

**Idaho & Montana
Snow Water
Equivalent Maps for
April 28, 2025**

**Snow 2 Flow Summary
April 28, 2025**

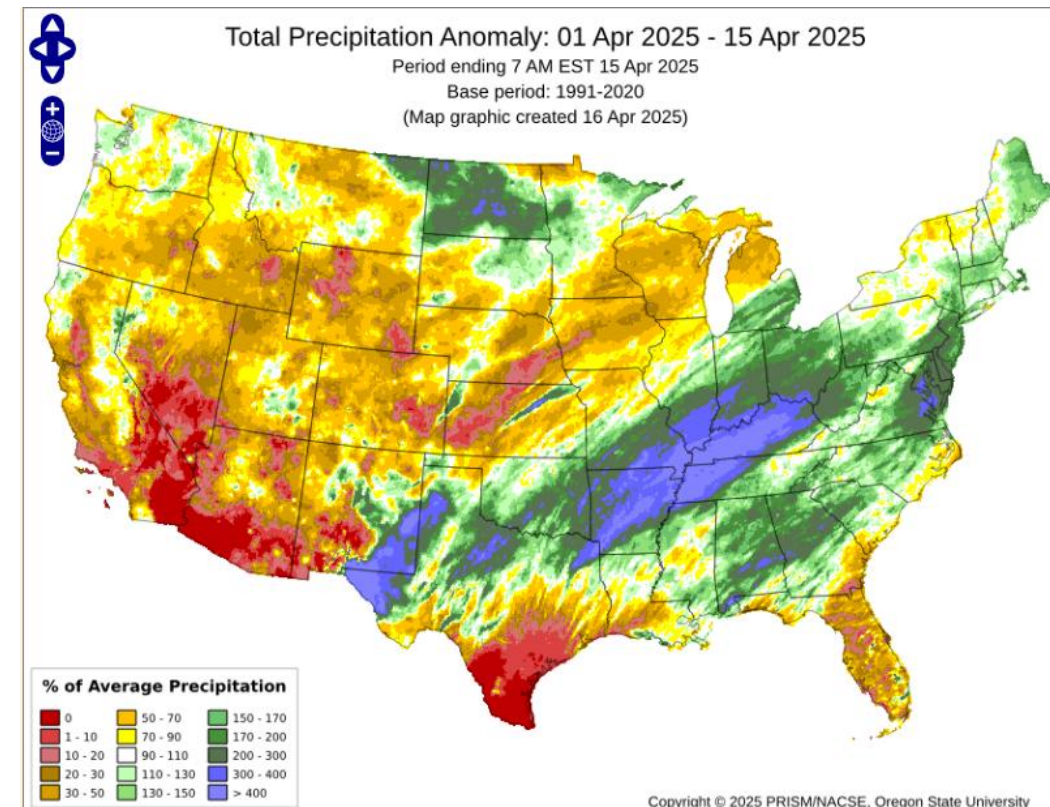
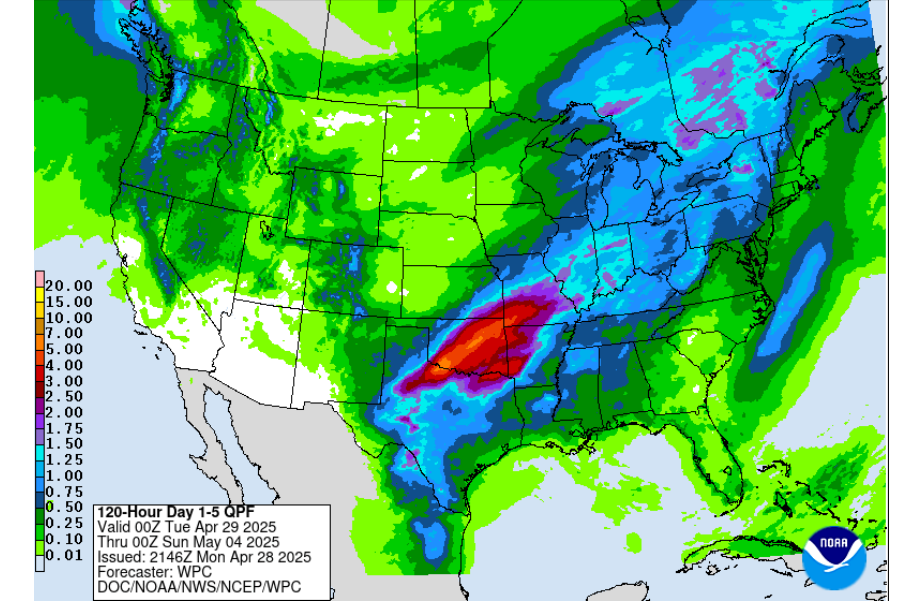
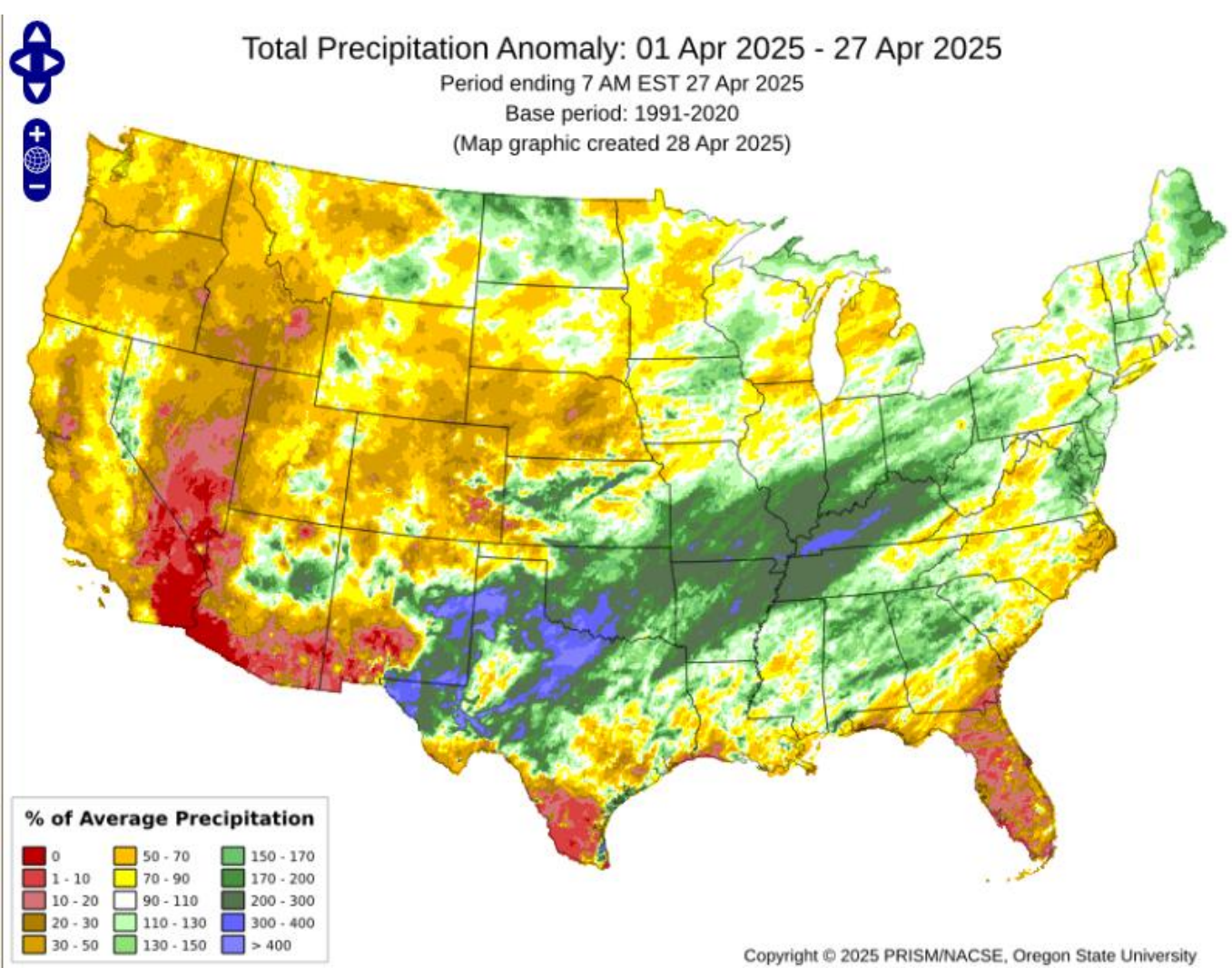
Where's the Snow ?

Snow2Flow Update for:

**MF, Main Salmon Rivers
Selway & Lochsa**

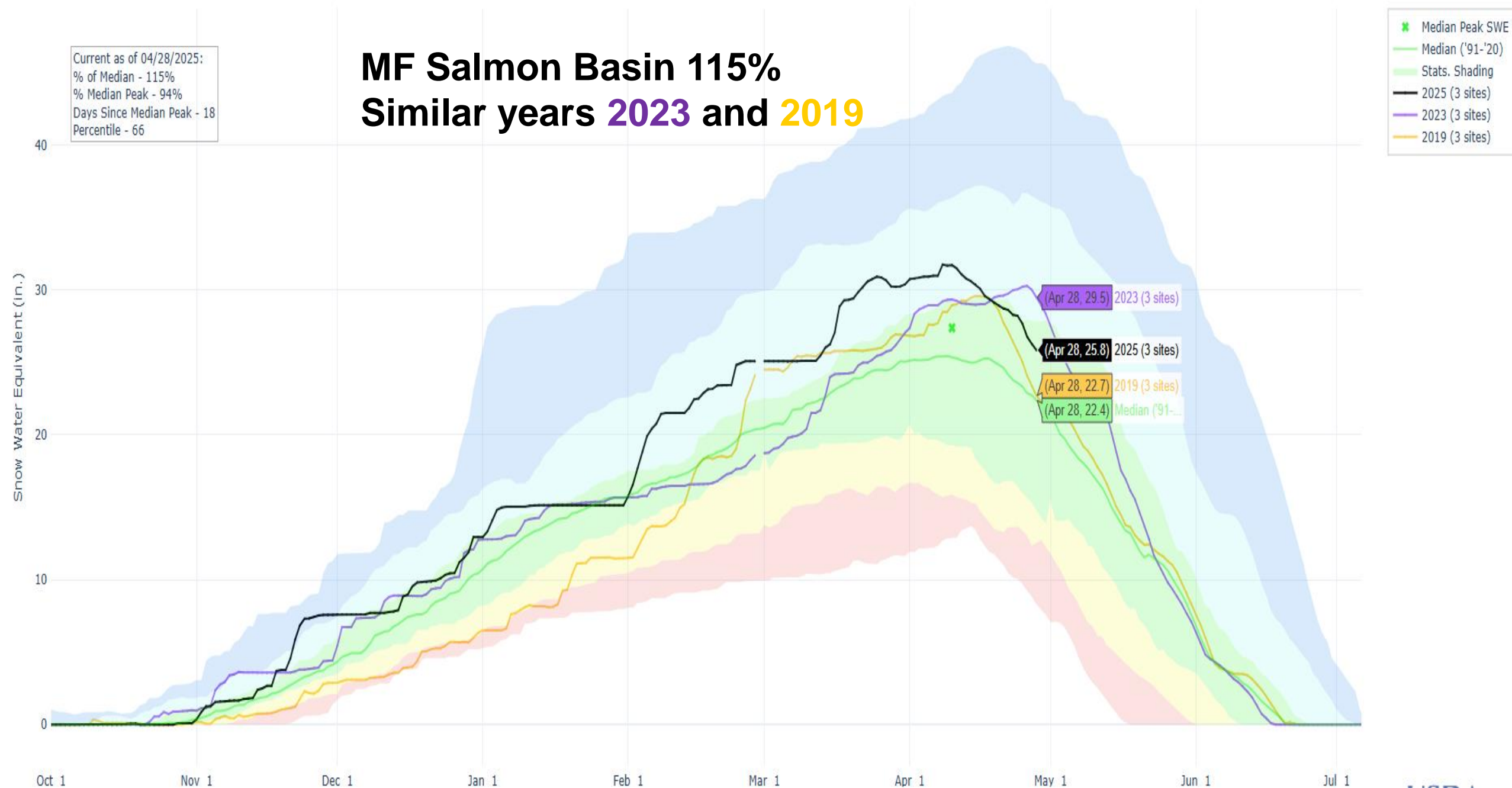
**And a few more:
Owyhee,
Camas Creek and
Salmon Falls Creek**

April 1-15 was dry across Idaho and remained dry for the 2nd half of April. Precip for next few days is minimal. So, April precip amounts will be in the range of 45-55% of normal in the Salmon and Clearwater, respectively; and only about 33% of normal in the Payette, Bruneau and Owyhee basins. Not a good month for moisture.



Current as of 04/28/2025:
% of Median - 115%
% Median Peak - 94%
Days Since Median Peak - 18
Percentile - 66

MF Salmon Basin 115% Similar years **2023** and **2019**



BANNER SUMMIT, ID (312) SNOW WATER EQUIVALENT

2025 Banner Summit peaked at 31.2" on Mar 26 and is at 20.5" today. On average, the snowmelt peak occurs when the site is 61 to 66% melted or when 9 to 11" of SWE remains at the site.

Current as of 04/28/2025:
 % of Median - 93%
 % Median Peak - 76%
 Days Since Median Peak - 17
 Percentile - 43

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.

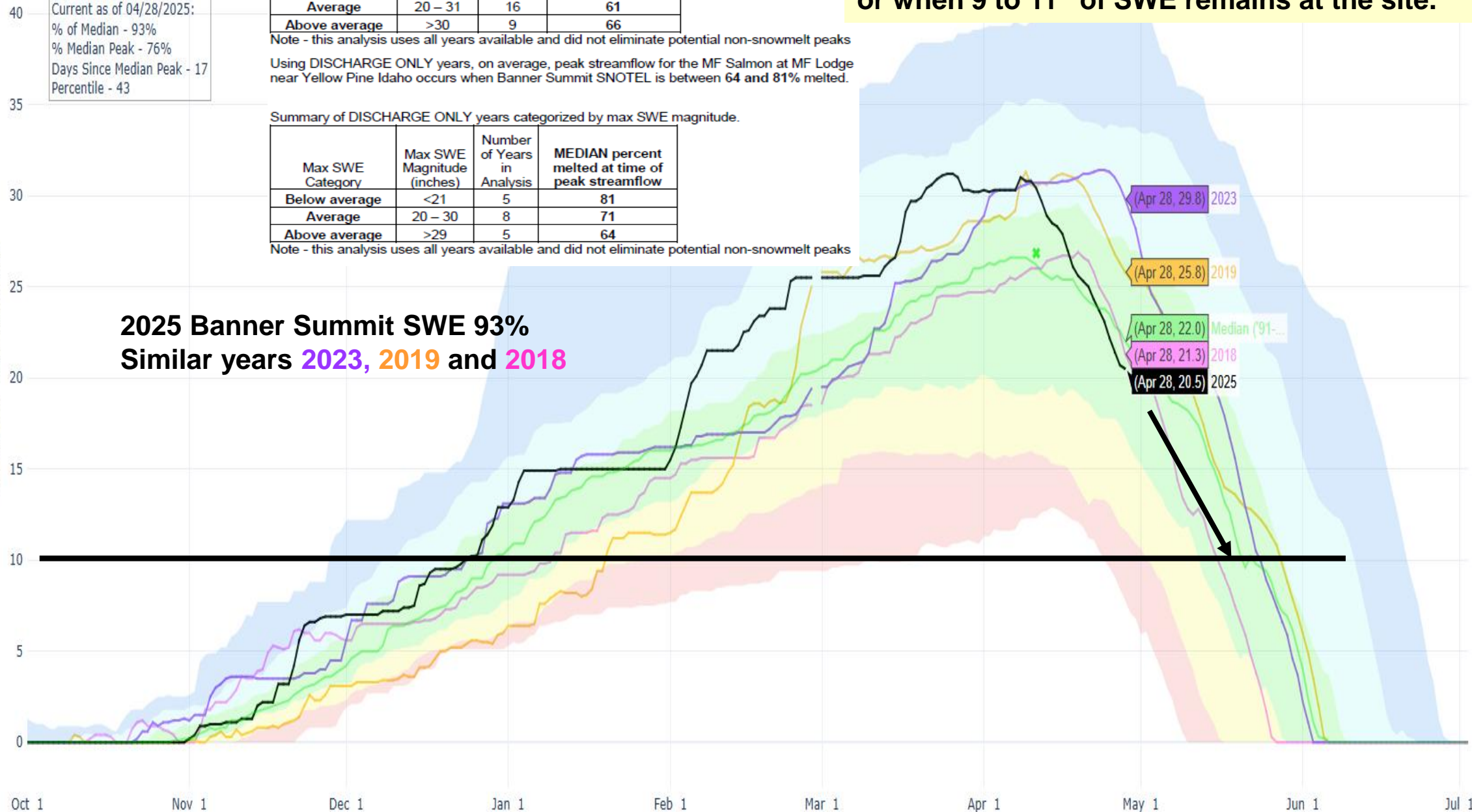
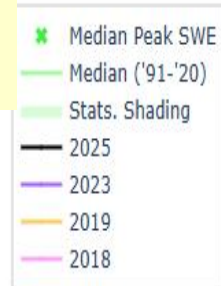
Summary of DISCHARGE ONLY years categorized by max SWE magnitude.

