, ID (978) SNOW WATER EQUIVALENT
Feb 16, 2026 Bogus Basin Daily Snow Water Equivalent (SWE) Years 2000 - 2026
Good illustration to use analog Years.
Current as of 02/16/2026:
% of Median - N/A%
% Median Peak - N/A%
Days Until Median Peak - 51
Percentile - N/A
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
2026 SWE
2015
Median Peak SWE
Max
Median (POR)
Median ('91-'20)
Min
Stats. Shading
2026
2025
2024
2023
2022
2021
2020
2019
2018
2017
2016
2015
2014
2013
2012
2011
2010
2009
2008
2007
2006
USDA


BOGUS BASIN, ID (978) SNOW WATER EQUIVALENT
Feb 16, 2026 Bogus Basin Daily SWE for Years 2000-2026
Snow is 49% of median
Last week's storm brought 15" of snow in 12 hours and increased SWE above 2015 levels.
Current as of 03/21/2026:
% of Median - 49%
% Median Peak - 40%
Days Until Median Peak - 17
Percentile - 4
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
2026
2015
2026
2025
2024
2023
2022
2021
2020
2019
2018
2017
2016
2015
2014
2013
2012
2011
2010
2009
2008
2007
2006
2005
2004
2003
2002
2001
2000

Ski patrol sweeps the 24-hours snow board around 4pm each day. Need to add Mar 4 + 5th snow totals for 17” in 12 hours.

