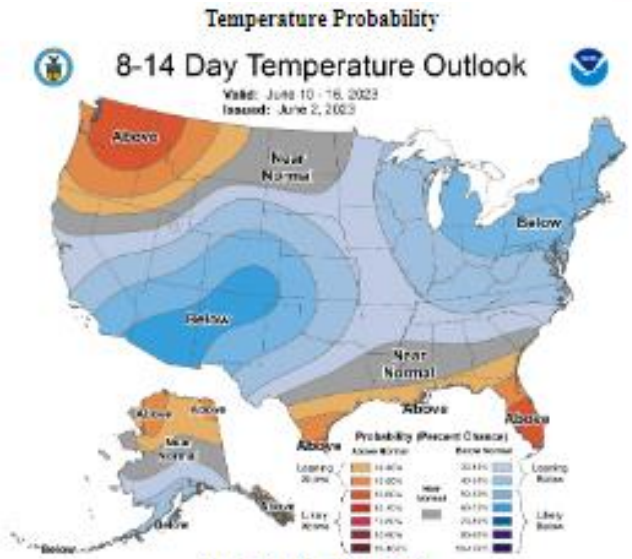
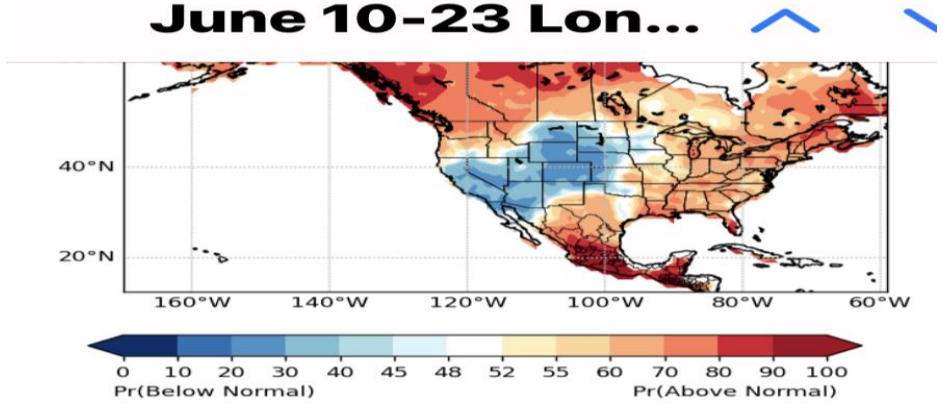
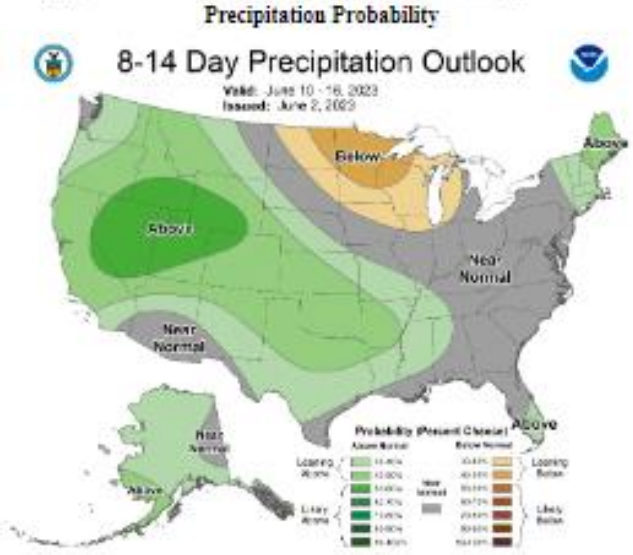
Snow & Flow Update for southern Idaho June 3, 2023

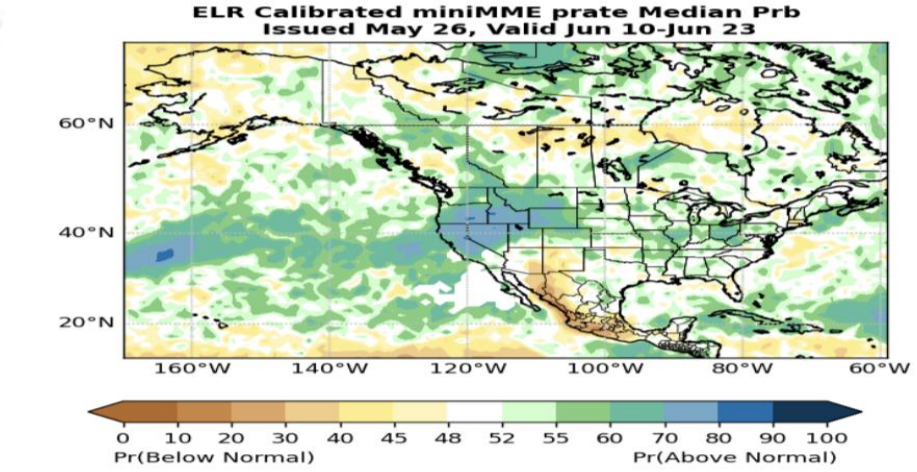
A few Temp & Precip Outlooks from NWS and Firsthand Weather showing current pattern likely to likely to continue for rest of June.