Max SWE Category	Max SWE Magnitude (inches)	Number of Years in Analysis	MEDIAN percent melted at time of peak streamflow
Below average	<21	5	81
Average	20 – 30	8	71
Above average	>29	5	64

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

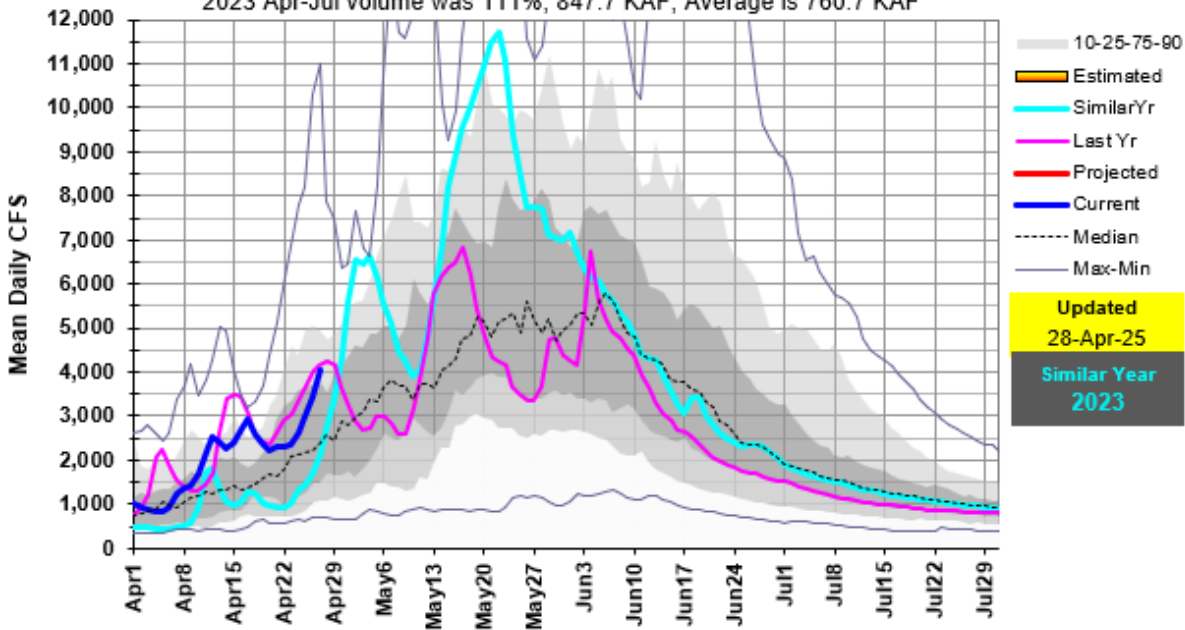
2025 Banner Summit SWE 93%
Similar years 2023, 2019 and 2018

Snow Water Equivalent (in.)



13309220: MF Salmon R at MF Lodge near Yellow Pine, ID

2023 Apr-Jul volume was 111%, 847.7 KAF, Average is 760.7 KAF



Flow for years that had a similar snowpack:

2024 Last Year Apr-Jul volume was 665 KAF.

2023 Apr-Jul volume was 847 KAF – late melt pushed the peak to May 22. Add rain soon would increase peak and extend recession flows.

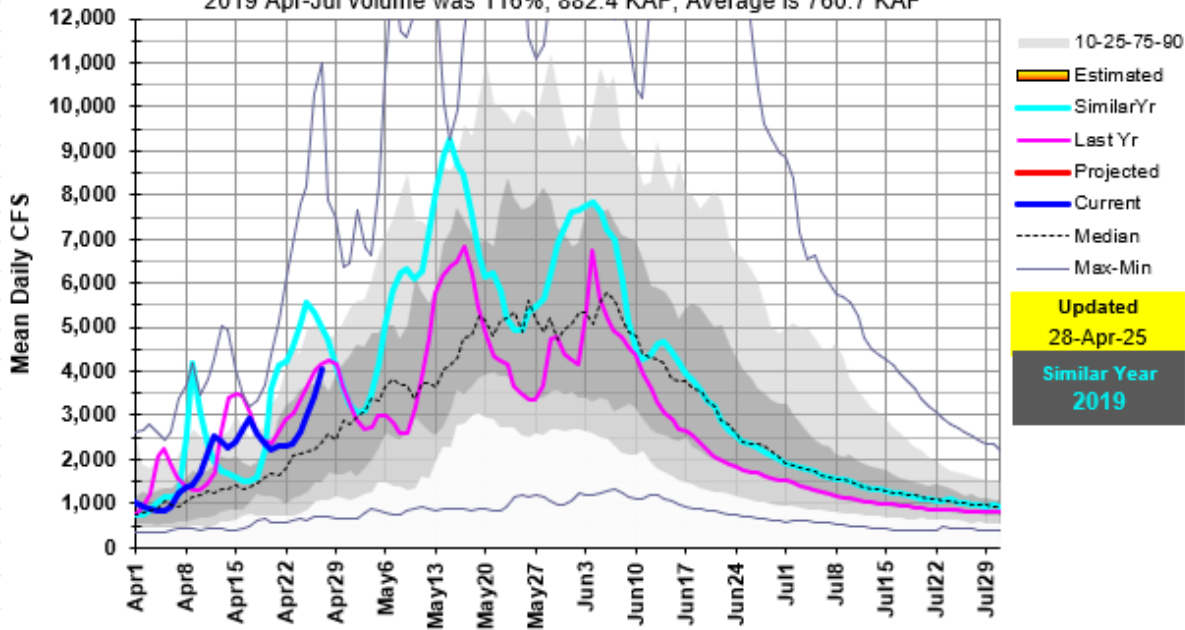
2019 Apr-Jul volume was 882 KAF

2018 Apr-Jul volume was 941 KAF

Apr-Jul volumes for all 3 years are in the ballpark as volume forecast for this year, 875-930 KAF. See next slide for forecast volumes.

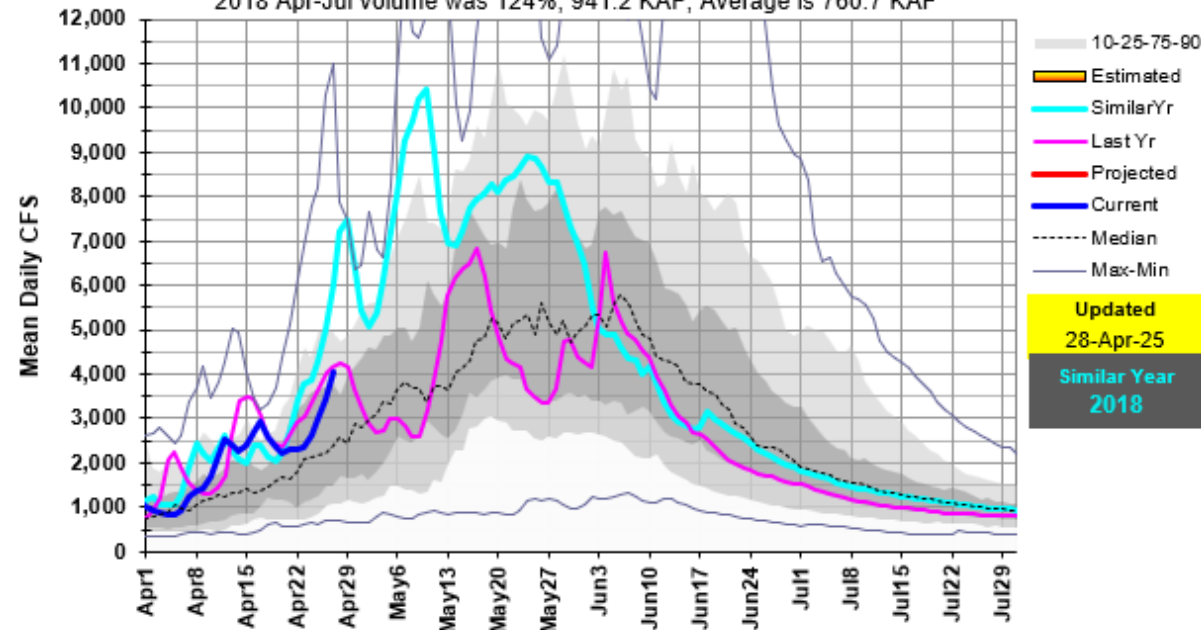
13309220: MF Salmon R at MF Lodge near Yellow Pine, ID

2019 Apr-Jul volume was 116%, 882.4 KAF, Average is 760.7 KAF



13309220: MF Salmon R at MF Lodge near Yellow Pine, ID

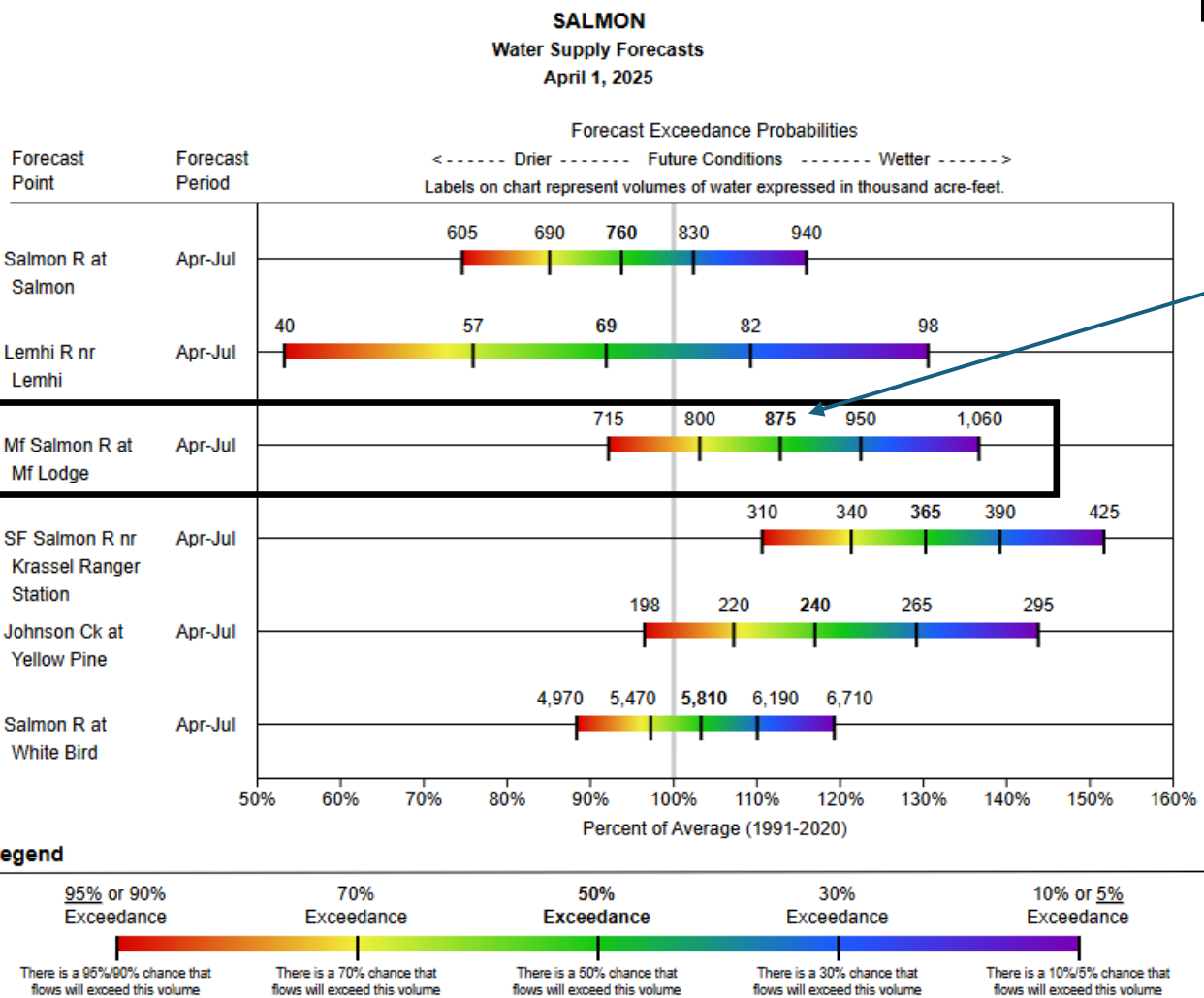
2018 Apr-Jul volume was 124%, 941.2 KAF, Average is 760.7 KAF



MF Salmon River Volume Forecasts for Apr-Jul
NRCS are from April 1, 2025 NWS are from **Apr 28**

Table in KAF

Natural Forecast					
ESP with 10 Days QPF Ensemble: 2025-04-28 Issued: 2025-04-28					
Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	941	1023	113	1236	905
APR-JUL	850	930	113	1130	819

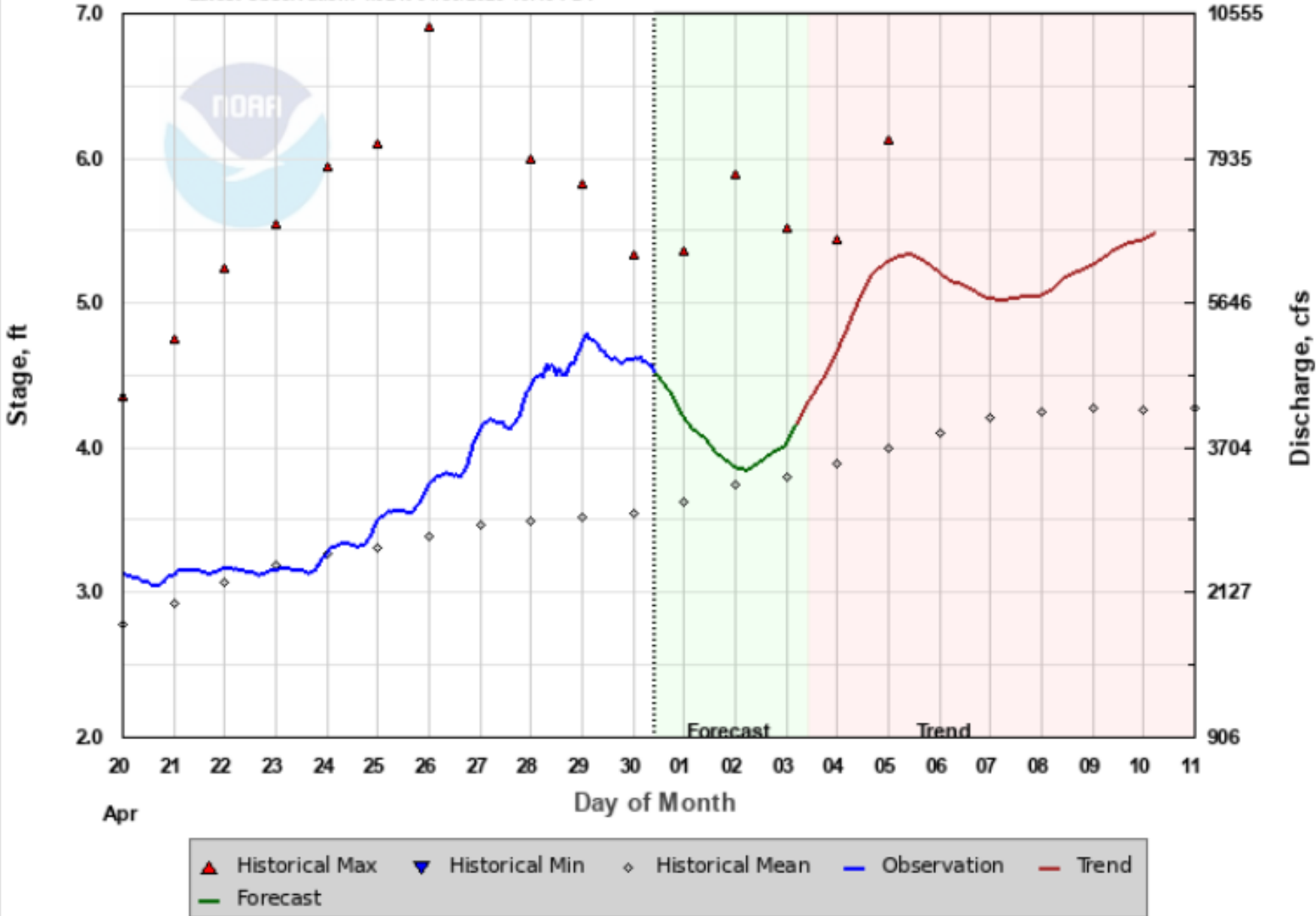


NRCS Apr 1 Apr-Jul Forecast remains at 875 KAF with a range of 715 to 1060 KAF

NWS Apr-Jul Forecast from, **Apr 28** is for 930 KAF with a range of 850 to 1130 KAF

MF SALMON - MIDDLE FORK LODGE (MIDI1)