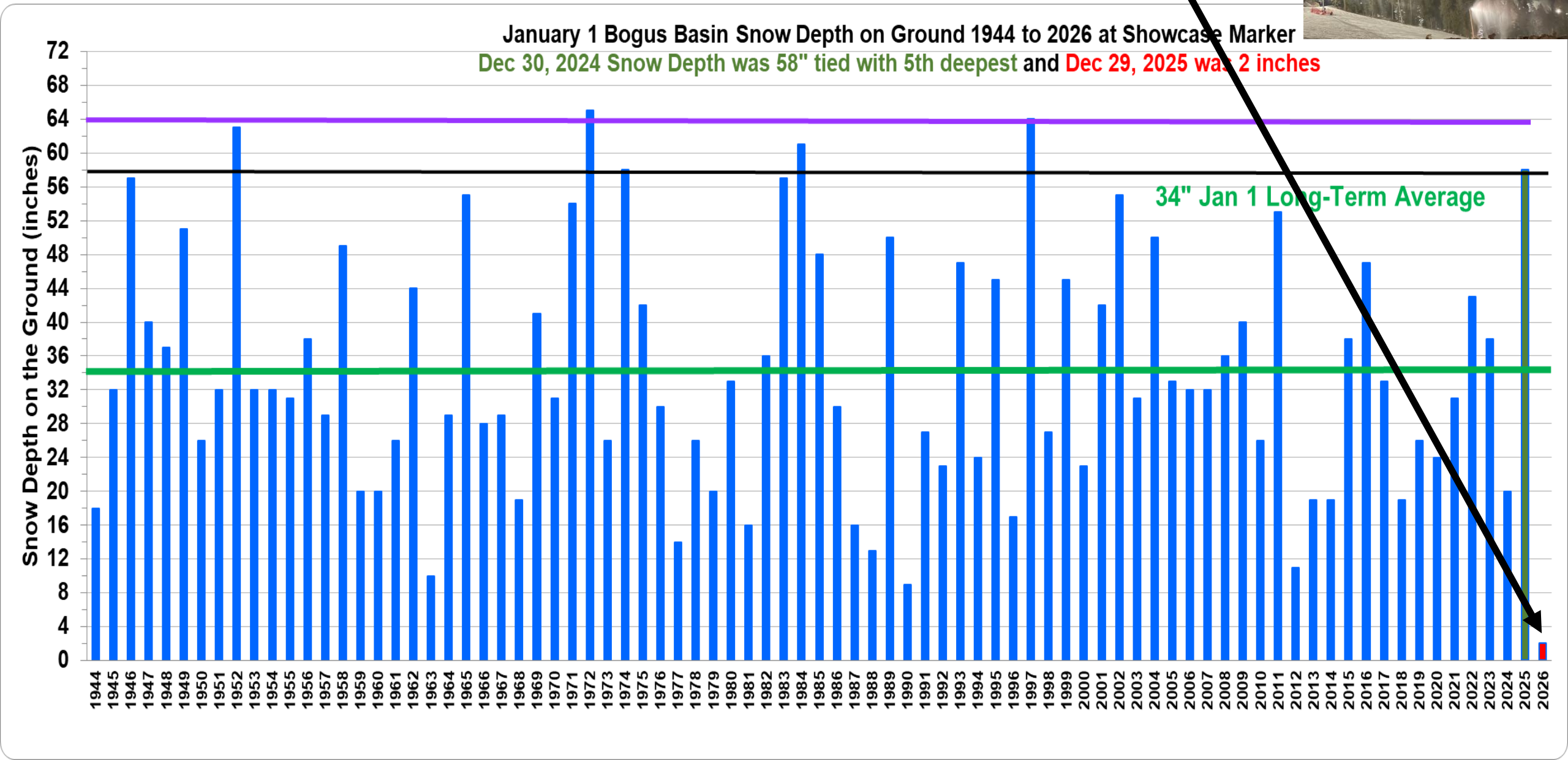
My backyard →

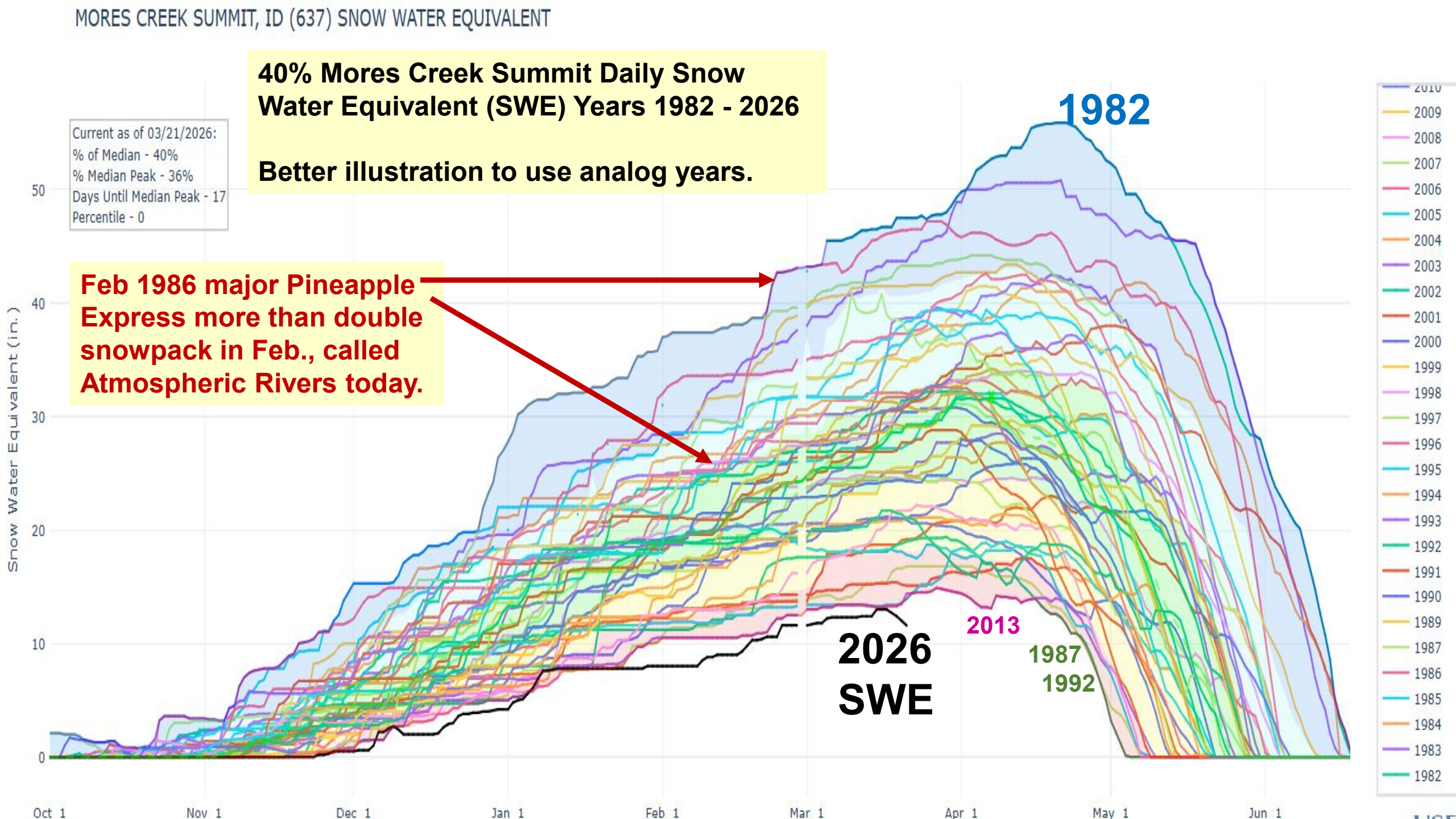
Bogus Basin Hourly Data

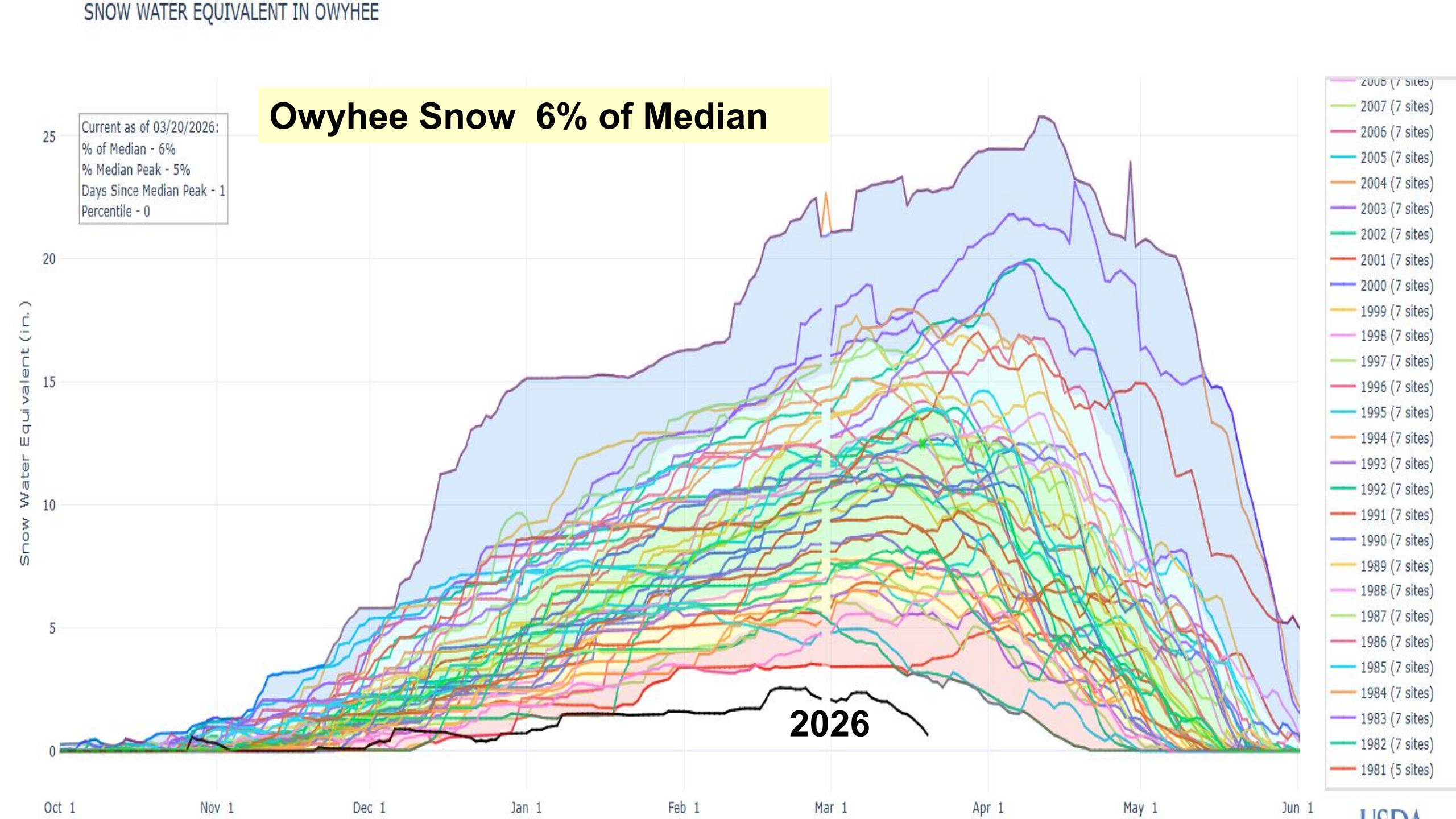
YR-M-D-time	SWE	Snow Depth		Precip	Temp
2026-03-04 14:00	8.5	23		17.20	30.9
2026-03-04 15:00	8.8	26		17.30	27.9
2026-03-04 16:00	9.2	28		17.40	27.7
2026-03-04 17:00	9.4	29		17.50	27.1
2026-03-04 18:00	9.4	28		17.50	27.0
2026-03-04 19:00	9.5	31		17.60	26.8
2026-03-04 20:00	9.7	32		17.60	25.9
2026-03-04 21:00	9.8	33		17.70	25.0
2026-03-04 22:00	9.9	35		17.80	25.3
2026-03-04 23:00	10.1			17.80	25.3
2026-03-05 00:00	10.2	40		17.90	25.3
2026-03-05 01:00	10.4	40		18.00	25.3
2026-03-05 02:00	10.5			18.20	25.3
2026-03-05 03:00	10.6	37		18.20	25.0
2026-03-05 04:00	10.6			18.30	24.8
2026-03-05 05:00	10.6	39		18.30	24.6
2026-03-05 06:00	10.6	39		18.30	24.6
2026-03-05 07:00	10.6	40		18.30	24.6

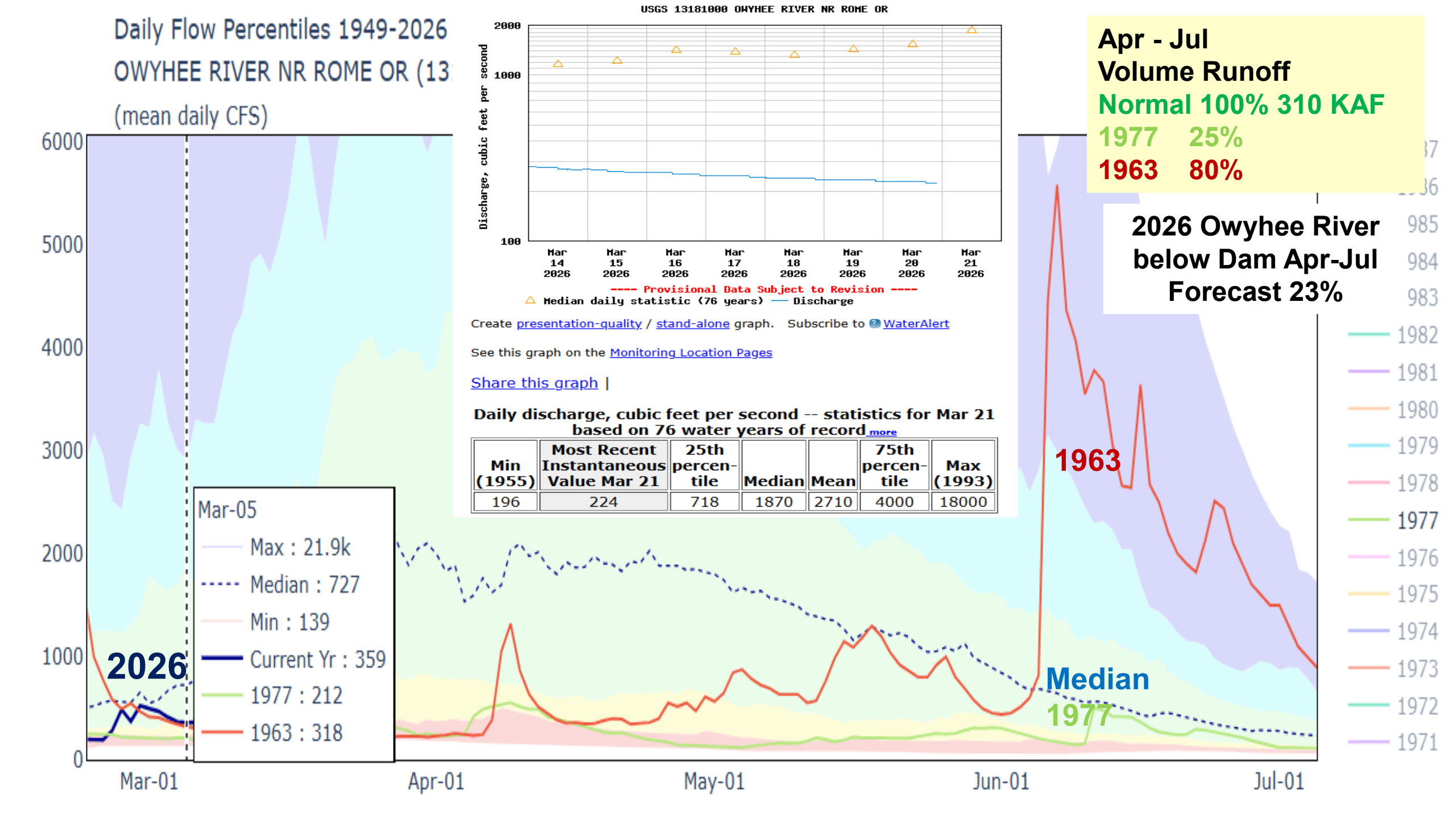
April 2025 - Bogus Basin reached 100” of snow depth for the 8th time since 1942.

What a difference a year makes – Jan 2026 Bogus Basin Snow Depth was 2 Inches




MORES CREEK SUMMIT, ID (637) SNOW WATER EQUIVALENT
40% Mores Creek Summit Daily Snow Water Equivalent (SWE) Years 1982 - 2026
Better illustration to use analog years.
Current as of 03/21/2026:
% of Median - 40%
% Median Peak - 36%
Days Until Median Peak - 17
Percentile - 0
Feb 1986 major Pineapple Express more than double snowpack in Feb., called Atmospheric Rivers today.
1982
2013
1987
1992
2026 SWE
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
2010
2009
2008
2007
2006
2005
2004
2003
2002
2001
2000
1999
1998
1997
1996
1995
1994
1993
1992
1991
1990
1989
1987
1986
1985
1984
1983
1982