Probability of above/below average temperatures from June 10-23, 2023

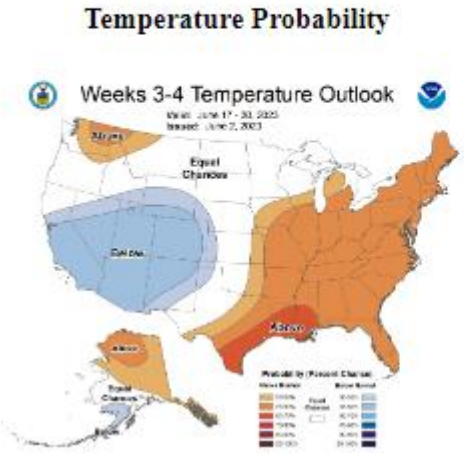


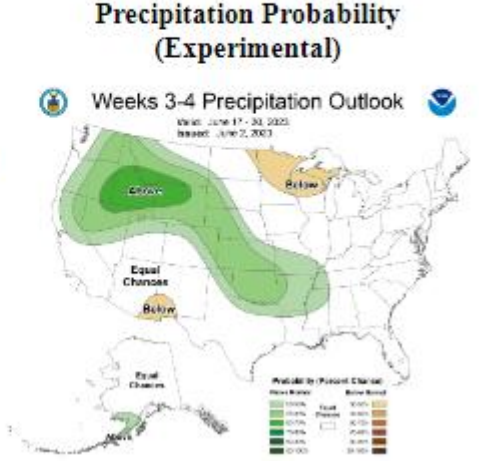


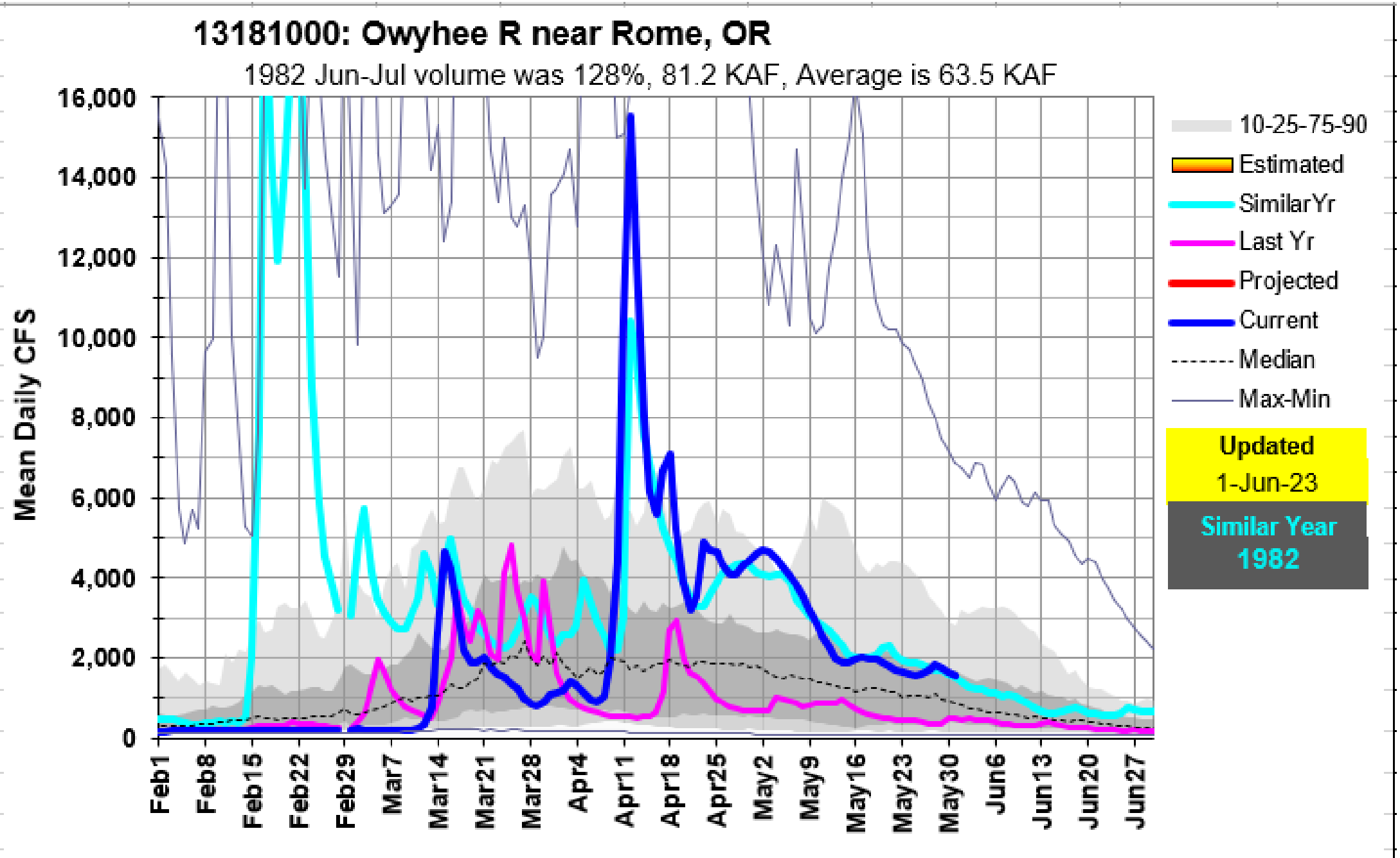
Probability of above/below average precipitation from June 10-23, 2023