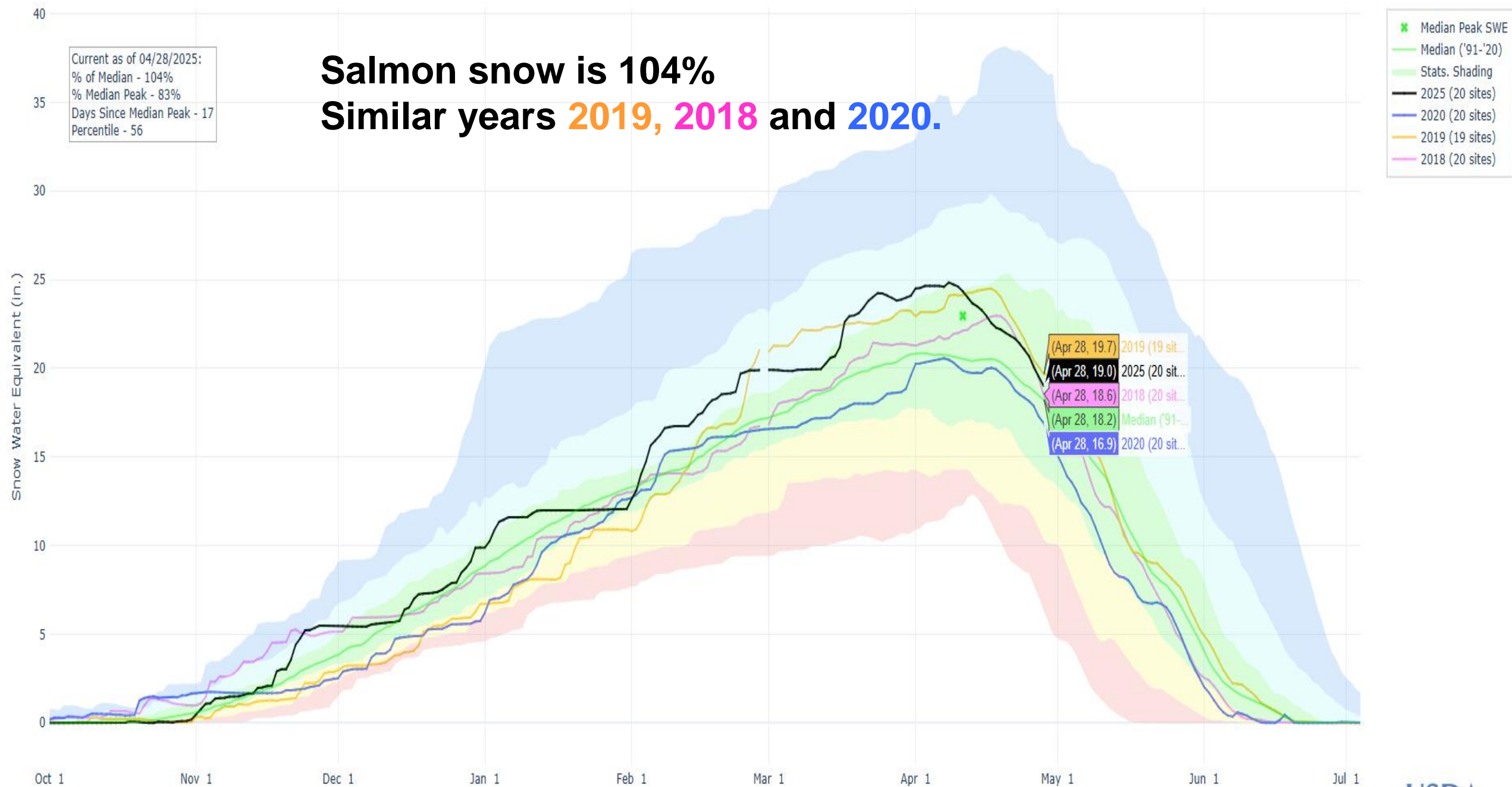
Latest Observation: 4.52 ft 04/30/2025 10:45 PDT



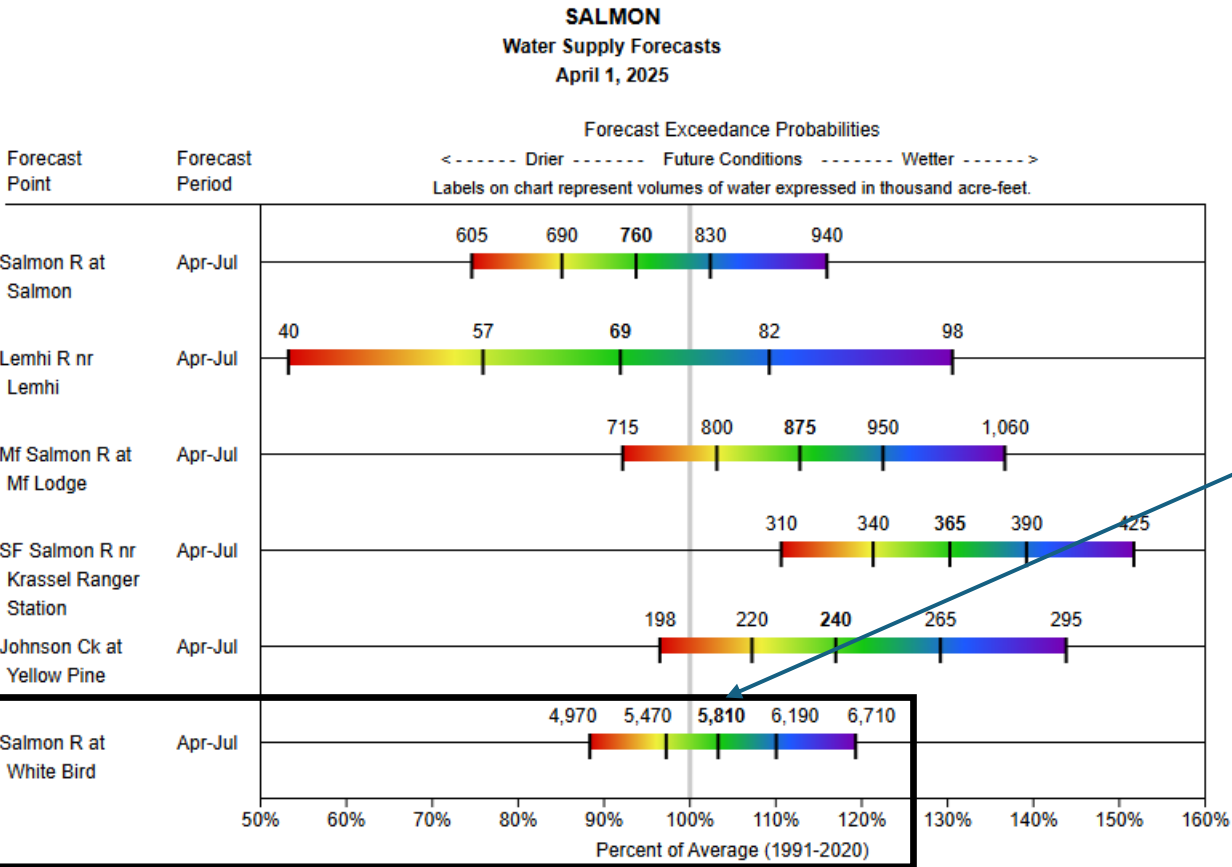
NWS Forecast and Trend shows flows increasing with warming temps this week and maybe nearing possible peak depending upon future temps, remaining snow and rain or not.

Salmon snow is 104% **Similar years 2019, 2018 and 2020.**

Current as of 04/28/2025:
 % of Median - 104%
 % Median Peak - 83%
 Days Since Median Peak - 17
 Percentile - 56



Salmon River Volume Forecasts for Apr-Jul
NRCS are from April 1, 2025 NWS are from **Apr 28**
KAF



SALMON - AT WHITEBIRD (WHBI1)
Forecasts for Water Year 2025

Natural Forecast

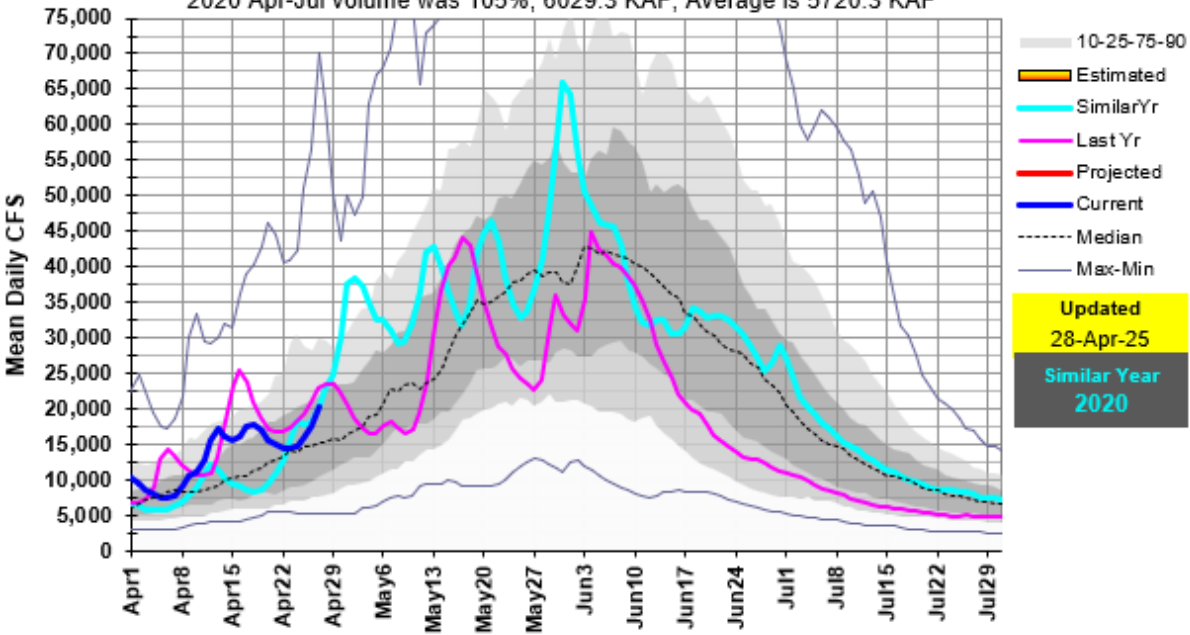
ESP with 10 Days QPF Ensemble: **2025-04-28** Issued: 2025-04-28

Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	6039	6463	103	7543	6264
APR-JUL	5442	5838	103	6863	5668

NRCS Apr-Jul Forecast is for 5810 KAF
with a range of 4970 to 6710 KAF

NWS Apr-Jul Forecast is for 5838 KAF
with a range of 5442 to 6863 KAF

13317000: Salmon R at White Bird, ID
 2020 Apr-Jul volume was 105%, 6029.3 KAF, Average is 5720.3 KAF



Flow for years that had a similar snowpack:

2024 Last Year Apr-Jul volume was 4559 KAF.

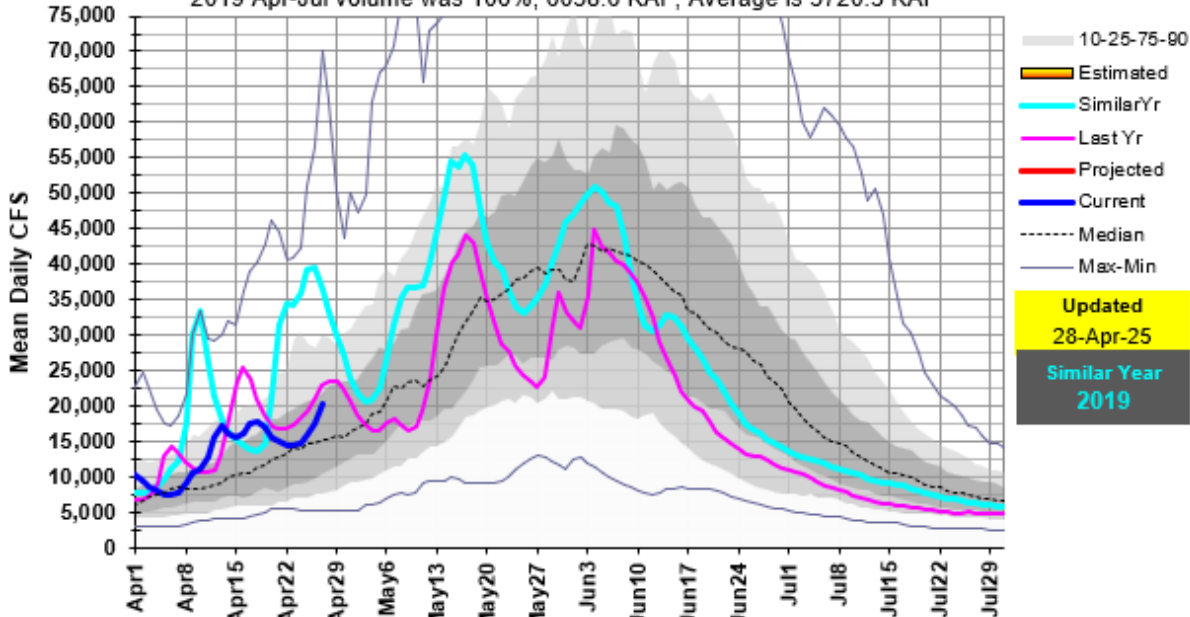
2020 Apr-Jul volume was 6029 KAF – late melt and probably rain bumped peak up on June 1 to 65,000 cfs. Rain is needed now to improve runoff and keep recession flows higher longer.

2019 Apr-Jul Volume was 6058 KAF

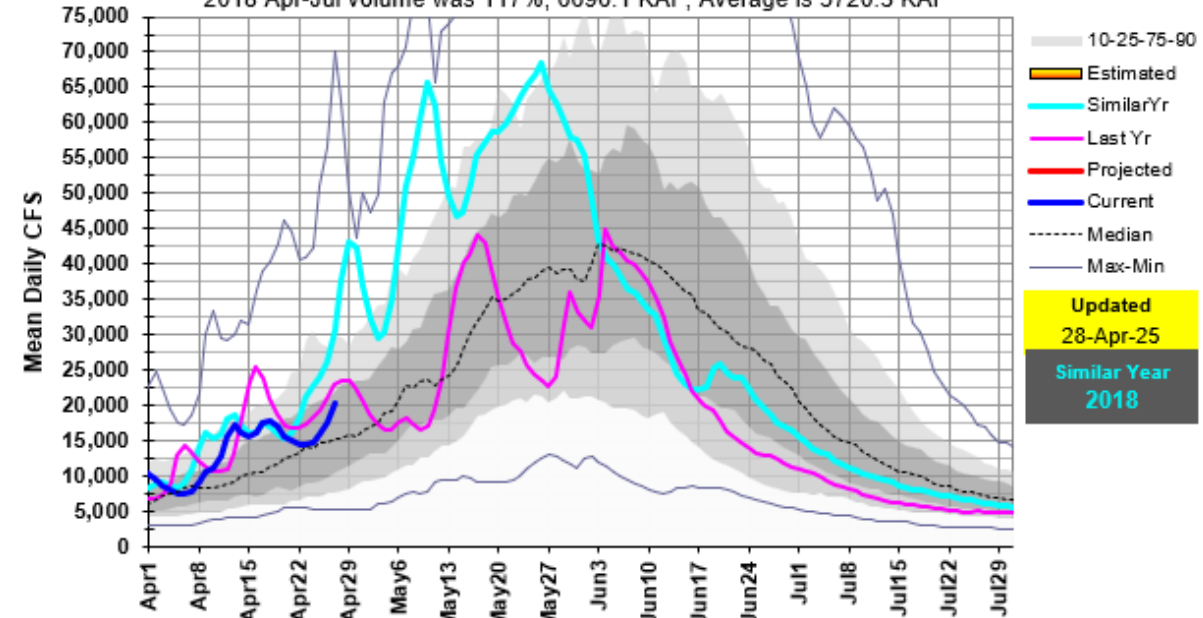
2018 Apr-Jul Volume was 6696 KAF

With both agencies volume forecasts in the 5800 KAF range, expect volumes slightly less than these years and hopefully better than **Last Year 2024**.

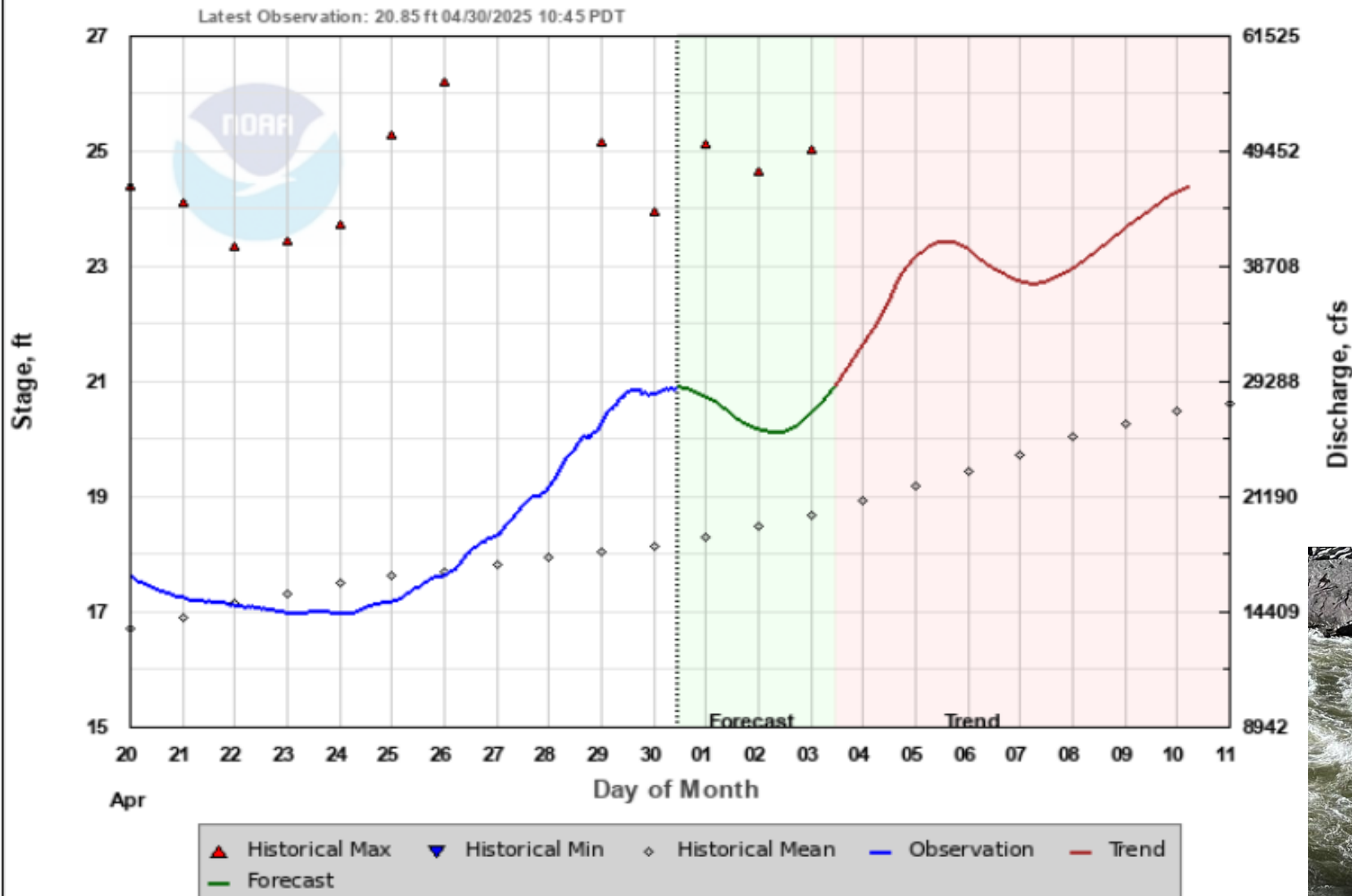
13317000: Salmon R at White Bird, ID
 2019 Apr-Jul volume was 106%, 6058.6 KAF, Average is 5720.3 KAF



13317000: Salmon R at White Bird, ID
 2018 Apr-Jul volume was 117%, 6696.1 KAF, Average is 5720.3 KAF



SALMON - AT WHITEBIRD (WHBI1)



Forecast Created: 04/30/2025 08:40 PDT
Plot Created: 04/30/2025 11:03 PDT

Observations Provided by US Geological Survey

NWS **Forecast** and **Trend** shows flows increasing with warming temps this week and maybe nearing peak depending upon future temps, remaining snow and rain or not.