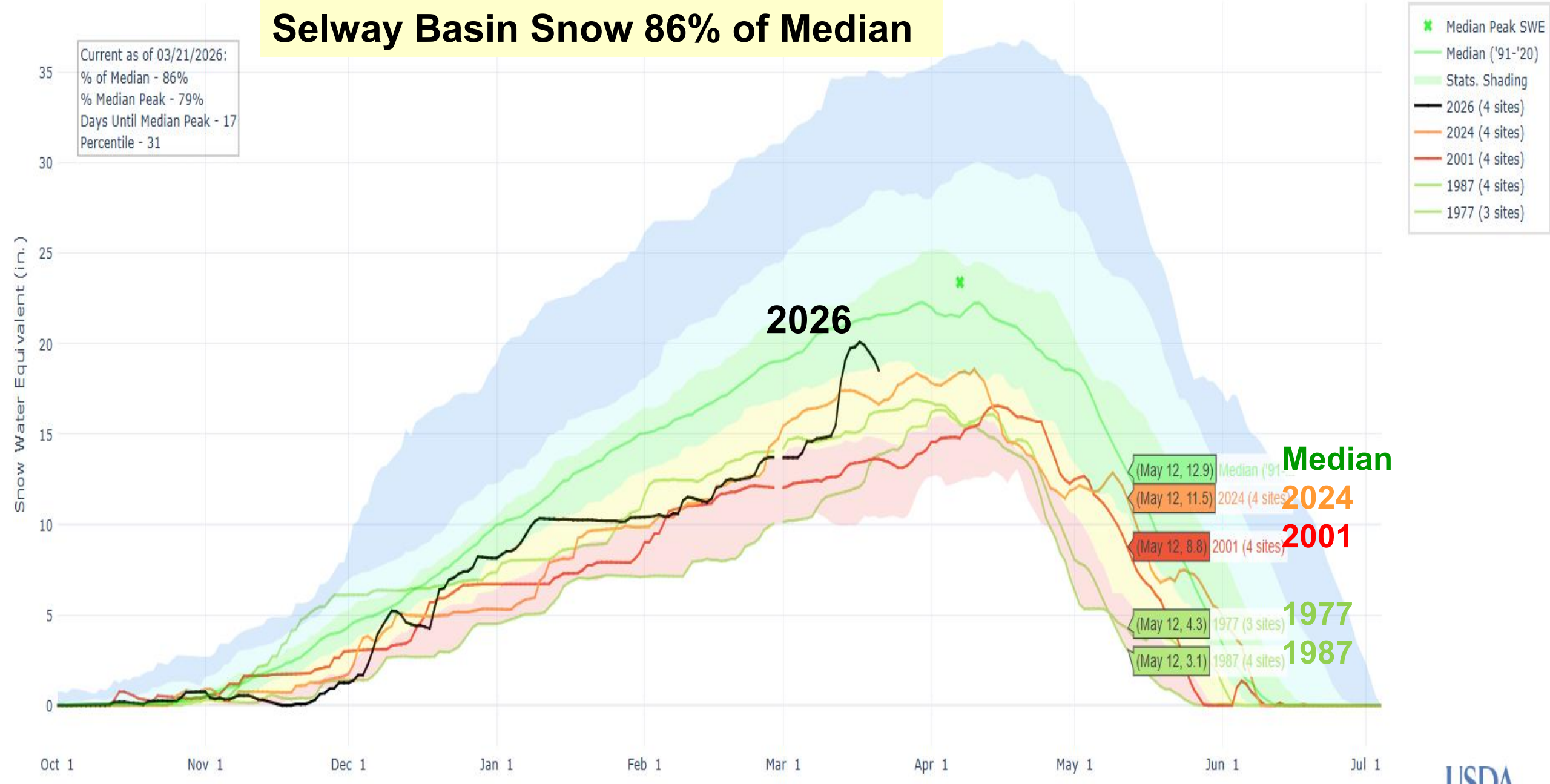

SNOW WATER EQUIVALENT IN OWYHEE
Owyhee Snow 6% of Median
Current as of 03/20/2026:
% of Median - 6%
% Median Peak - 5%
Days Since Median Peak - 1
Percentile - 0
Snow Water Equivalent (in.)
25
20
15
10
5
0
2026
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
2007 (7 sites)
2006 (7 sites)
2005 (7 sites)
2004 (7 sites)
2003 (7 sites)
2002 (7 sites)
2001 (7 sites)
2000 (7 sites)
1999 (7 sites)
1998 (7 sites)
1997 (7 sites)
1996 (7 sites)
1995 (7 sites)
1994 (7 sites)
1993 (7 sites)
1992 (7 sites)
1991 (7 sites)
1990 (7 sites)
1989 (7 sites)
1988 (7 sites)
1987 (7 sites)
1986 (7 sites)
1985 (7 sites)
1984 (7 sites)
1983 (7 sites)
1982 (7 sites)
1981 (5 sites)

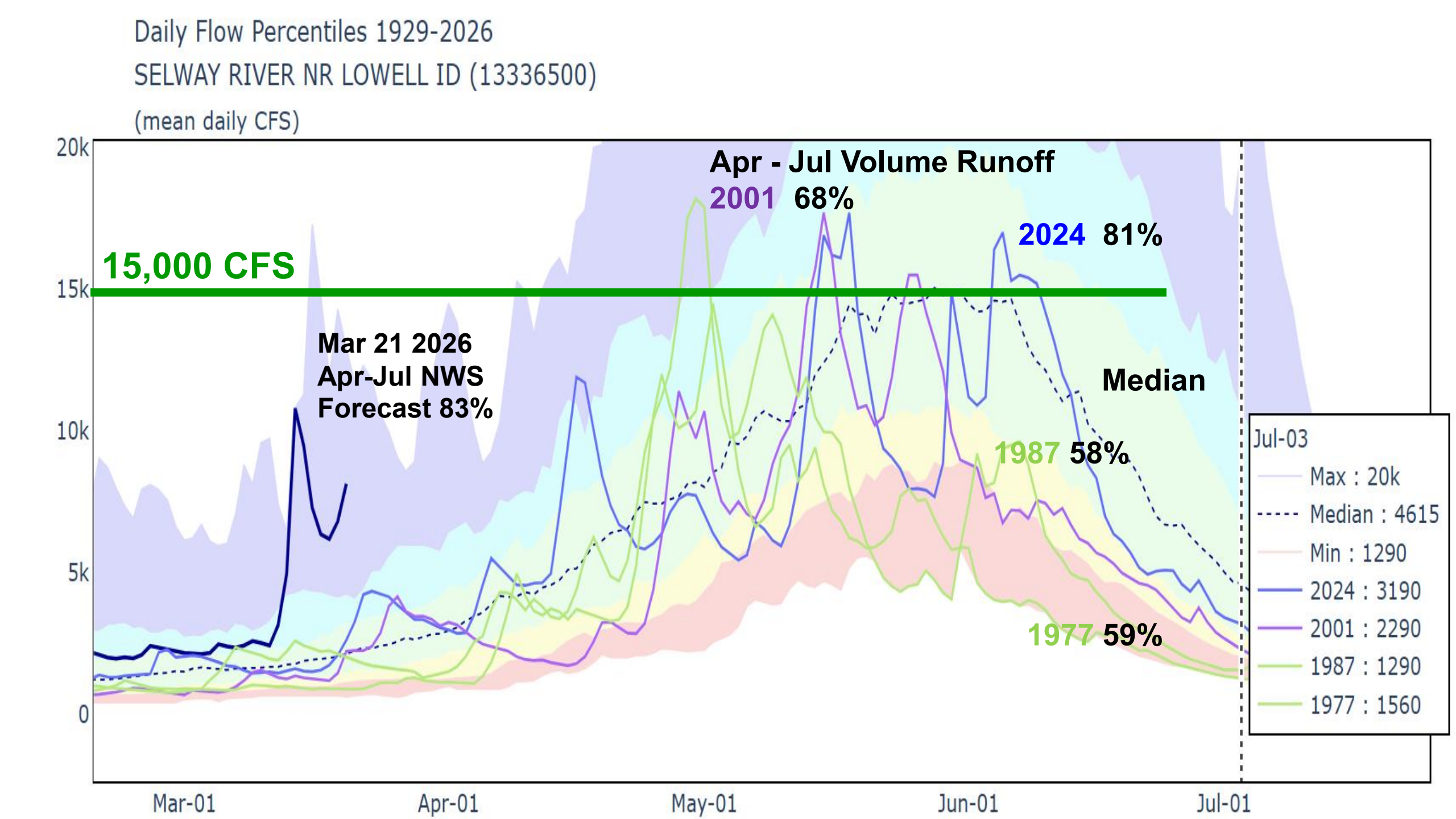

Daily Flow Percentiles 1949-2026
OWYHEE RIVER NR ROME OR (13
(mean daily CFS)
6000
5000
4000
3000
2000
1000
0
Mar-01
Apr-01
May-01
Jun-01
Jul-01
Mar-05
Max : 21.9k
Median : 727
Min : 139
Current Yr : 359
1977 : 212
1963 : 318
2026
1963
Median
1977
1982
1981
1980
1979
1978
1977
1976
1975
1974
1973
1972
1971
USGS 13181000 OWYHEE RIVER NR ROME OR
Discharge, cubic feet per second
2000
1000
100
Mar 14 2026
Mar 15 2026
Mar 16 2026
Mar 17 2026
Mar 18 2026
Mar 19 2026
Mar 20 2026
Mar 21 2026
---- Provisional Data Subject to Revision ----
Median daily statistic (76 years)
Discharge
Create presentation-quality / stand-alone graph. Subscribe to WaterAlert
See this graph on the Monitoring Location Pages
Share this graph |
Daily discharge, cubic feet per second -- statistics for Mar 21
based on 76 water years of record more
Min (1955) 196
Most Recent Instantaneous Value Mar 21 224
25th percen-tile 718
Median 1870
Mean 2710
75th percen-tile 4000
Max (1993) 18000
Apr - Jul
Volume Runoff
Normal 100% 310 KAF
1977 25%
1963 80%
2026 Owyhee River below Dam Apr-Jul Forecast 23%


68

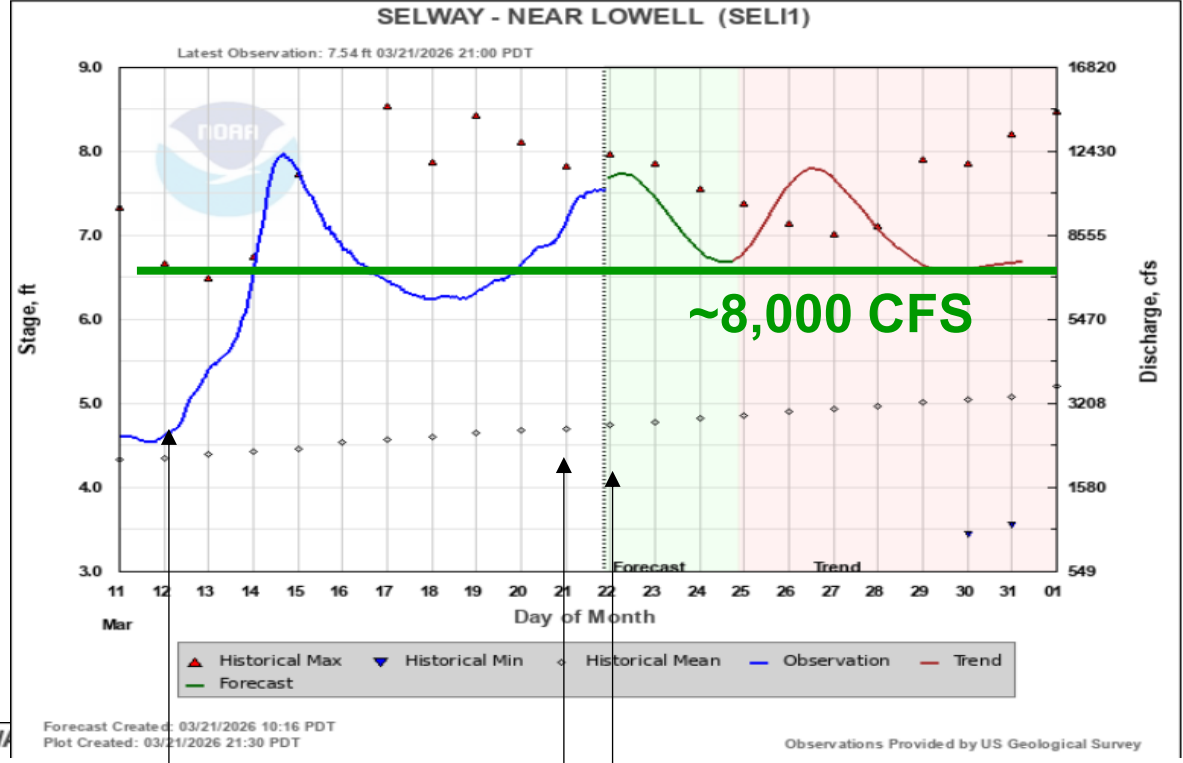
SNOW WATER EQUIVALENT IN SELWAY

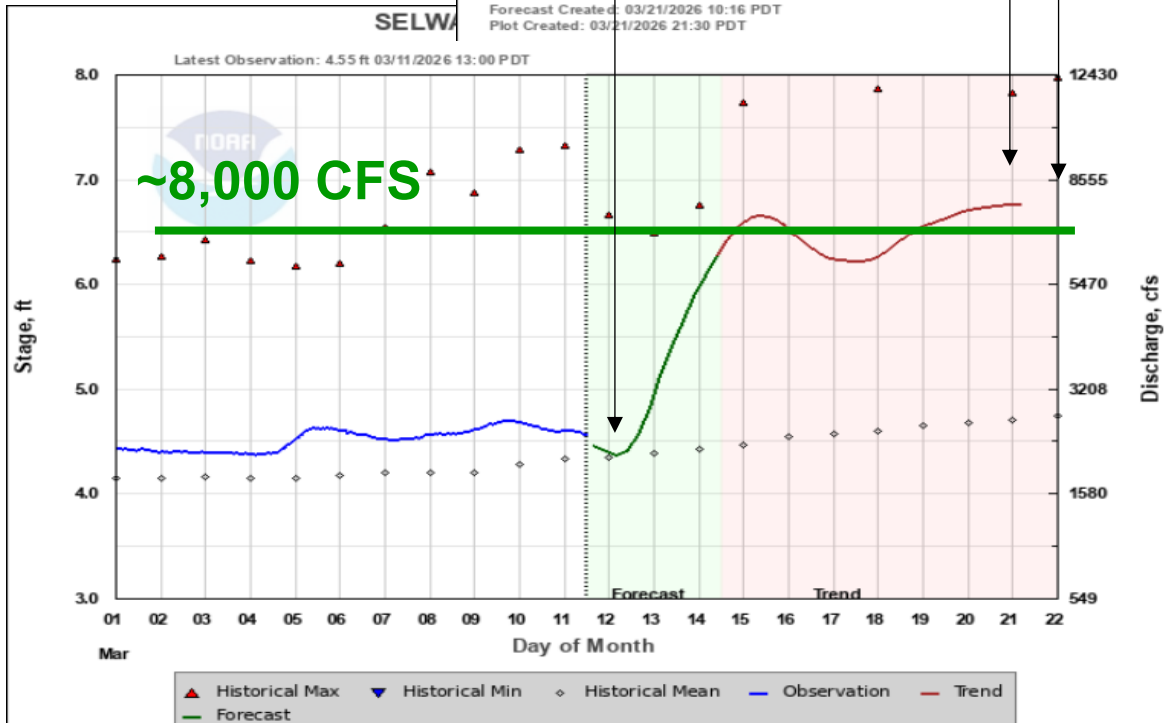
Selway Basin Snow 86% of Median




Daily Flow Percentiles 1929-2026
SELWAY RIVER NR LOWELL ID (13336500)
(mean daily CFS)
20k
15k
10k
5k
0
Mar-01
Apr-01
May-01
Jun-01
Jul-01
Apr - Jul Volume Runoff
2001 68%
2024 81%
15,000 CFS
Mar 21 2026
Apr-Jul NWS
Forecast 83%
Median
1987 58%
1977 59%
Jul-03
Max : 20k
Median : 4615
Min : 1290
2024 : 3190
2001 : 2290
1987 : 1290
1977 : 1560

May 10, 2025
Selway Falls pushing 19,000 CFS





Snow2Flow Verification Banner Summit & MF Salmon River

MF SALMON RIVER AND BANNER SUMMIT SNOTEL SITE
Discharge Data Years used in analysis: 1981, 1999 - 2016
Gage Height Data Years used in analysis: 1982 -1984, 1986, 1988 -1998

Using combined DISCHARGE and GAGE HEIGHT years, on average, peak streamflow for the MF Salmon at MF Lodge near Yellow Pine Idaho occurs when Banner Summit SNOTEL is between **66 and 90%** melted.

Summary of combined DISCHARGE and GAGE HEIGHT years categorized by max SWE magnitude.

Max SWE Category	Max SWE Magnitude (inches)	Number of Years in Analysis	**Average percent melted at time of peak streamflow**
Below average	<21	9	**90**
Average	20 – 31	16	**61**
Above average	>30	9	**66**

Note - this analysis uses all years available and did not eliminate potential non-snowmelt peaks

Using DISCHARGE ONLY years, on average, peak streamflow for the MF Salmon at MF Lodge near Yellow Pine Idaho occurs when Banner Summit SNOTEL is between **64 and 81%** melted.

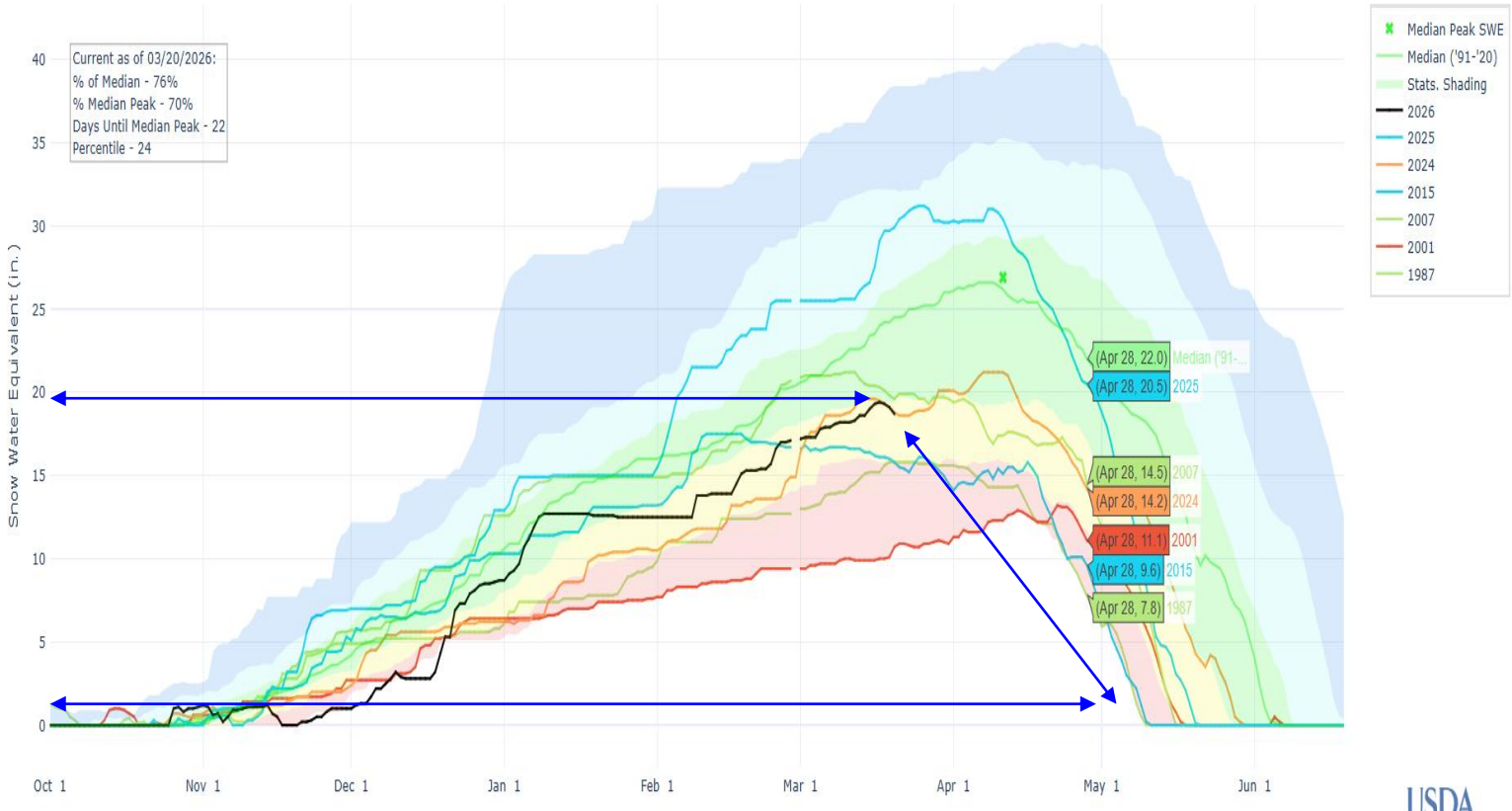
Peak projection was correct for 2024 and 2023 and 4 days early for 2025.