Time will tell, how high and when...

Bailey Rapid Apr 22, 2025 10:47 AM
MT/PT flow about 16000 cfs

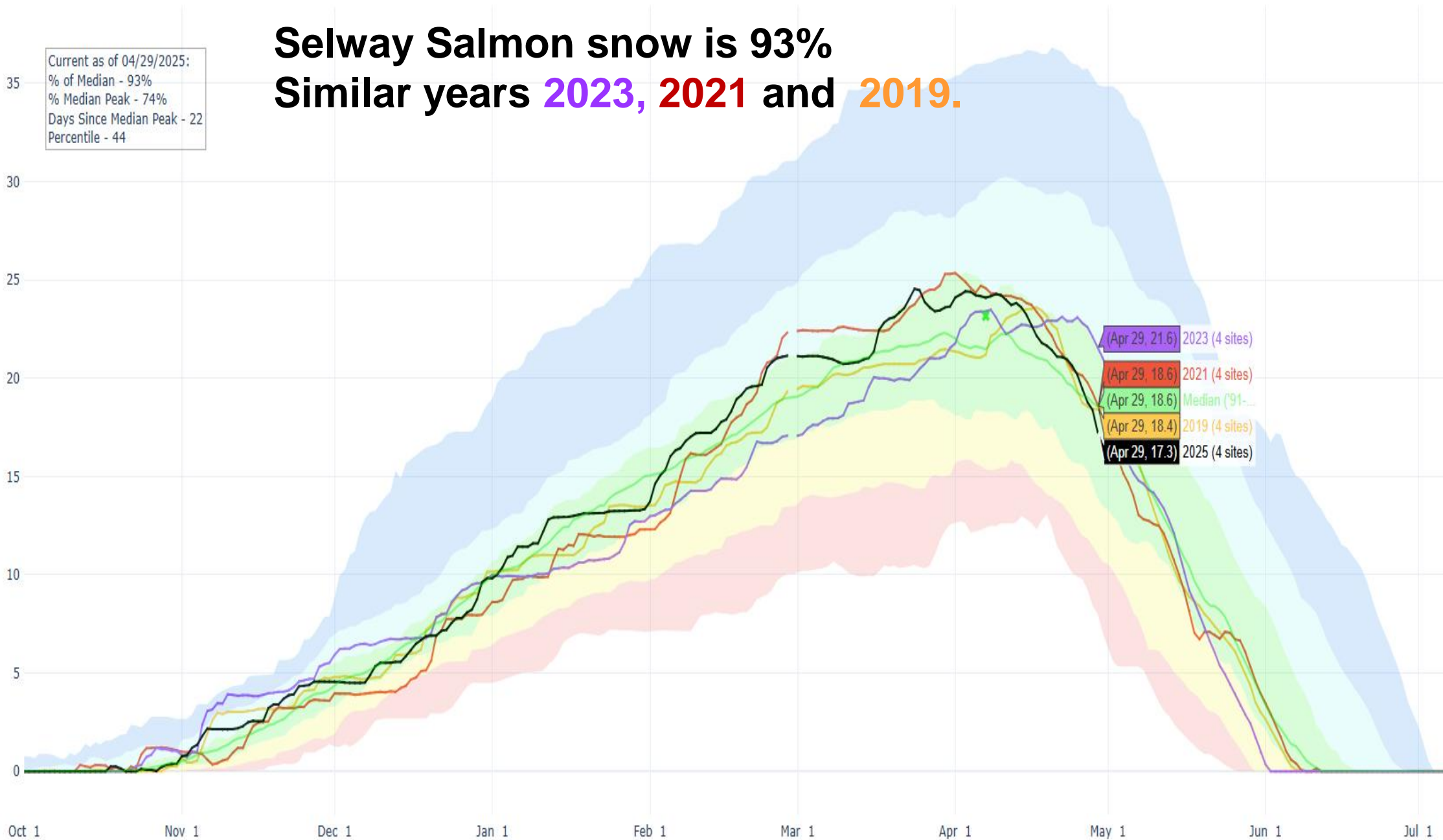


Selway Salmon snow is 93% Similar years **2023**, **2021** and **2019**.

Current as of 04/29/2025:
% of Median - 93%
% Median Peak - 74%
Days Since Median Peak - 22
Percentile - 44

- Median Peak SWE
- Median ('91-'20)
- Stats. Shading
- 2025 (4 sites)
- 2023 (4 sites)
- 2021 (4 sites)
- 2019 (4 sites)

Snow Water Equivalent (in.)



TWIN LAKES, MT (836) SNOW WATER EQUIVALENT

SELWAY RIVER AND TWIN LAKES SNOTELSITE

On average, peak streamflow for the Selway River near Lowell, Idaho occurs when Twin Lakes SNOTEL is between **26 and 33%** melted.

Summary of all years by max SWE magnitude

Max SWE Category	Range of Max SWE Magnitude (inches)	Number of Years in Analysis	Average percent melted at time of peak streamflow
Below average	<35	11	33
Average	34 – 49	25	33
Above average	>48	12	26

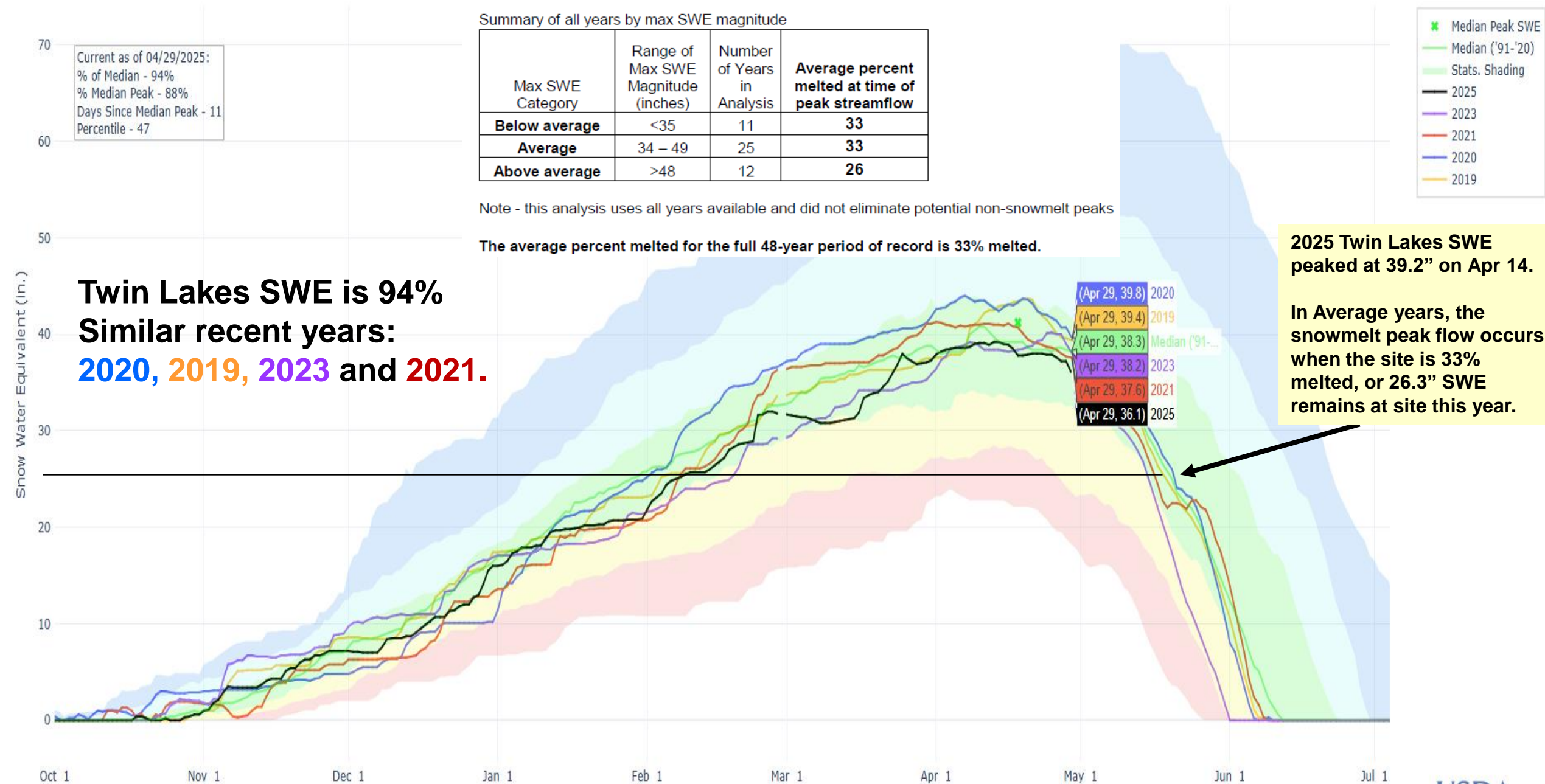
Note - this analysis uses all years available and did not eliminate potential non-snowmelt peaks

The average percent melted for the full 48-year period of record is 33% melted.

Current as of 04/29/2025:
% of Median - 94%
% Median Peak - 88%
Days Since Median Peak - 11
Percentile - 47

Twin Lakes SWE is 94%
Similar recent years:
2020, 2019, 2023 and 2021.

2025 Twin Lakes SWE peaked at 39.2" on Apr 14.
In Average years, the snowmelt peak flow occurs when the site is 33% melted, or 26.3" SWE remains at site this year.



Selway River
Volume Forecasts for Apr-Jul

NRCS are from April 1, 2025 NWS are from **Apr 28**

Table in KAF

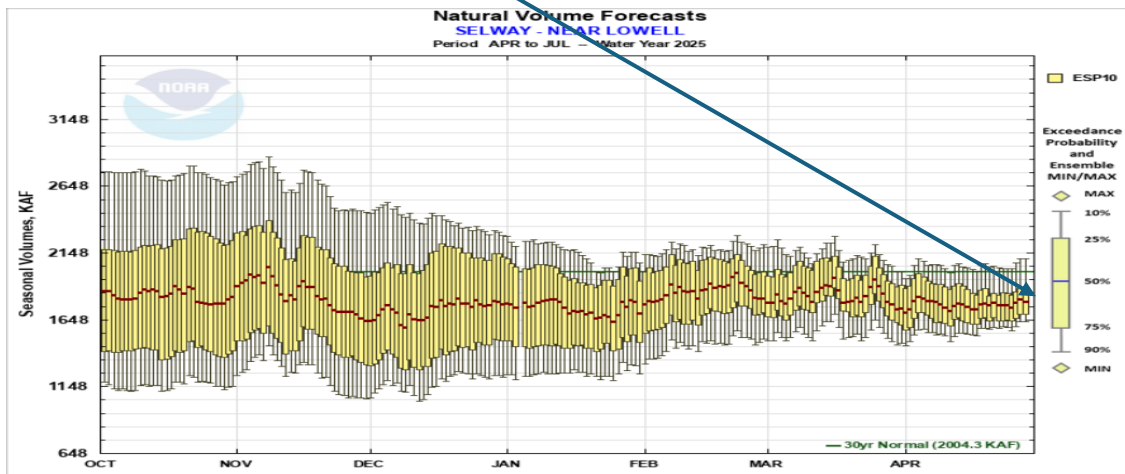
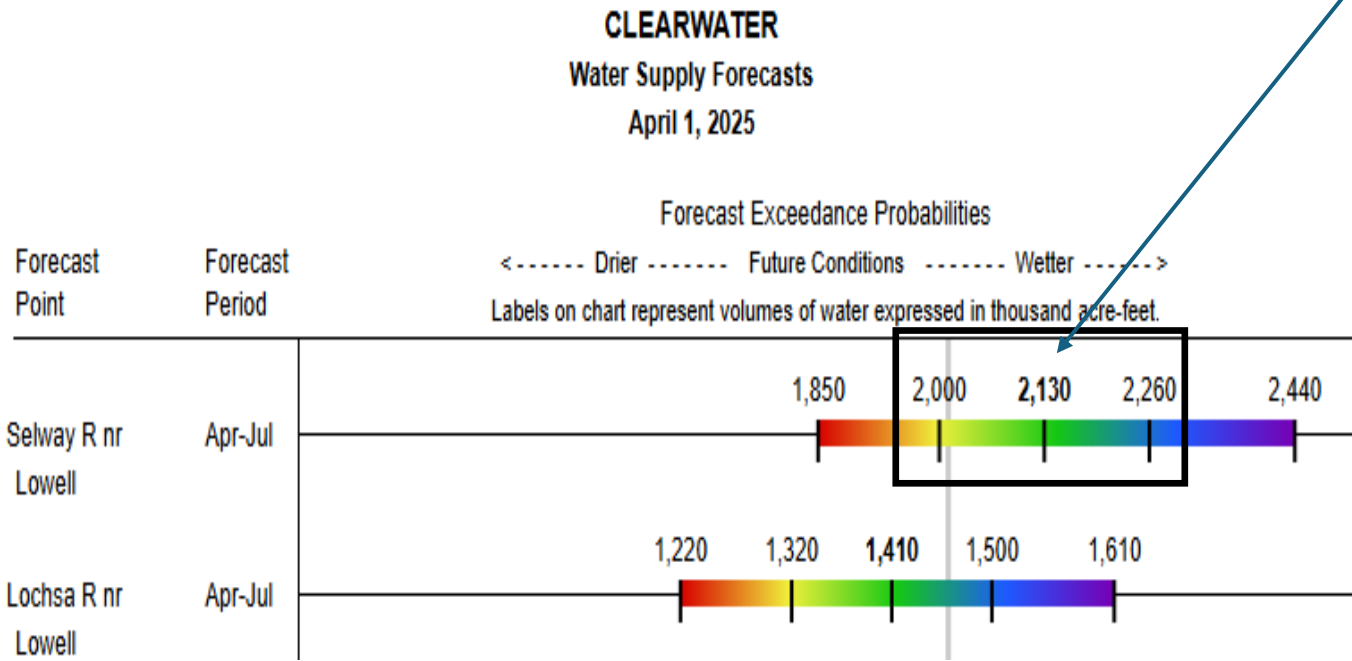
SELWAY - NEAR LOWELL (SEL1)
Forecasts for Water Year 2025

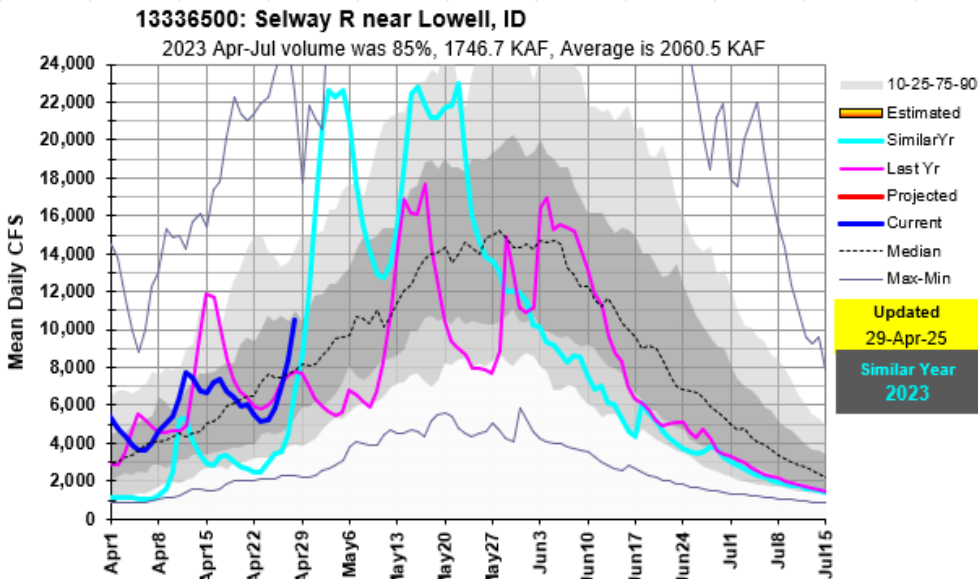
Natural Forecast
ESP with 10 Days QPF Ensemble: **2025-04-28** Issued: 2025-04-28

Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	1716	1872	89	2207	2099
APR-JUL	1633	1783	89	2107	2004

Selway River:
NRCS Apr-Jul Forecast is for 2130 KAF with 70/30% range of 2000 to 2260 KAF