MF Salmon River Snowmelt Peak occurs when Banner is about 90% melted when peak SWE is <20”

So far… 2026 Banner Summit peak SWE is/was 19.4” on Mar 17.

That means snowmelt peak flow may occur when 2” of SWE remains without another SWE peak. Lots of weather can happen between now and then.

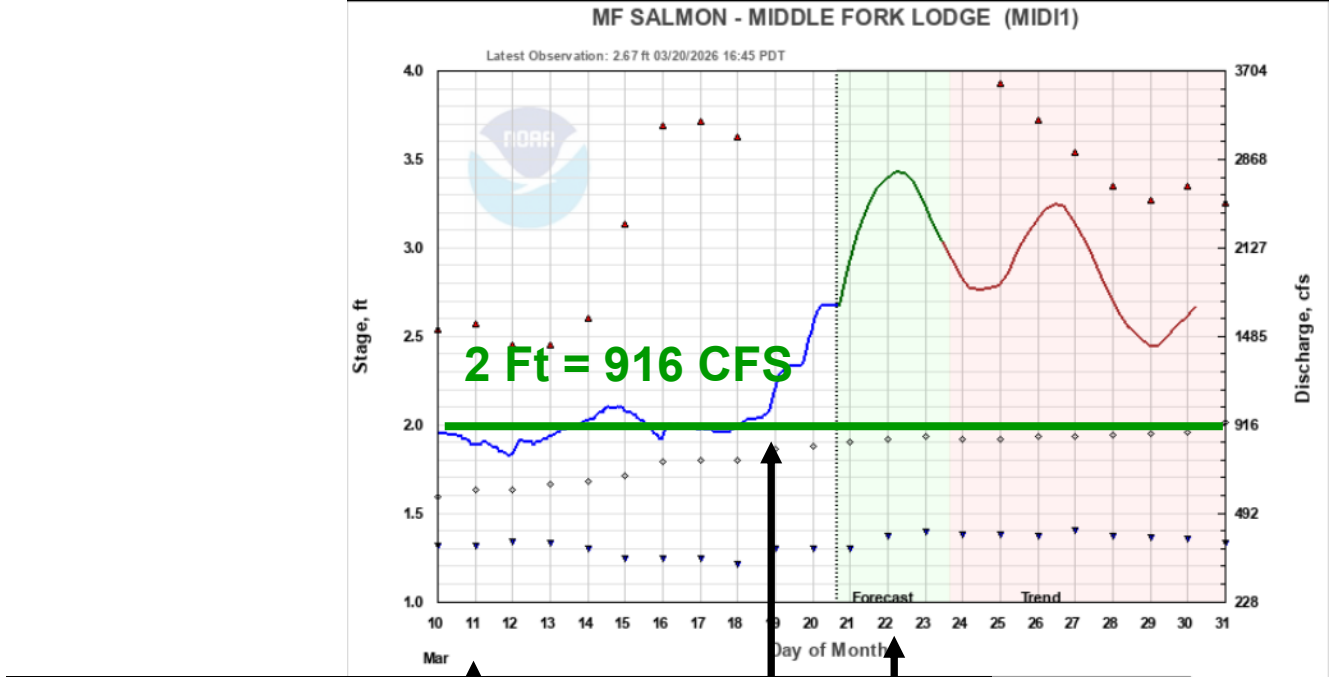
BANNER SUMMIT, ID (312) SNOW WATER EQUIVALENT

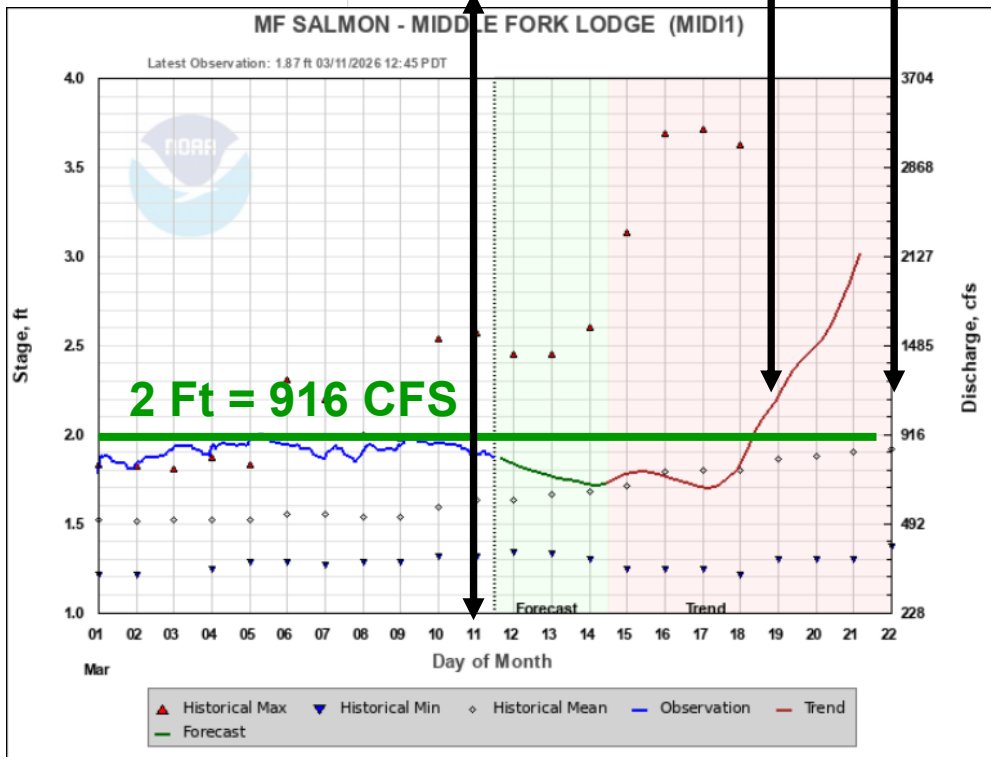


MF Salmon River

NWS forecasted this increase back on Mar 11 run with MF increasing.

Projected to decrease after two windy cold fronts move thru yesterday and Wednesday.





US National Weather Service Missoula Montana
9h ·

Hold onto your hats! 📈 We're in for a true "Spring Temperature Rollercoaster" over the next week.

We're tracking two cold fronts moving through on Saturday and Wednesday. While the ups and downs in temperature are notable, our biggest concern is the combination of breezy conditions and low humidity this week.

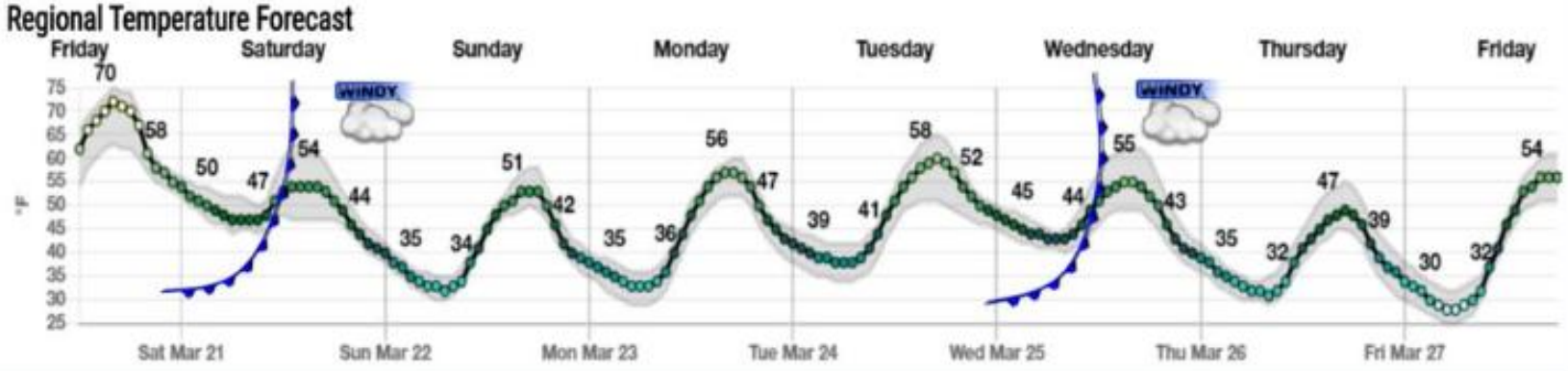
⚠️ FIRE SAFETY: Please exercise caution with any outdoor burning on these windy days. Dry conditions and gusty winds mean fires can escape control quickly.