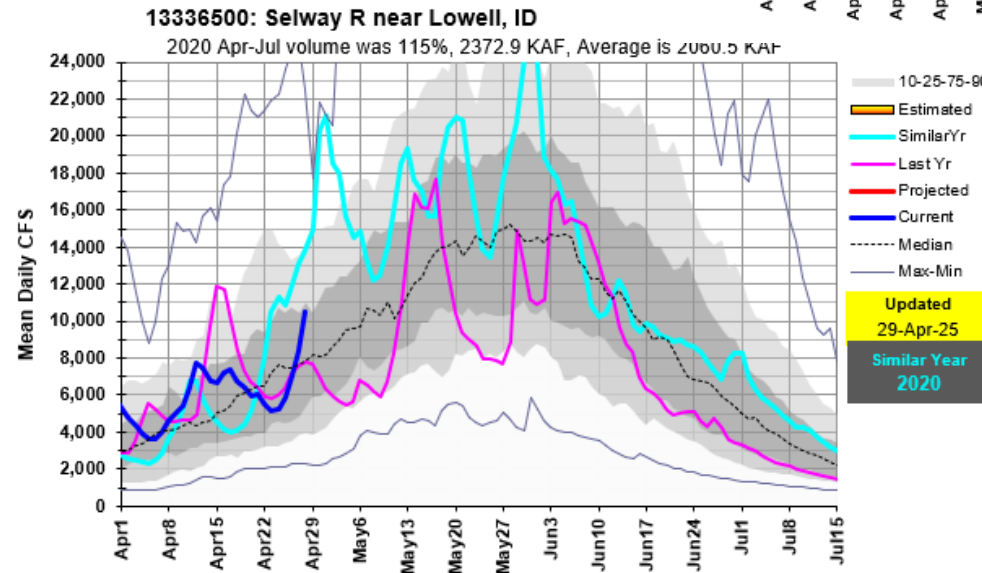
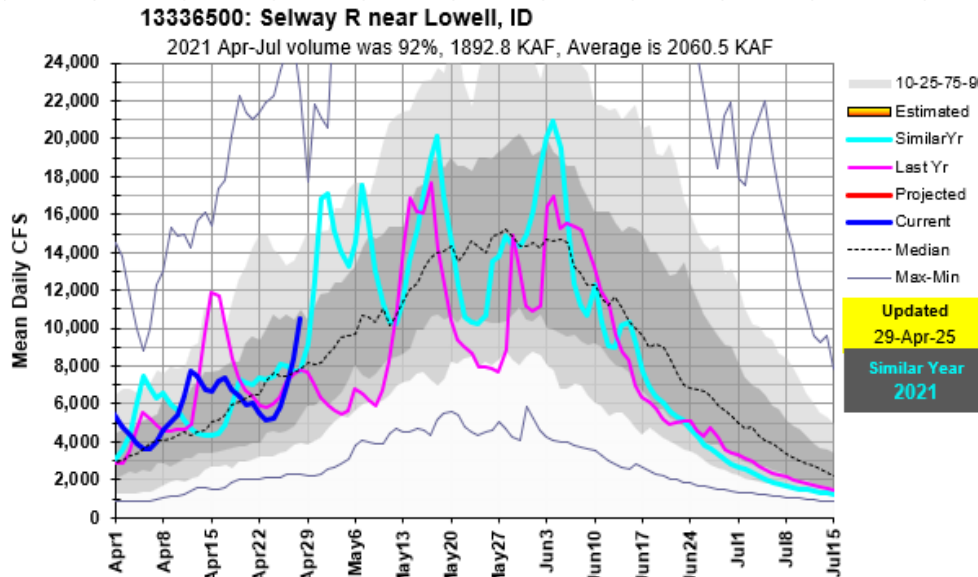
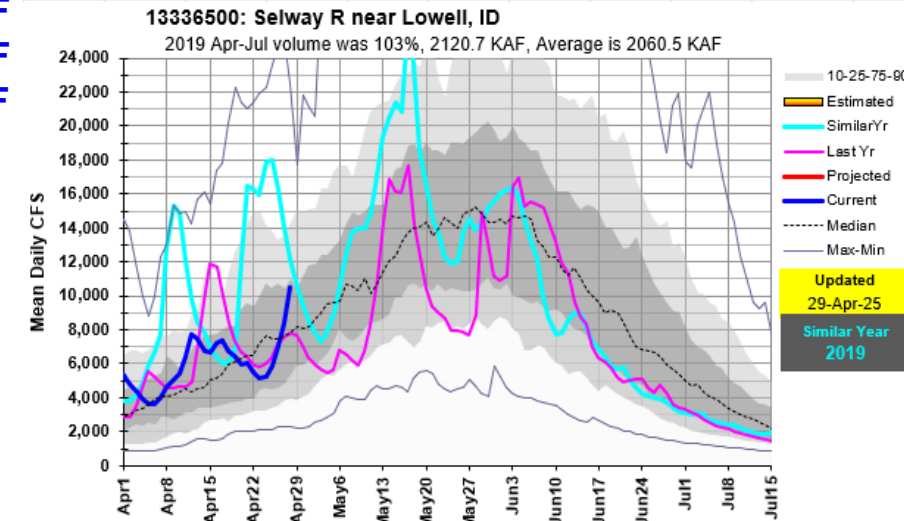
NWS Apr-Jul Forecast is for 1783 KAF with a 75/25% range of 1773 to 1969 KAF





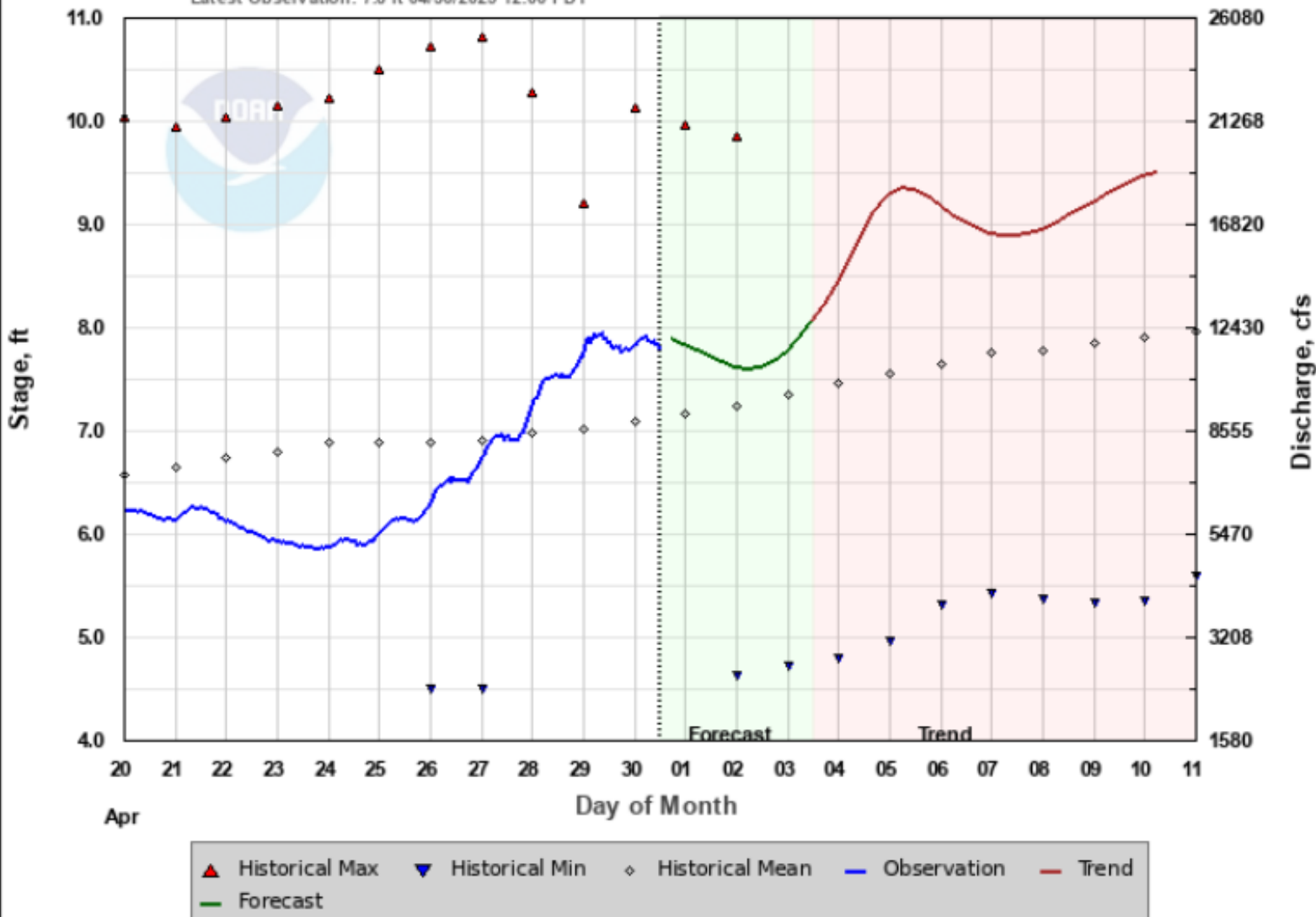
Flow for years that had a similar snowpack:
With a wider range of Apr-Jul volume forecasts from NWS and NRCS ranging from 1800 to 2100 KAF, expect volumes to be better than Last Year and maybe similar 2023 and 2019 which both favored an early peak.

2024 Last Year Apr-Jul volume was 1625 KAF.
2023 Apr-Jul volume was 1746 KAF
2021 Apr-Jul volume was 1892 KAF
2020 Apr-Jul volume was 2372 KAF
2019 Apr-Jul volume was 2120 KAF



SELWAY - NEAR LOWELL (SEL1)

Latest Observation: 7.8 ft 04/30/2025 12:00 PDT



NWS **Forecast** and **Trend** shows flows increasing with warming temps this week and maybe nearing peak depending upon future temps, remaining snow and rain or not.

Time will tell, how high and when...

Forecast Created: 04/30/2025 08:38 PDT

Plot Created: 04/30/2025 12:30 PDT

Observations Provided by US Geological Survey

**Salmon River and Bargamin Creek
confluence Apr 22, 2025 about
16,000 cfs**

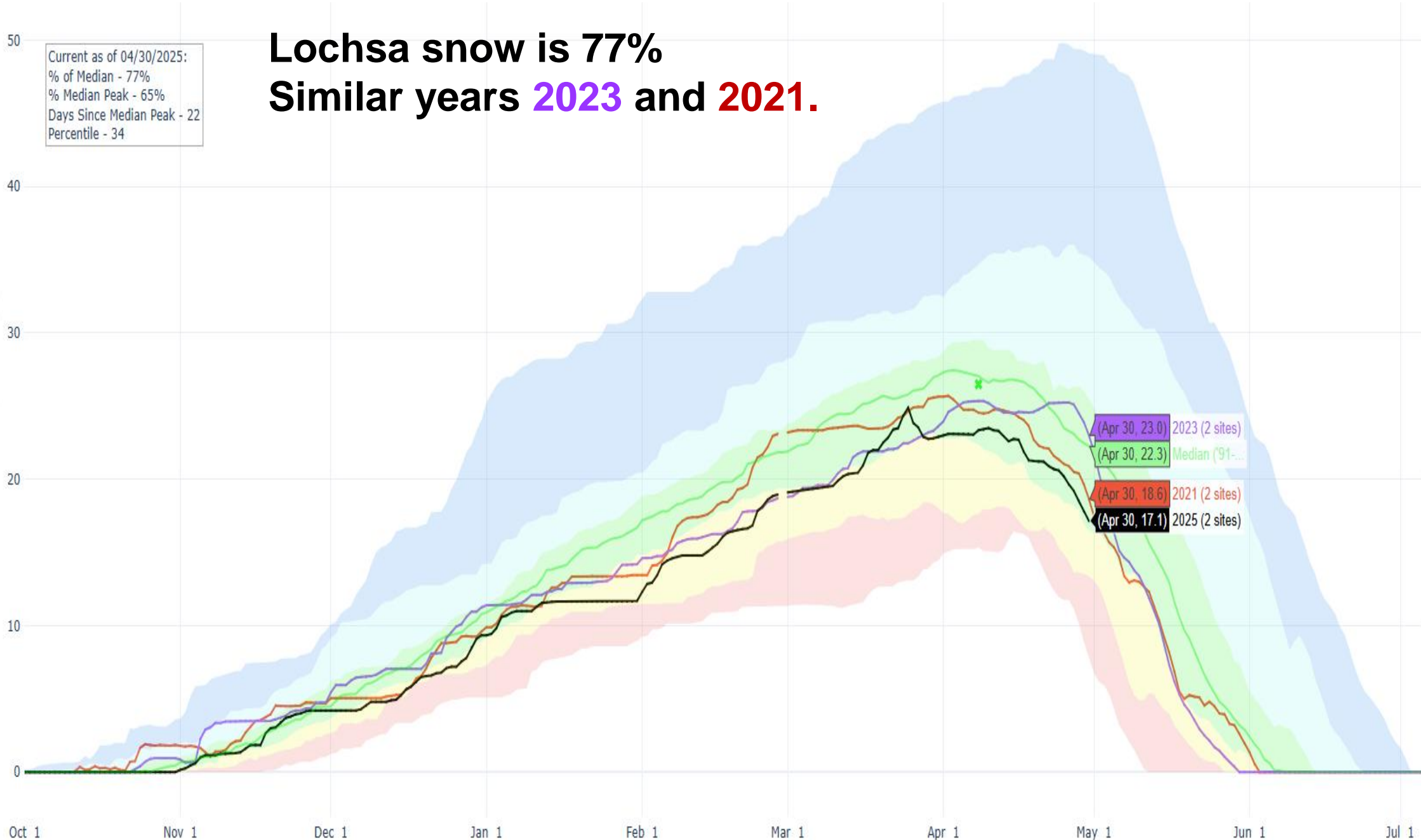


Lochsa snow is 77%
Similar years 2023 and 2021.

Current as of 04/30/2025:
% of Median - 77%
% Median Peak - 65%
Days Since Median Peak - 22
Percentile - 34

✱ Median Peak SWE
— Median ('91-'20)
Stats. Shading
— 2025 (2 sites)
— 2023 (2 sites)
— 2021 (2 sites)

Snow Water Equivalent (in.)



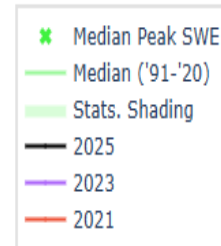
On average, peak streamflow for the Lochsa River near Lowell, Idaho occurs when Lolo Pass SNOTEL is between **55 and 80%** melted.

Summary of years using only "snowmelt peak" and 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	<22	7	78
Average	21 – 34	13	80
Above average	>33	7	55

The average percent melted for the full 32-year period of record is 77% melted.

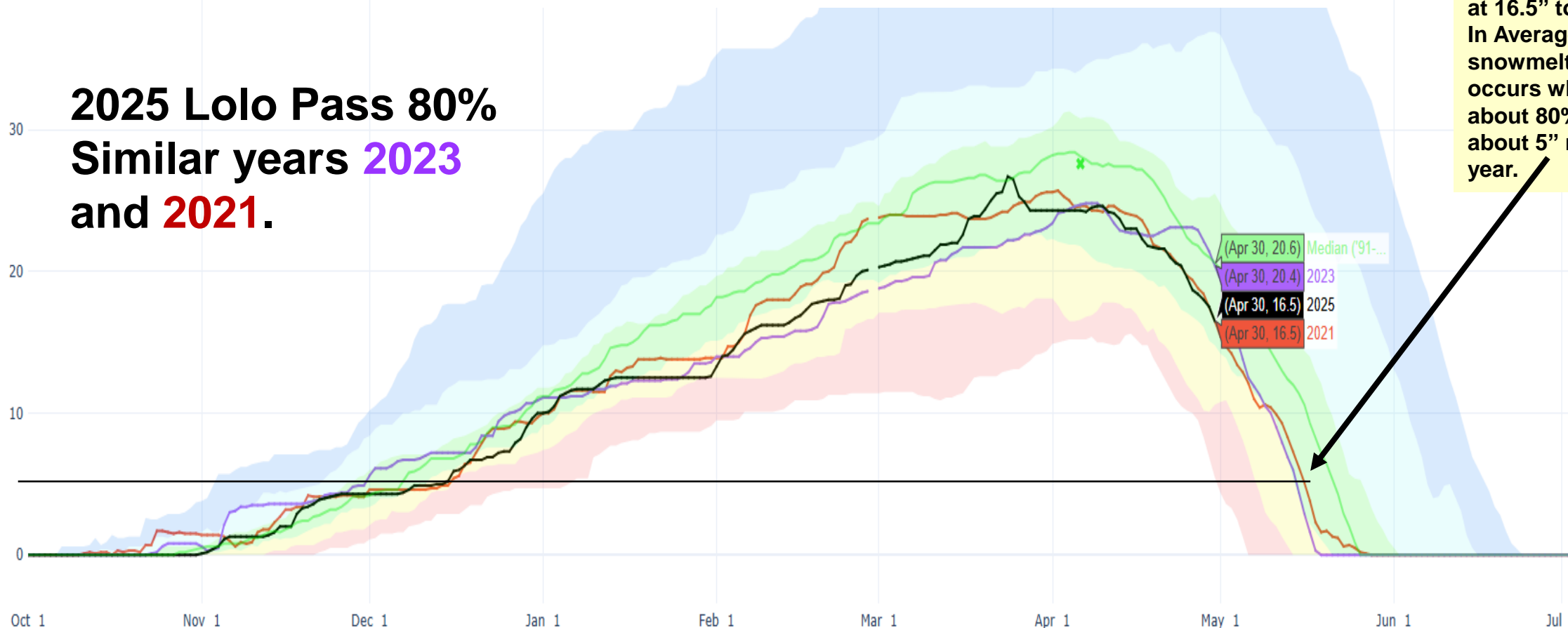
Current as of 04/30/2025:
% of Median - 80%
% Median Peak - 60%
Days Since Median Peak - 24
Percentile - 39



2025 Lolo Pass 80%
Similar years 2023
and 2021.

2025 Lolo Pass SWE peaked at about 25" (some funny data) and is at 16.5" today.
In Average years, the snowmelt peak flow occurs when the site is about 80% melted, when about 5" remains this year.

Snow Water Equivalent (in.)



Lochsa River
Volume Forecasts for Apr-Jul

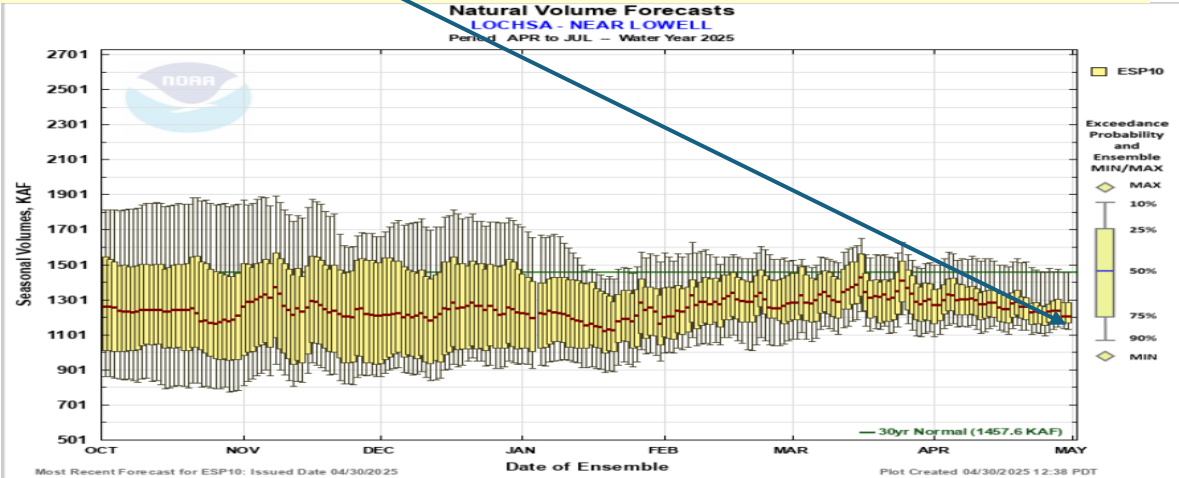
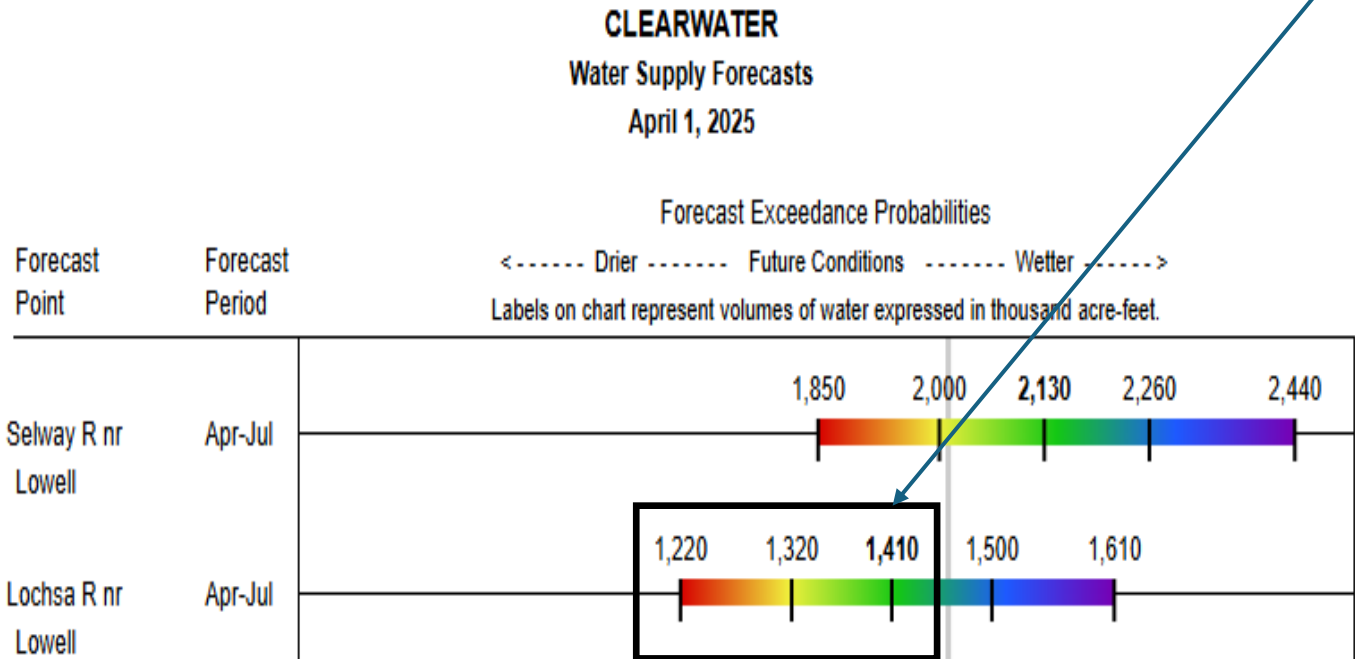
NRCS are from April 1, 2025 NWS are from **Apr 28**

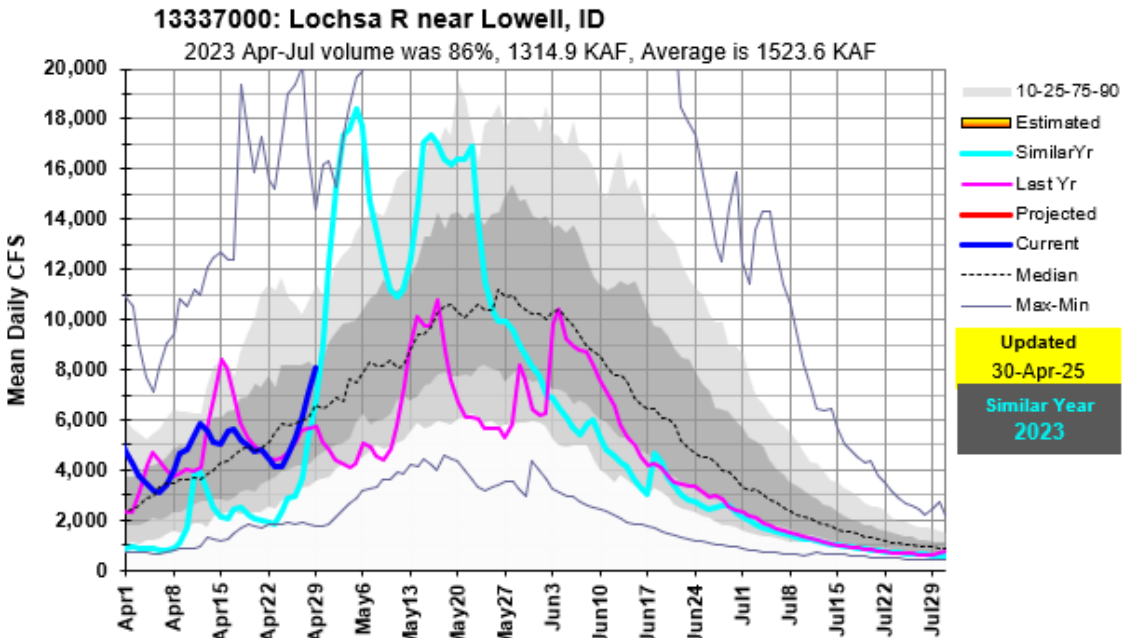
Table in KAF

LOCHSA - NEAR LOWELL (LOC1)					
Forecasts for Water Year 2025					
Natural Forecast					
ESP with 10 Days QPF Ensemble: 2025-04-30 Issued: 2025-04-30					
Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	1187	1258	82	1520	1525
APR-JUL	1133	1205	83	1458	1458

Selway River:
 NRCS Apr-Jul Forecast is for 1410 KAF with a lower forecast range of 1220 to 1320 KAF

NWS Apr-Jul Forecast is for 1205 KAF with a lower forecast range of 1133 to 1171 KAF





Flow for years that had a similar snowpack:

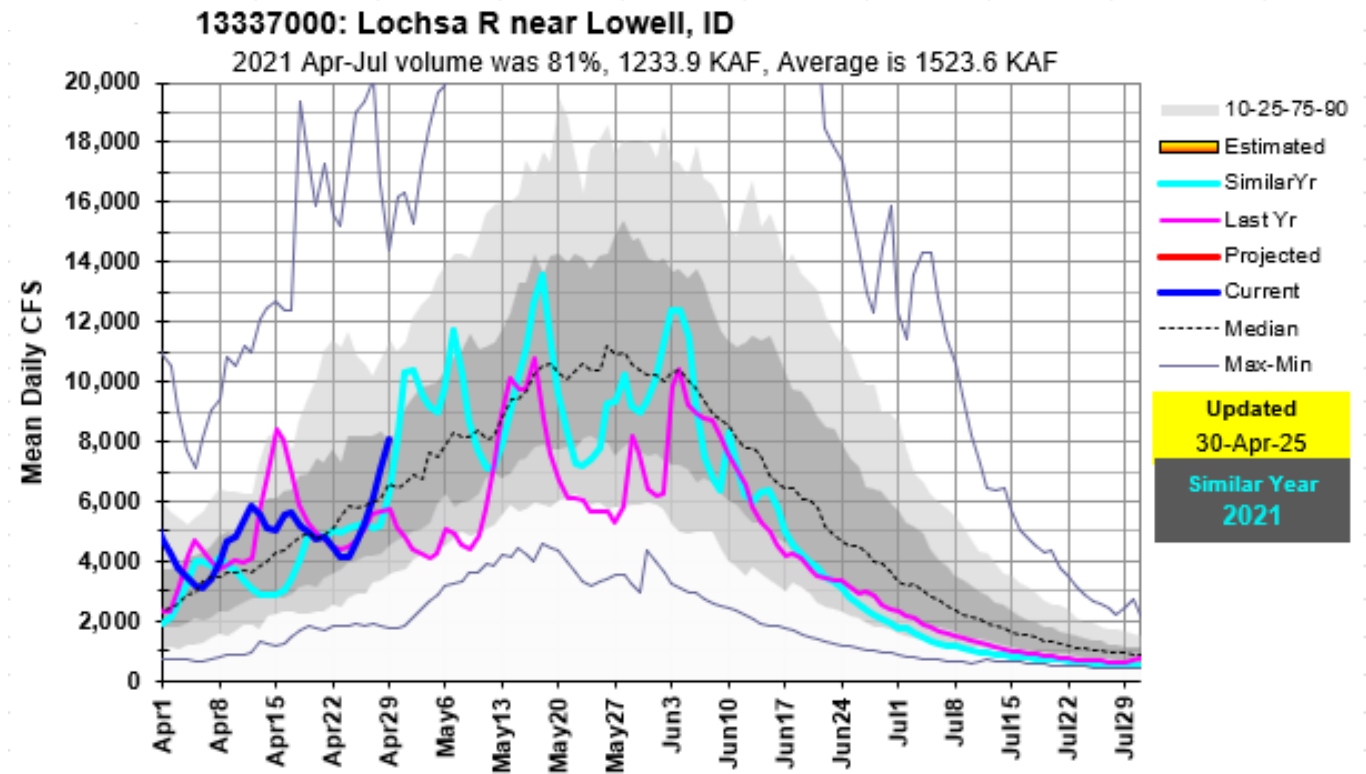
2024 Last Year Apr-Jul volume was 1085 KAF.

2023 Apr-Jul volume was 1314 KAF

2021 Apr-Jul Volume was 1233 KAF

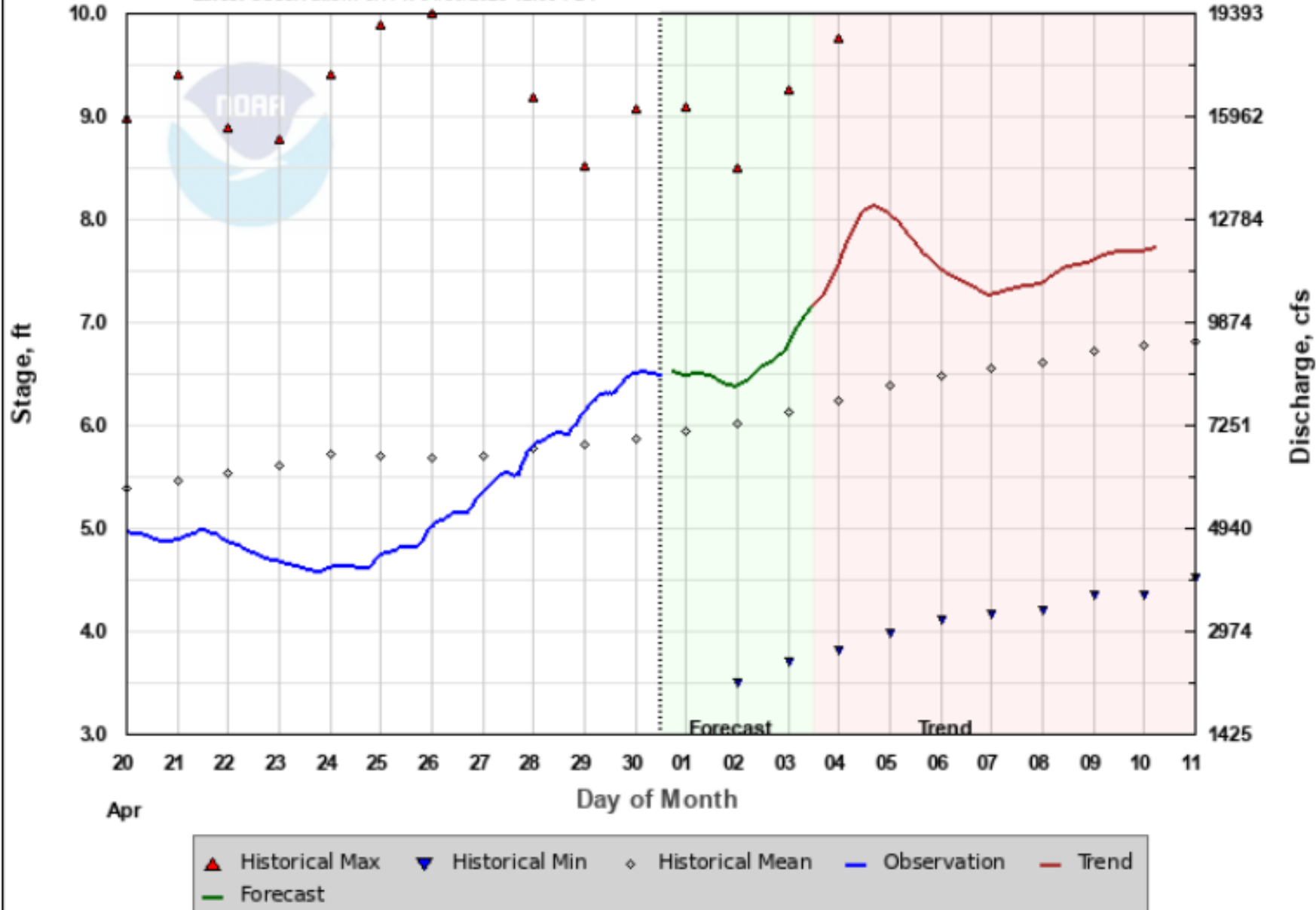
With volume forecasts around 1200 KAF, runoff should be better than Last Year, volume could be similar 2021 with an early peak like in 2023.

Time, temps, and rain will determine actual peak.



LOCHSA - NEAR LOWELL (LOCI1)

Latest Observation: 6.47 ft 04/30/2025 12:00 PDT



NWS Forecast and Trend shows flows increasing with warming temps this week and maybe nearing peak depending upon future temps, remaining snow and rain or not.