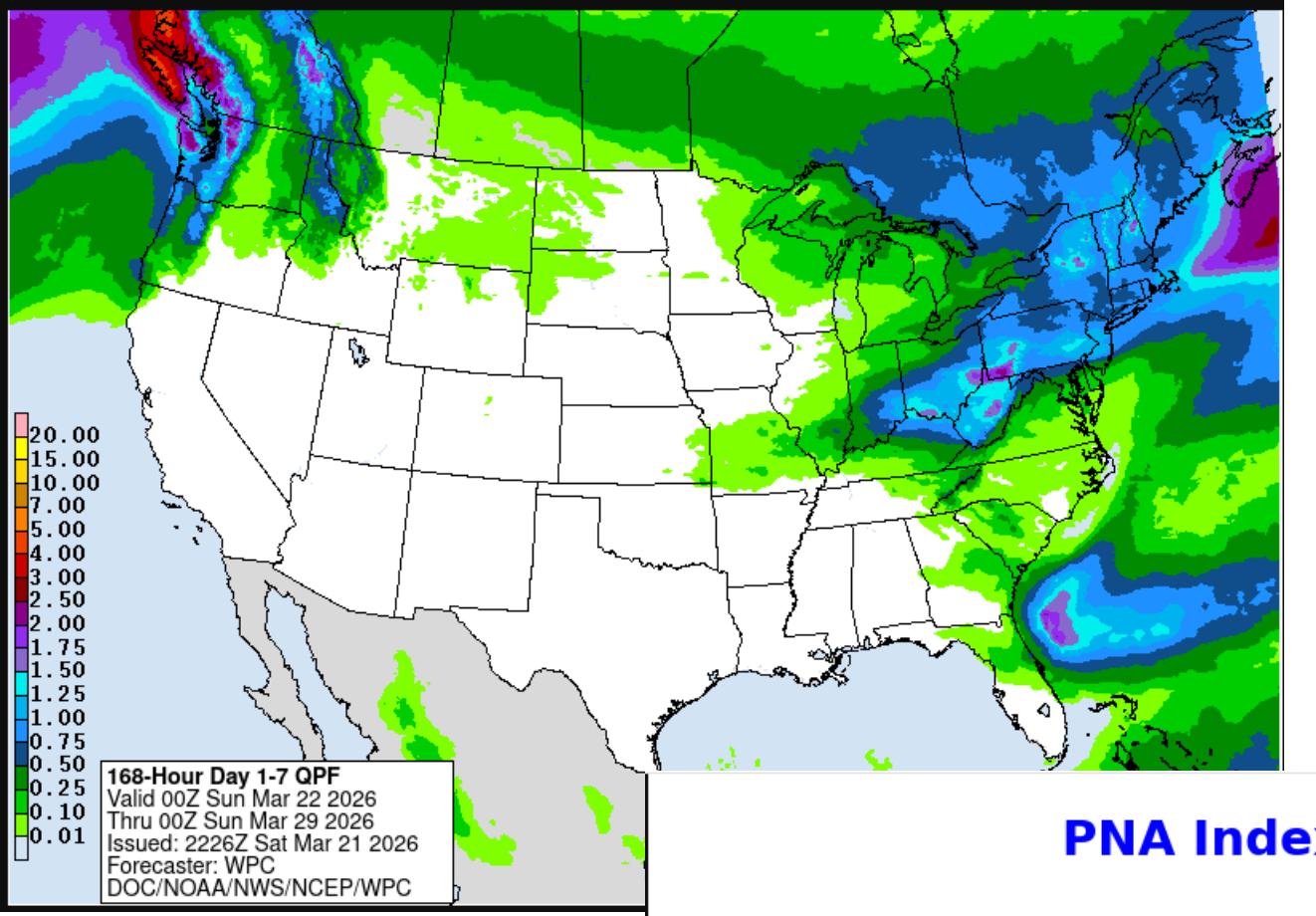
SPRING TEMPERATURE ROLLERCOASTER: 20 - 27 March

- Two Cold Fronts: Saturday & Wednesday
- Temperatures moderate to near normal by Thursday
- Windy conditions develop w/ fronts Saturday, Tuesday, and Wednesday

Windy conditions & low humidity

Use caution with outdoor burning.

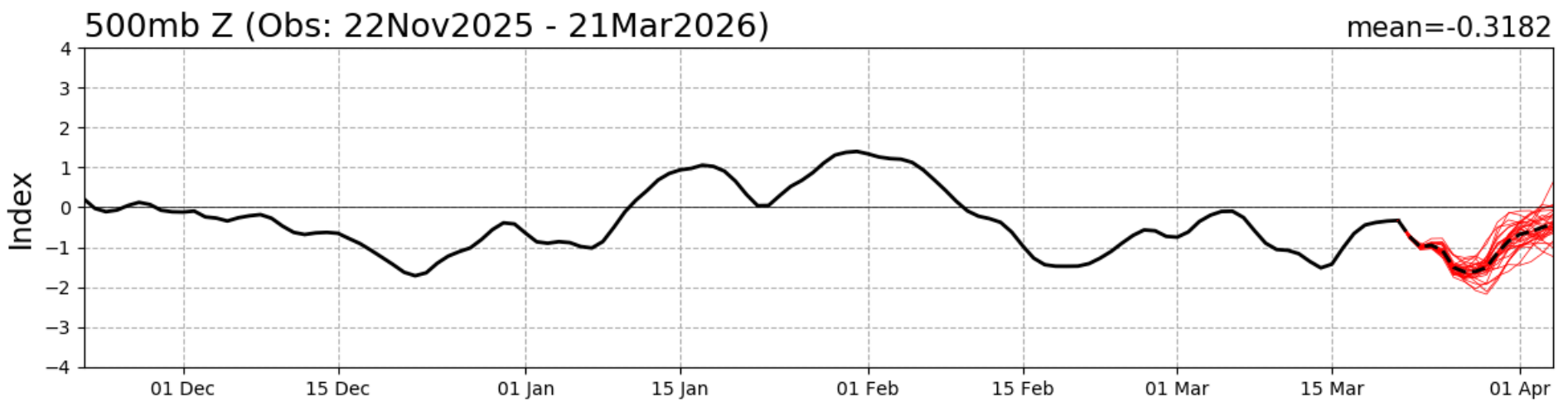


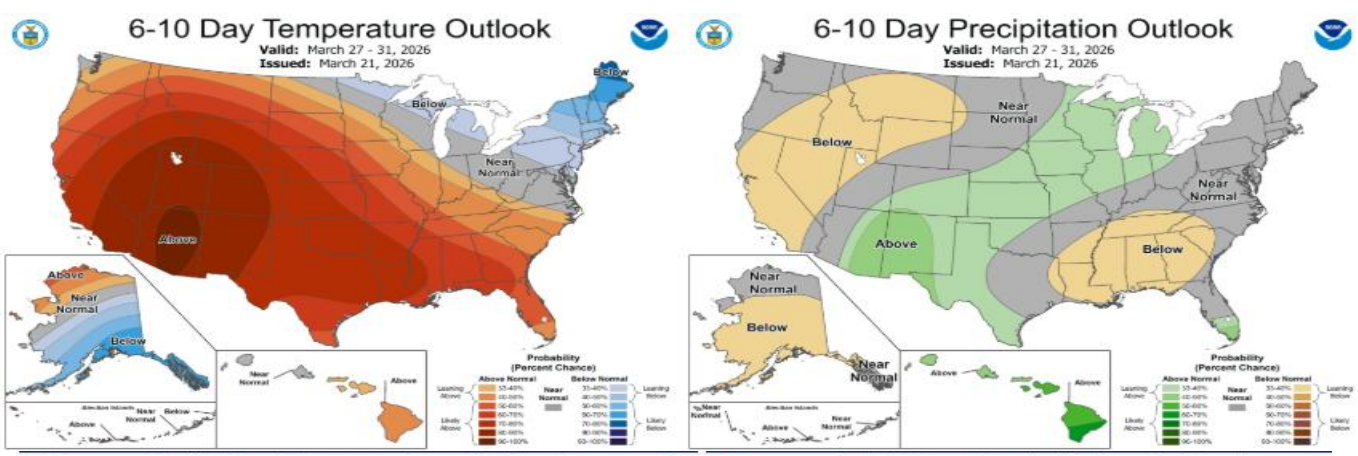


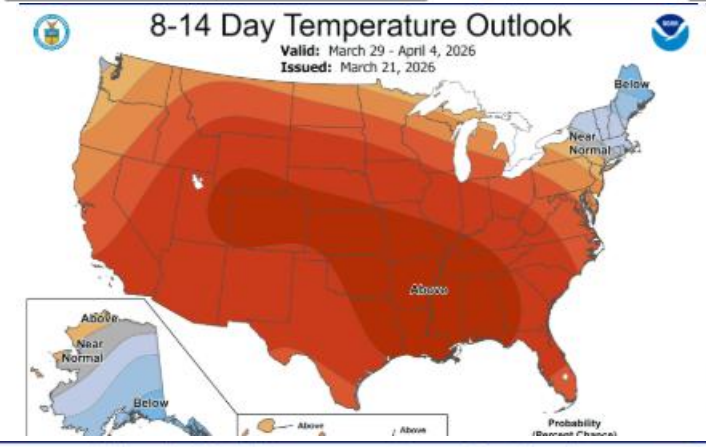
5-Day Total Precip Mar 22-29

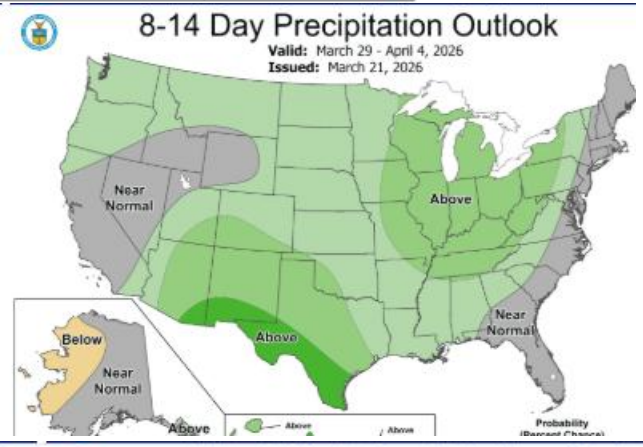
PNA was trending Negative which means weather in PNW.

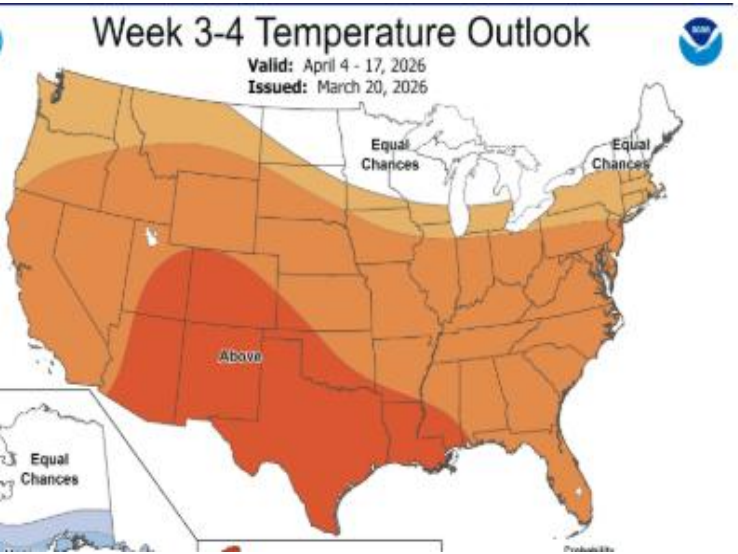
PNA Index: Observed & GEFS Forecasts

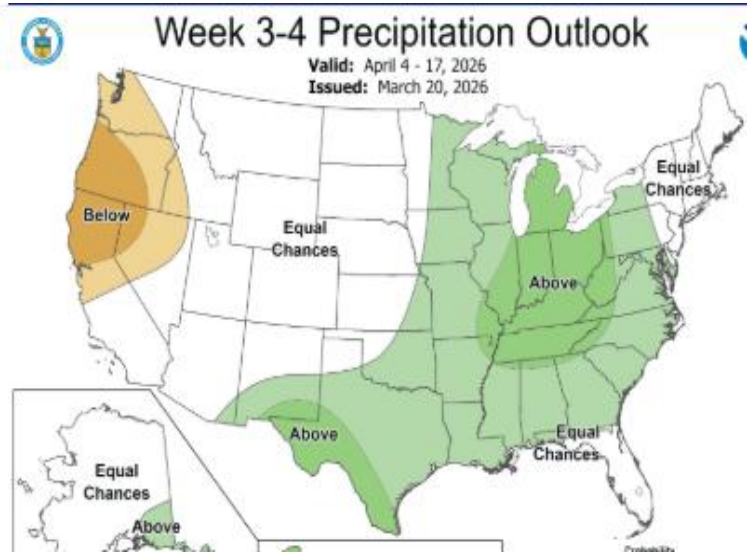












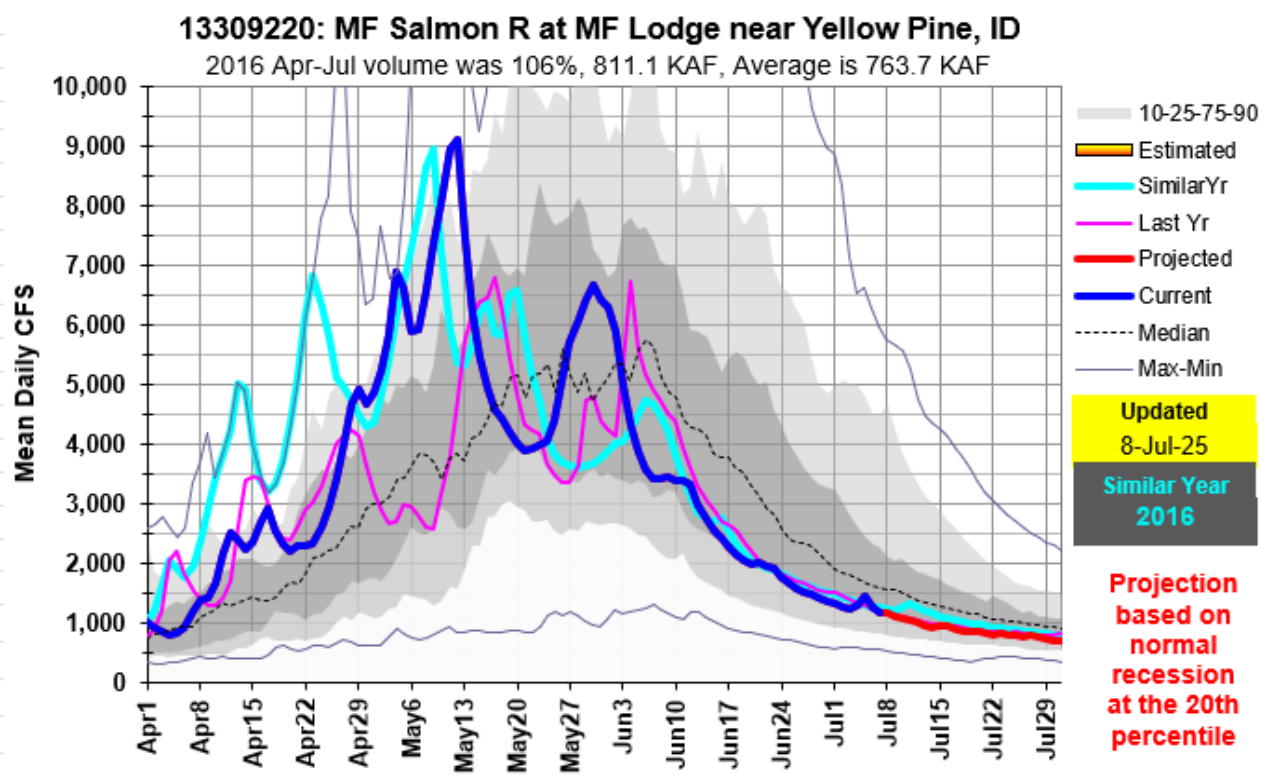
Winter will feel like its over next week.

NWS Temp & Precip OutlookS

Mar 27 - 31

Mar 29 - Apr 4

Apr 4 - 17

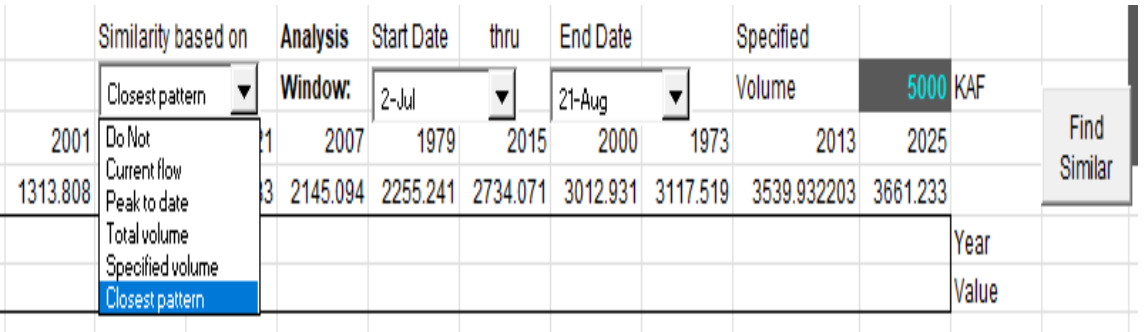


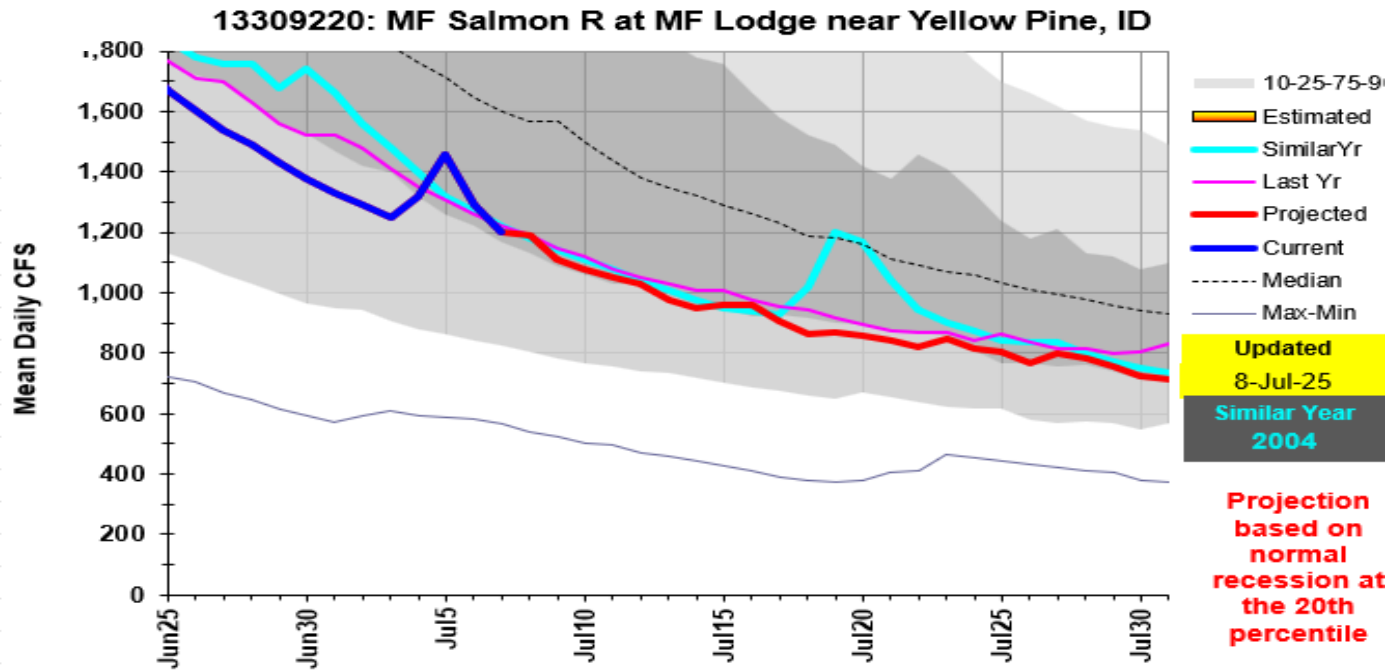
Remember these Flow Projections - Dr Tom Pagano wrote this Excel Spreadsheet tool back in the summer of 2006 !