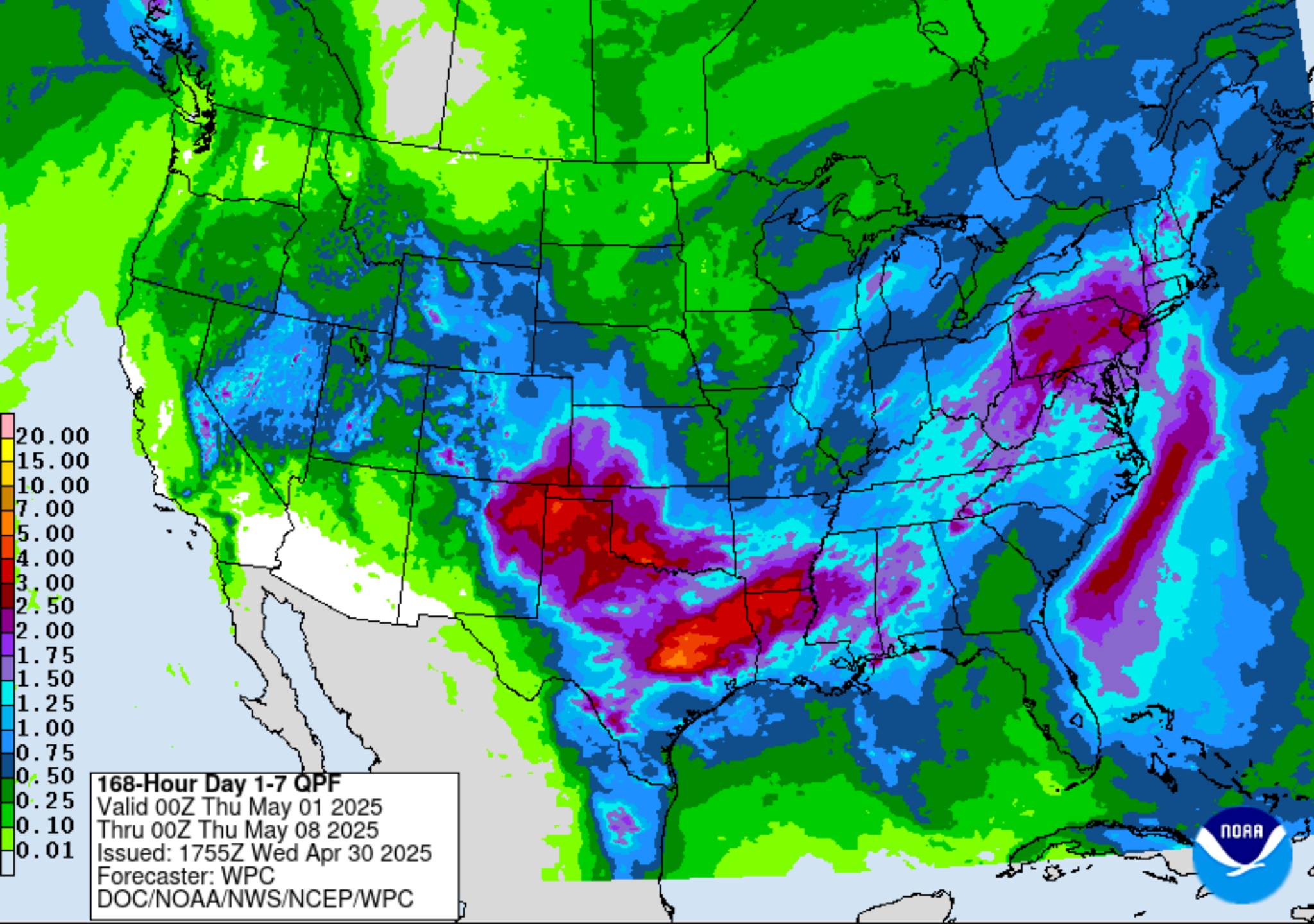
Interesting, trend line is slightly lower than previous peak on May 4

Time will tell, how high and when...

Forecast Created: 04/30/2025 08:38 PDT

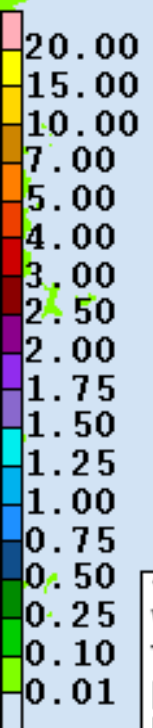
Plot Created: 04/30/2025 12:32 PDT

Observations Provided by US Geological Survey



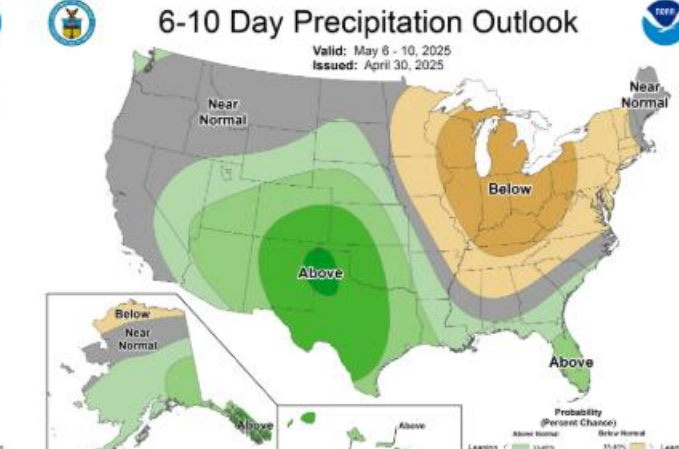
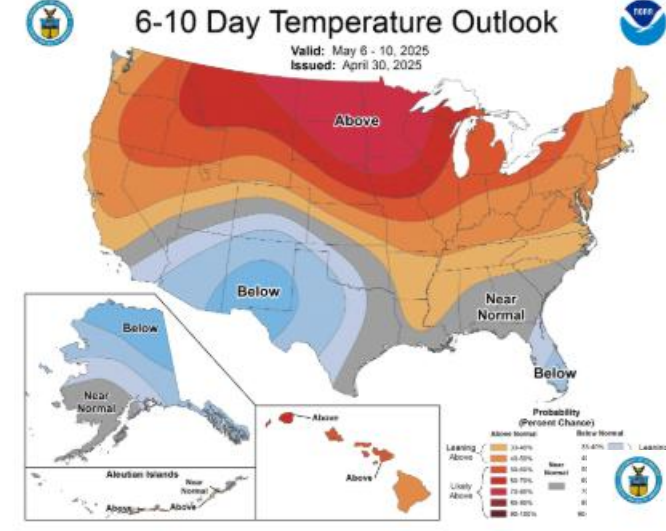
7-Day total precip shows little precip falling in the PNW.

Basically, what we see is what we get until the weather pattern changes.

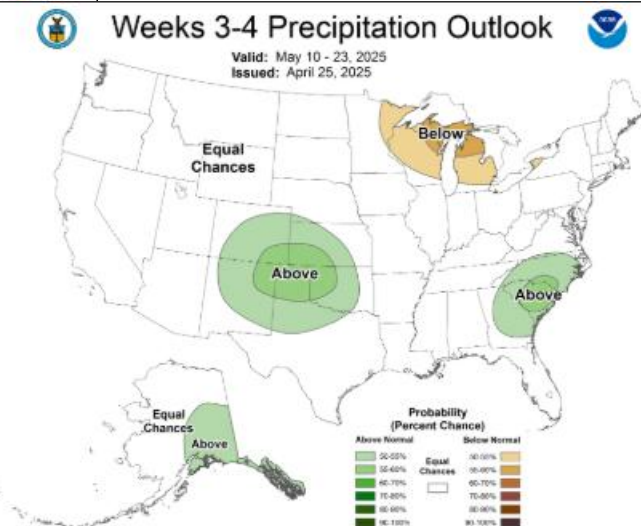
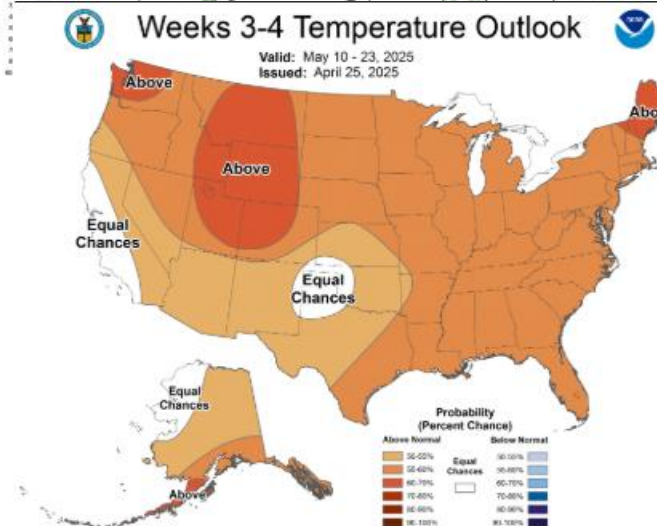
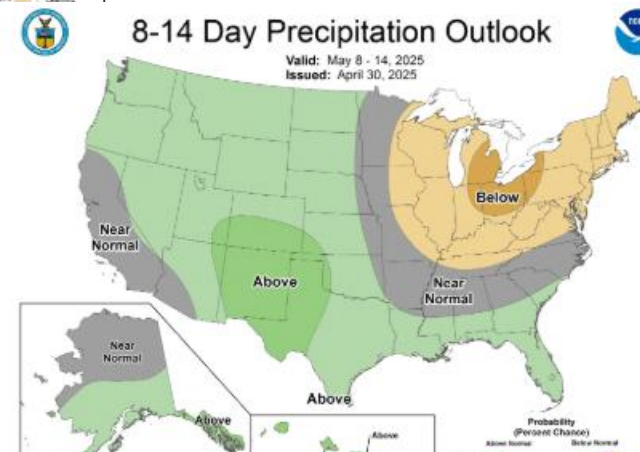
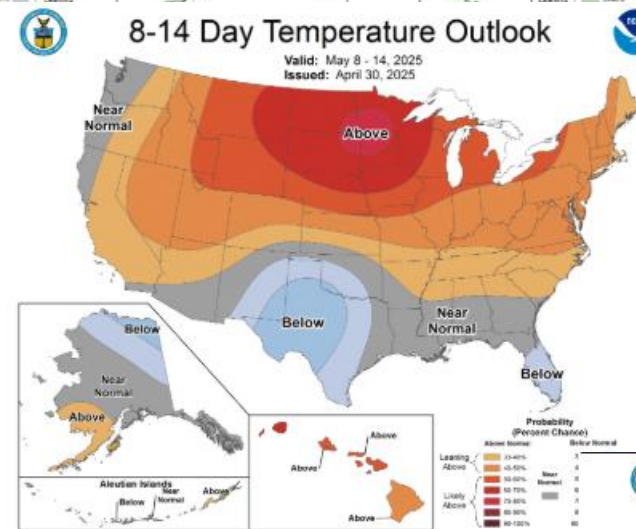


168-Hour Day 1-7 QPF
Valid 00Z Thu May 01 2025
Thru 00Z Thu May 08 2025
Issued: 1755Z Wed Apr 30 2025
Forecaster: WPC
DOC/NOAA/NWS/NCEP/WPC



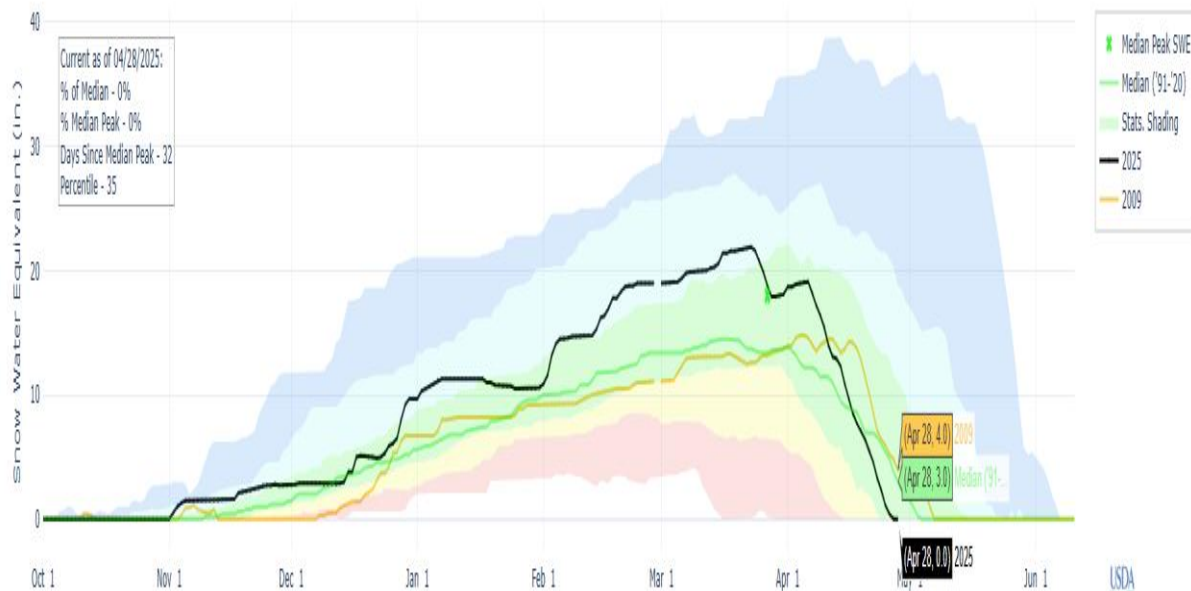


Short- and longer-term NWS Outlooks show more of the same, above normal Temps and maybe a better chance for above normal Precip when mid-May arrives.
Basically, what we see is what we get until the weather pattern changes...

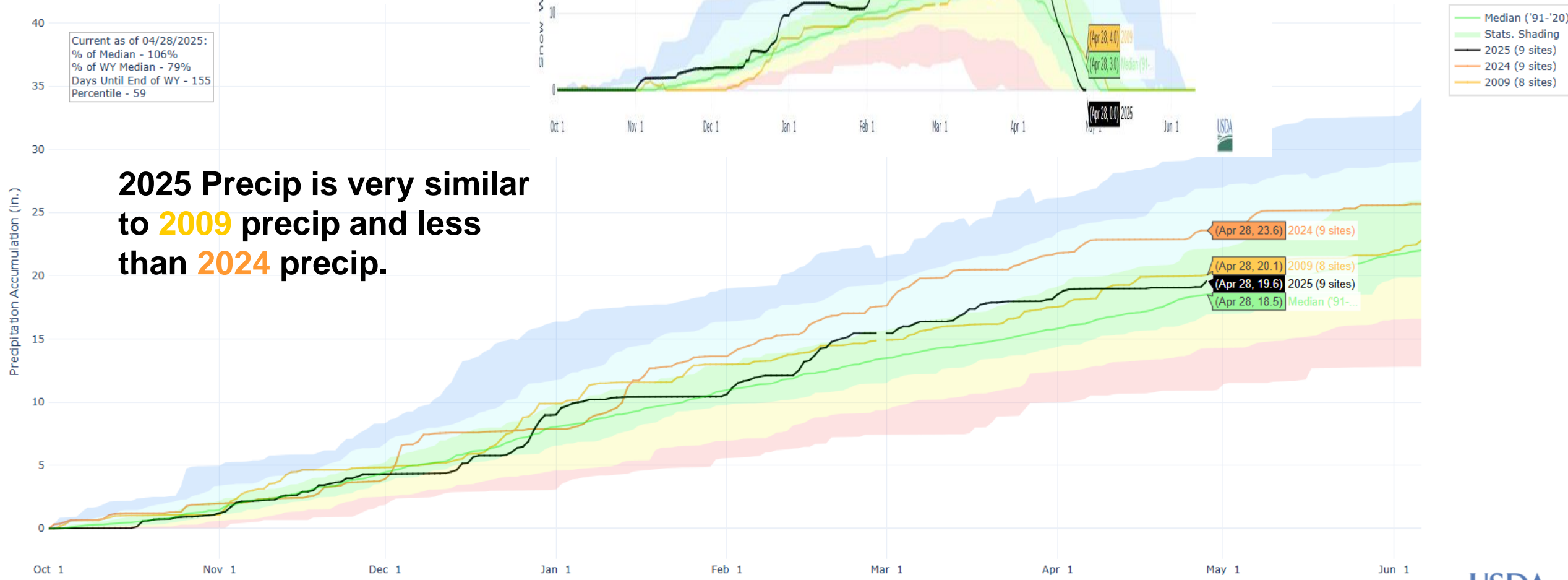


Owyhee Bonus: South Mountain just melted out.