It's was an amazing spreadsheet and run using them since 2006 with minimum maintenance. BUT change Sep 2, 2025 on USGS platform caused the spreadsheet to cease working.

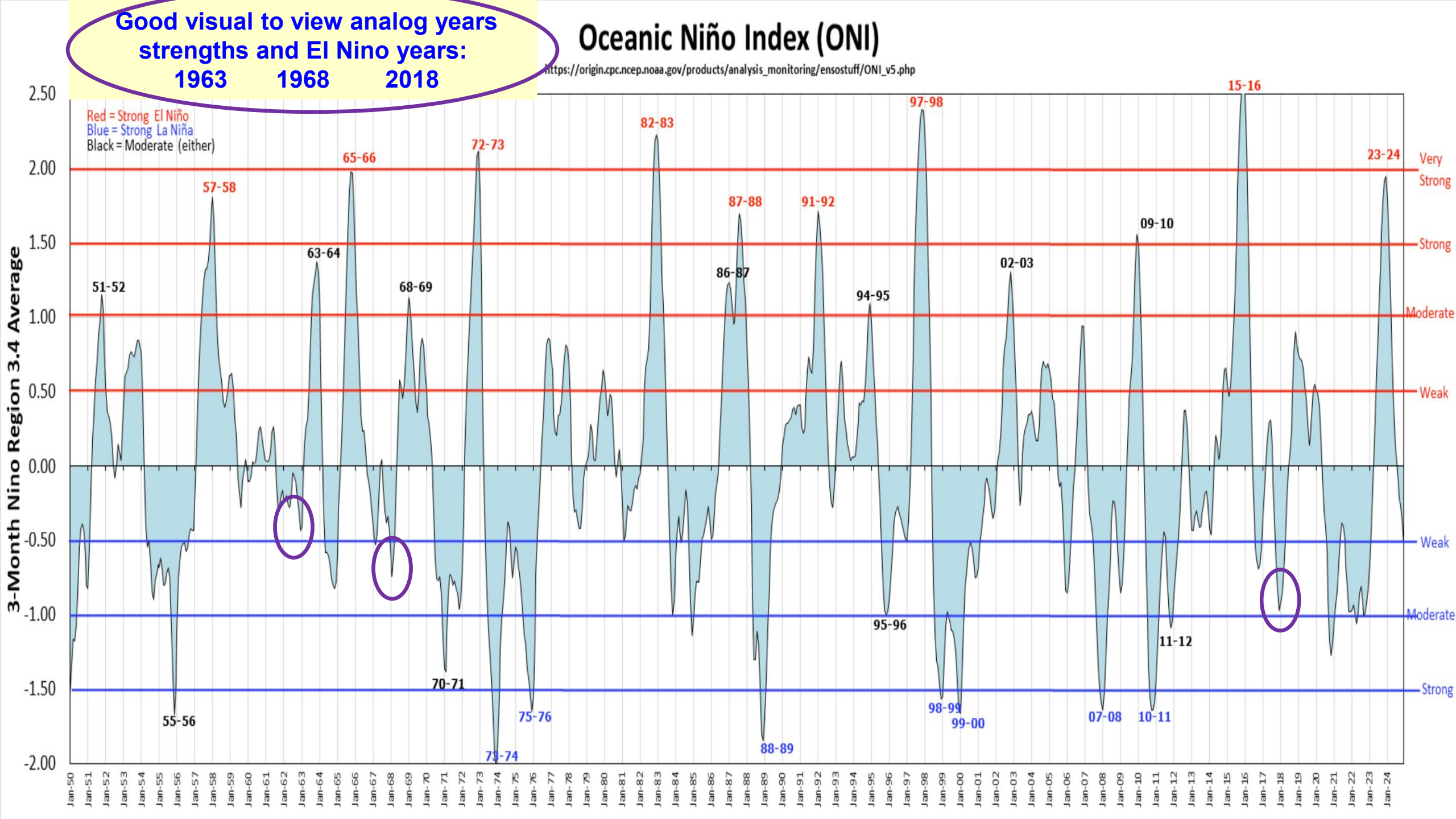
It was a great data grabber that quickly analyzed the historic data to produce similar years and flow projections.

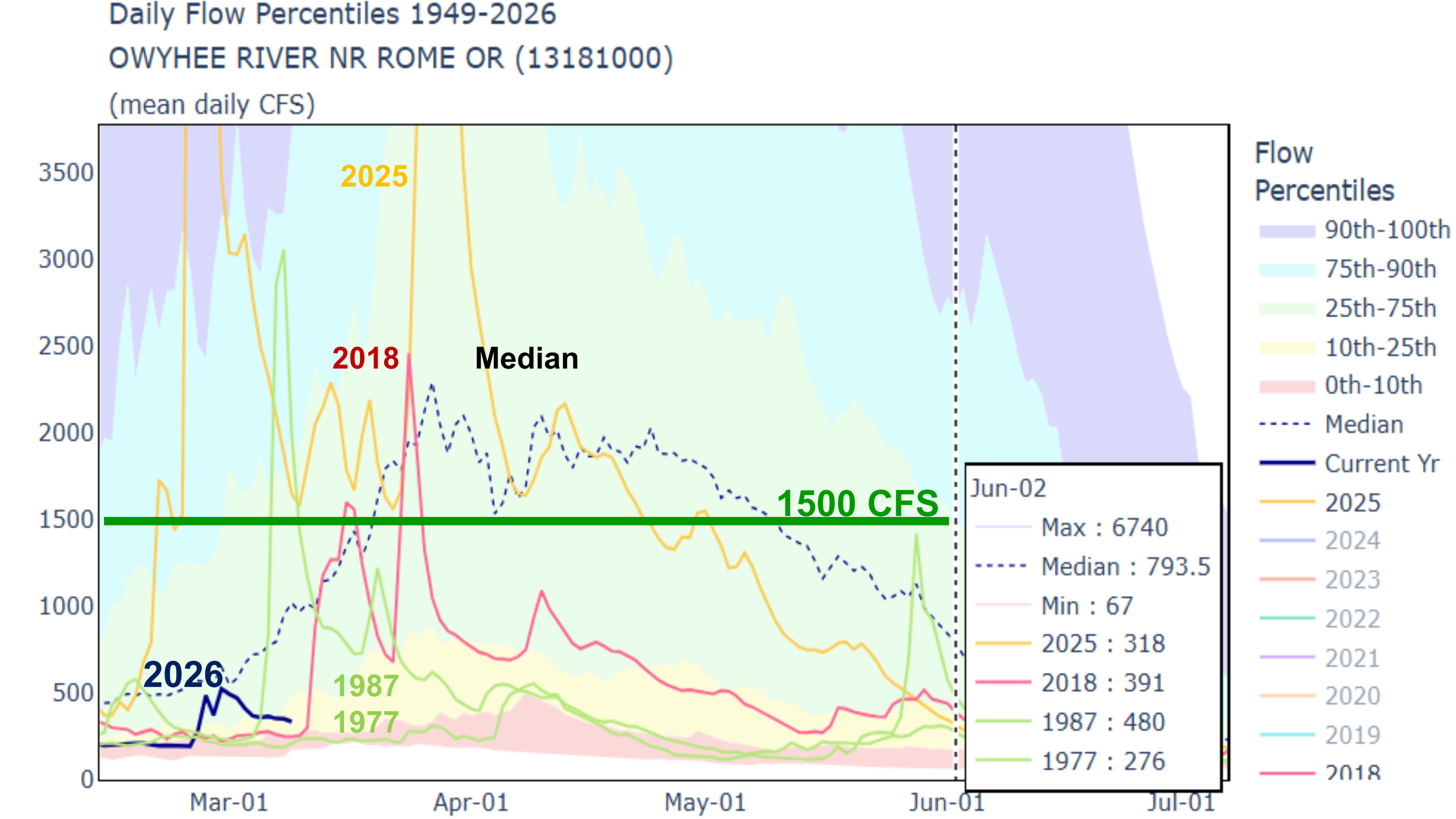
Now I'm feeling like a Salmon on its last stretch going up Marsh Creek. I'm sure we were able to educate many along the way and save a few lives.





Good visual to view analog years strengths and El Nino years:
1963 1968 2018




Daily Flow Percentiles 1949-2026
OWYHEE RIVER NR ROME OR (13181000)
(mean daily CFS)
3500
3000
2500
2000
1500
1000
500
0
2025
2018
Median
1500 CFS
2026
1987
1977
Mar-01
Apr-01
May-01
Jun-01
Jul-01
Jun-02
Max : 6740
Median : 793.5
Min : 67
2025 : 318
2018 : 391
1987 : 480
1977 : 276
Flow Percentiles
90th-100th
75th-90th
25th-75th
10th-25th
0th-10th
Median
Current Yr
2025
2024
2023
2022
2021
2020
2019
2018