SOUTH MTN., ID (774) SNOW WATER EQUIVALENT



PRECIPITATION ACCUMULATION IN OWYHEE

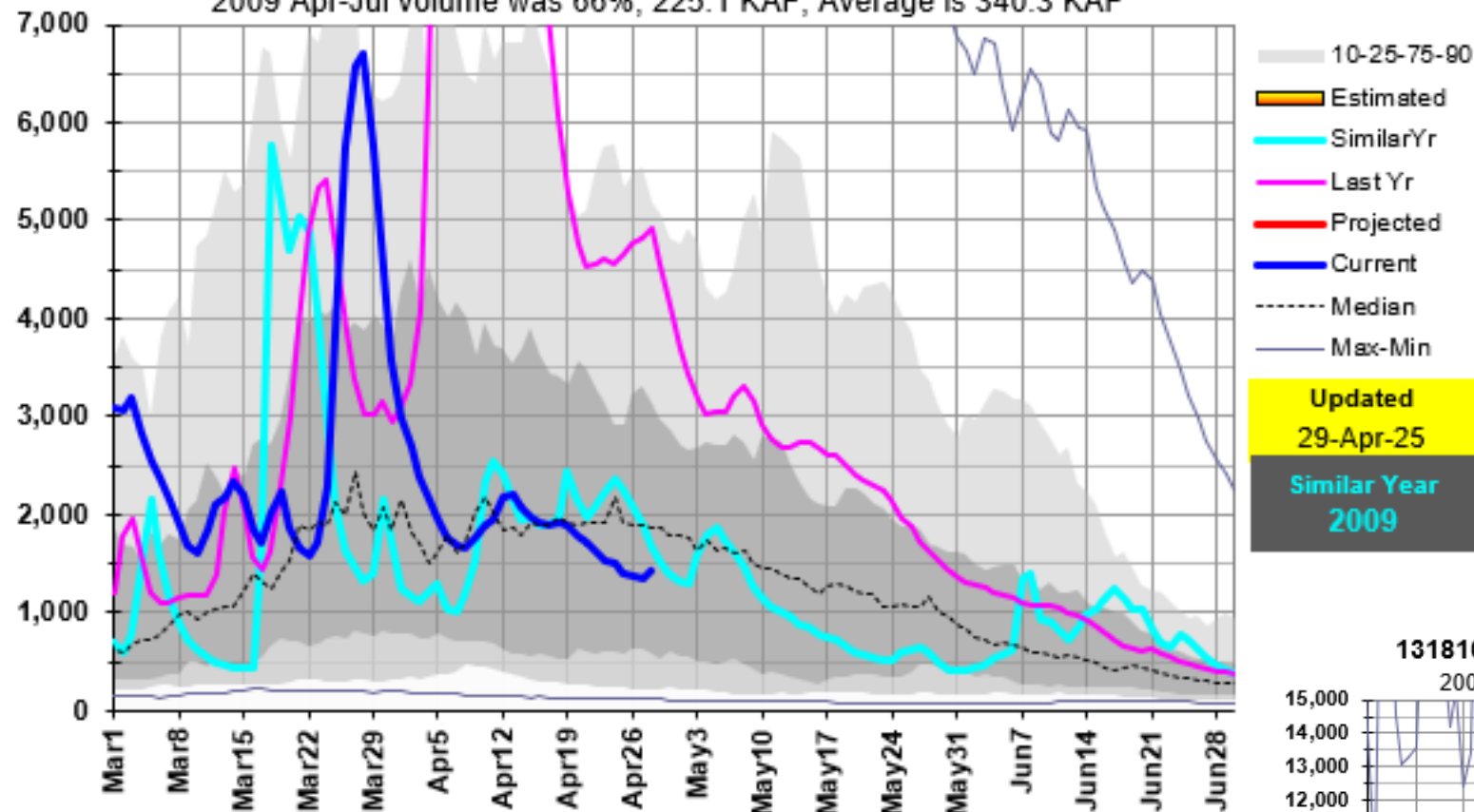


2025 Precip is very similar
to **2009** precip and less
than **2024** precip.

13181000: Owyhee R near Rome, OR

2009 Apr-Jul volume was 66%, 225.1 KAF, Average is 340.3 KAF

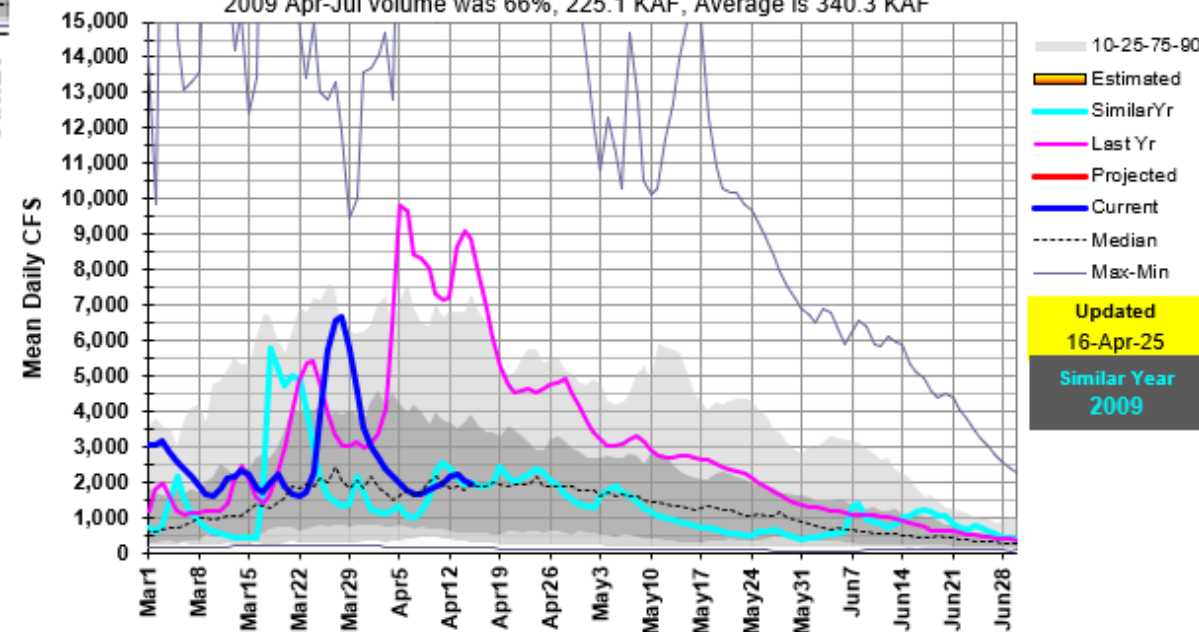
Mean Daily CFS



As mentioned in Apr 16
Snow2Flow update, 2009 still
looks like a good similar flow
year to use for this year,

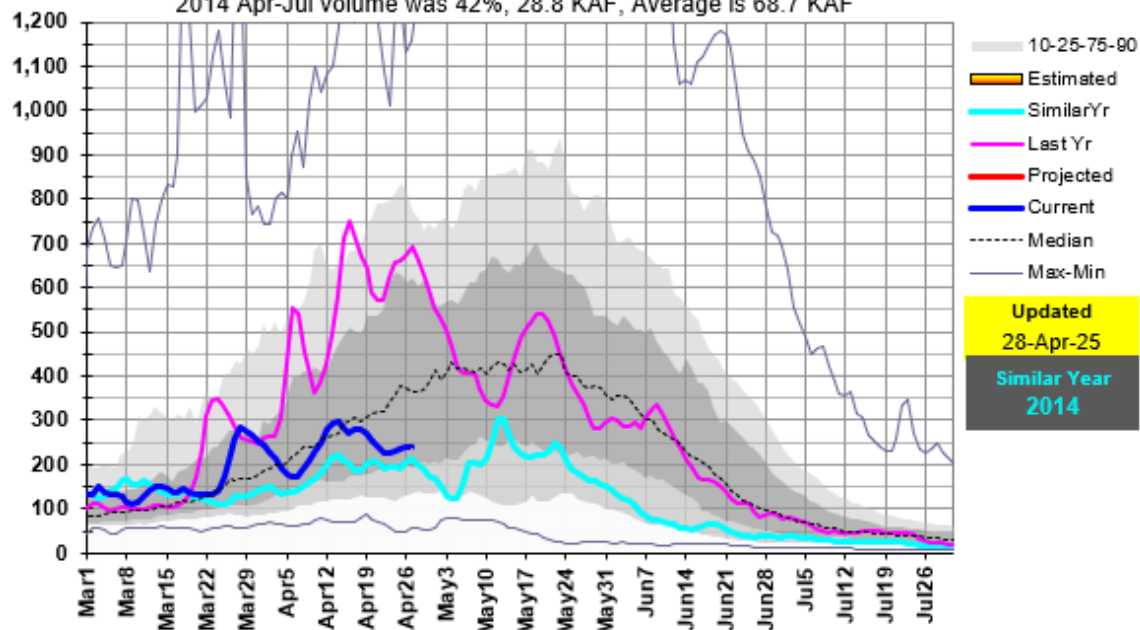
13181000: Owyhee R near Rome, OR

2009 Apr-Jul volume was 66%, 225.1 KAF, Average is 340.3 KAF



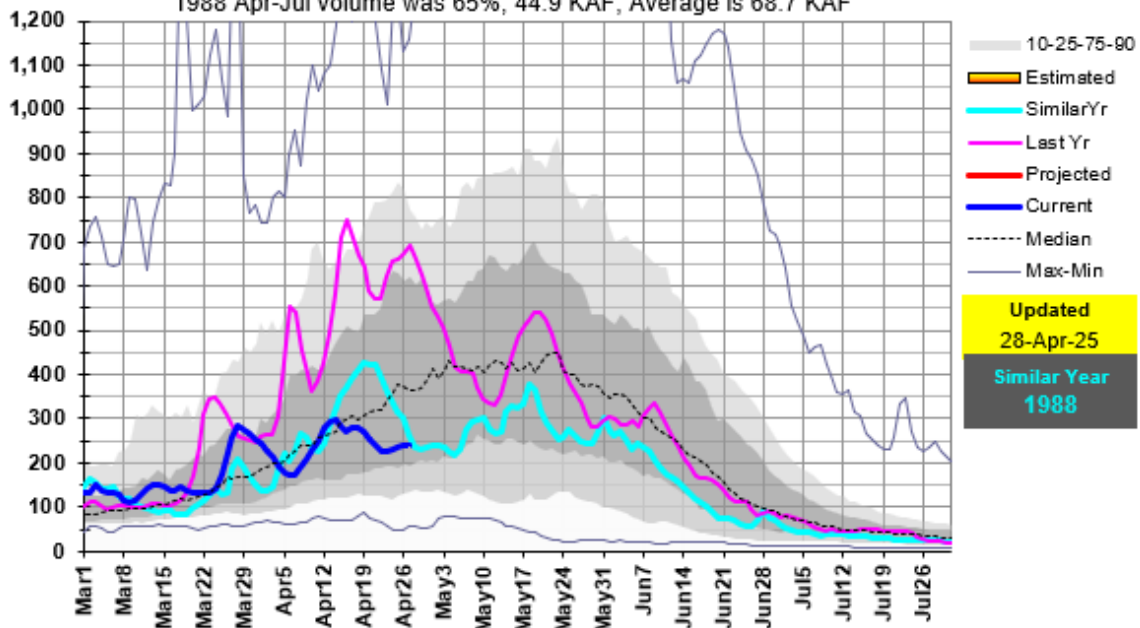
13105000: Salmon Falls Ck near San Jacinto, NV
 2014 Apr-Jul volume was 42%, 28.8 KAF, Average is 68.7 KAF

Mean Daily CFS



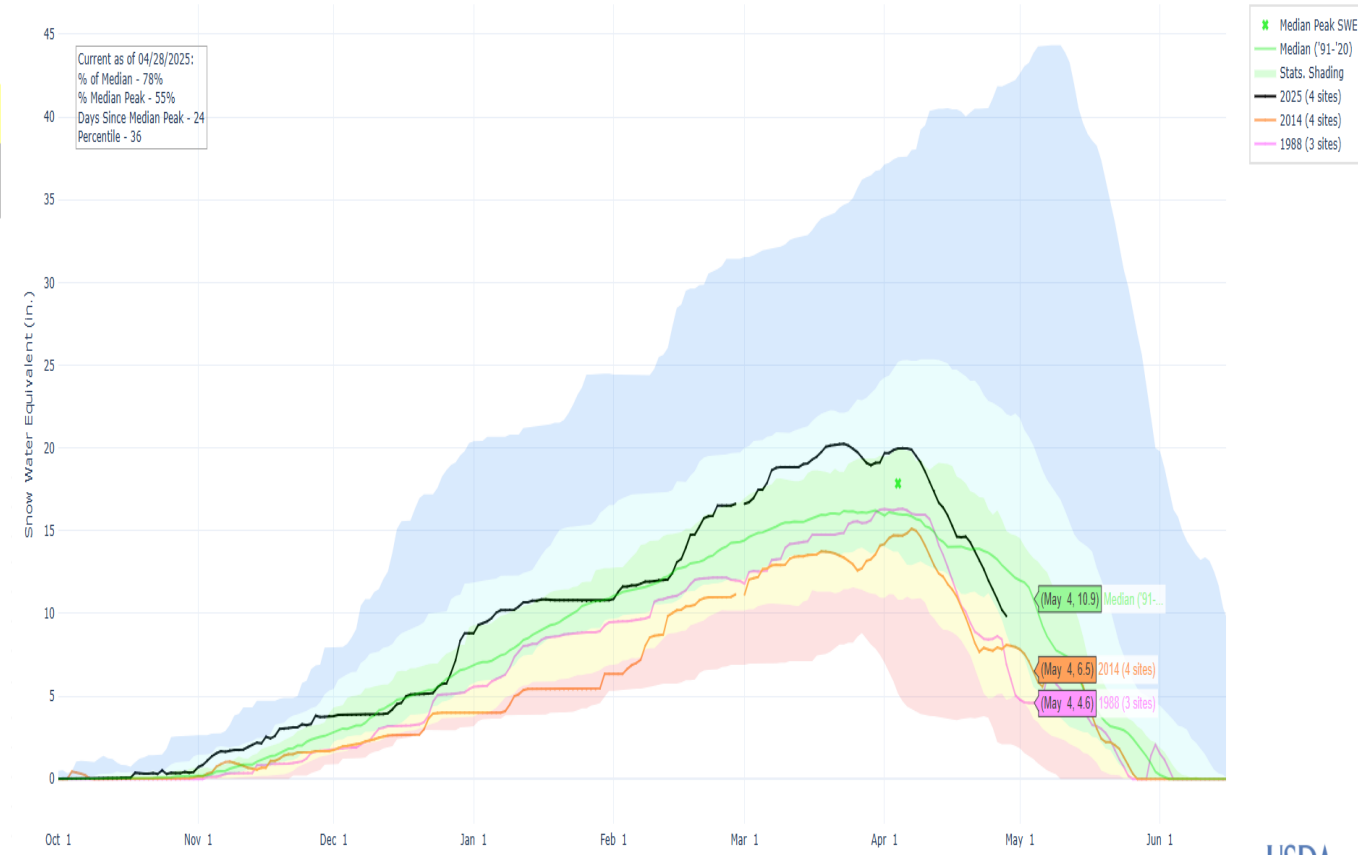
13105000: Salmon Falls Ck near San Jacinto, NV
 1988 Apr-Jul volume was 65%, 44.9 KAF, Average is 68.7 KAF

Mean Daily CFS



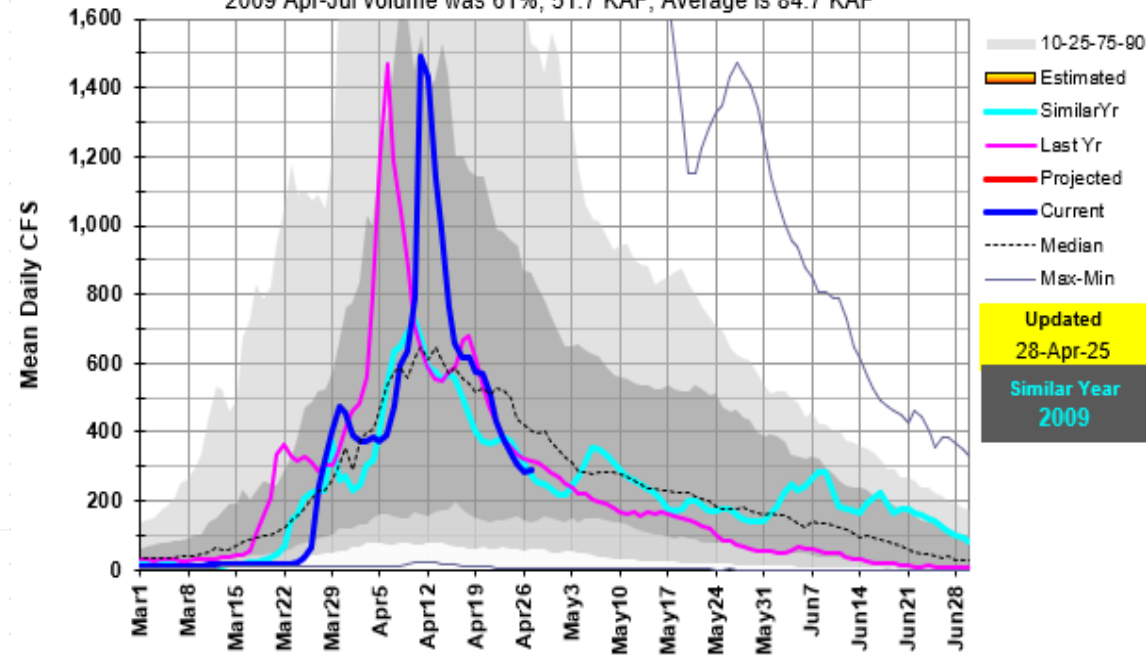
Salmon Falls Bonus:
 Snow is 79% and slightly better than 2014 and 1988.

SNOW WATER EQUIVALENT IN SALMON FALLS



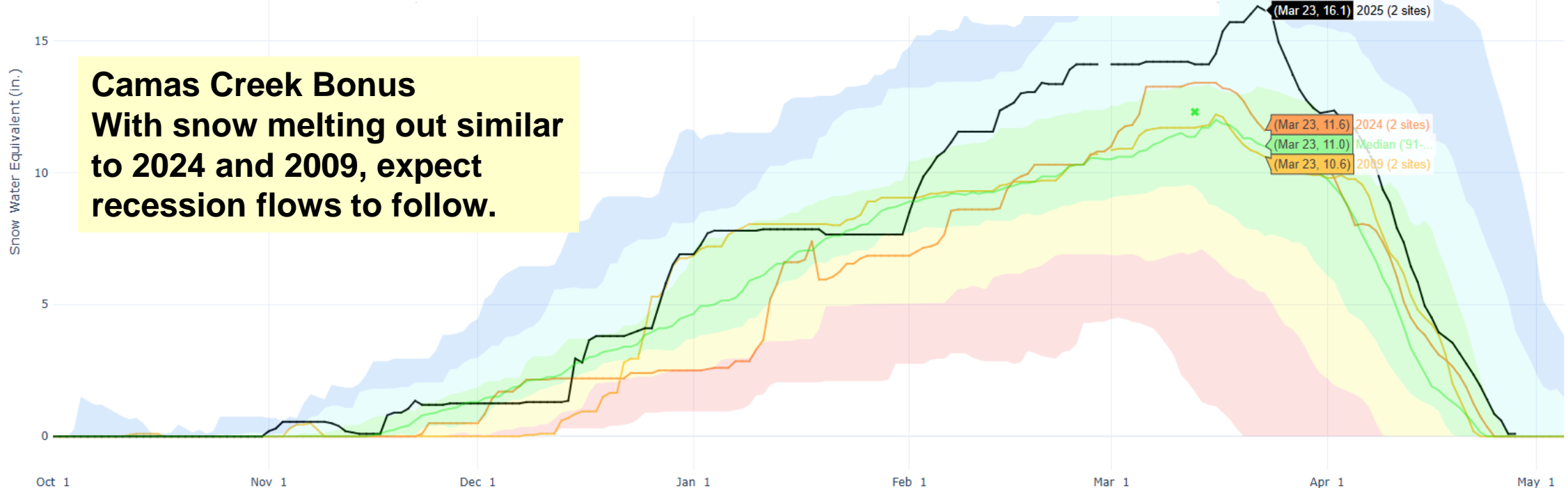
13141500: Camas CK near Blaine, ID

2009 Apr-Jul volume was 61%, 51.7 KAF, Average is 84.7 KAF



SNOW WATER EQUIVALENT IN CAMAS

Current as of 04/28/2025:
% of Median - N/A%
% Median Peak - N/A%
Days Since Median Peak - 46
Percentile - 72



Camas Creek Bonus
With snow melting out similar
to 2024 and 2009, expect
recession flows to follow.