Week 3-4 Outlooks

Valid: 17 Jun 2023 to 30 Jun 2023
Updated: 02 Jun 2023

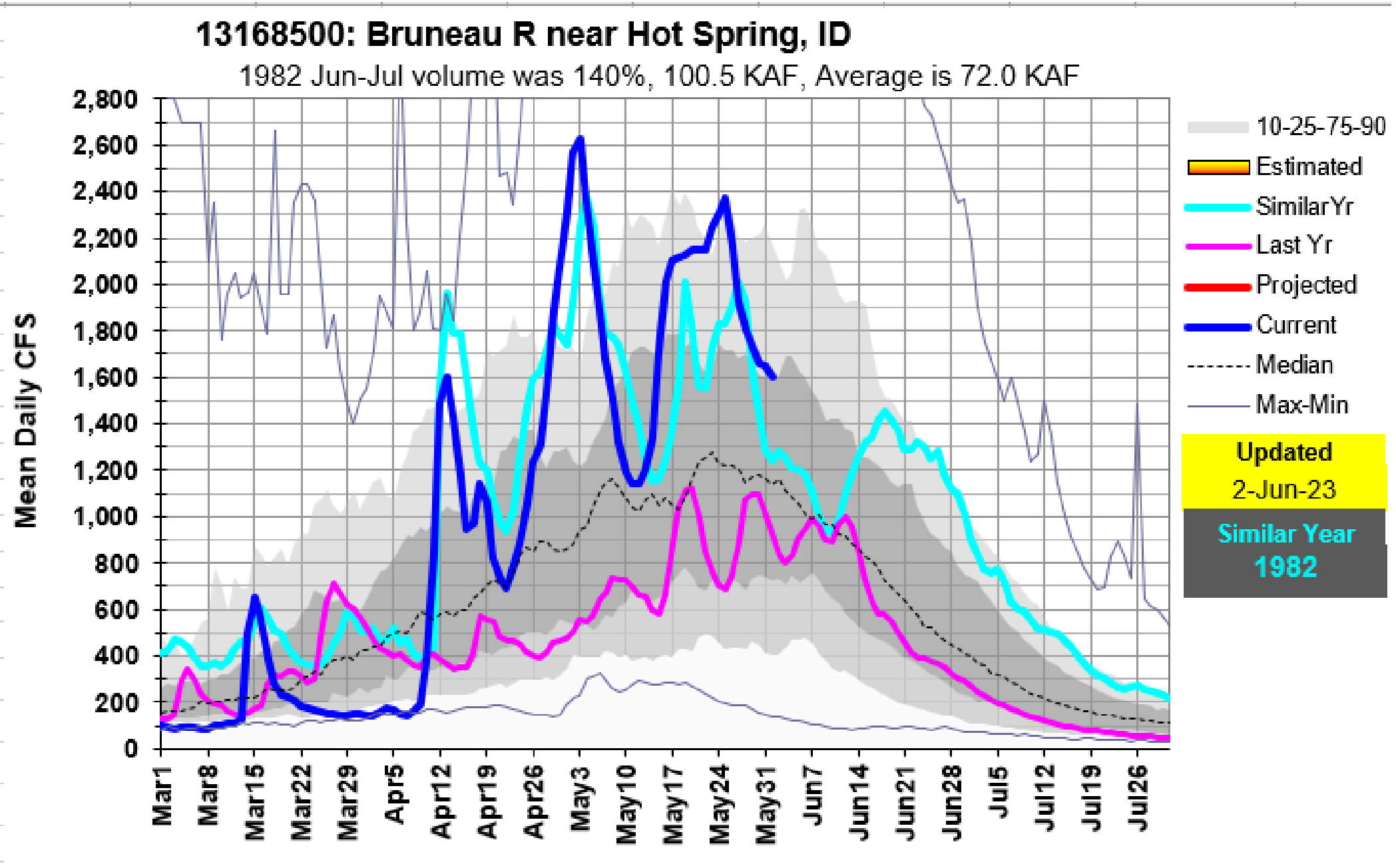






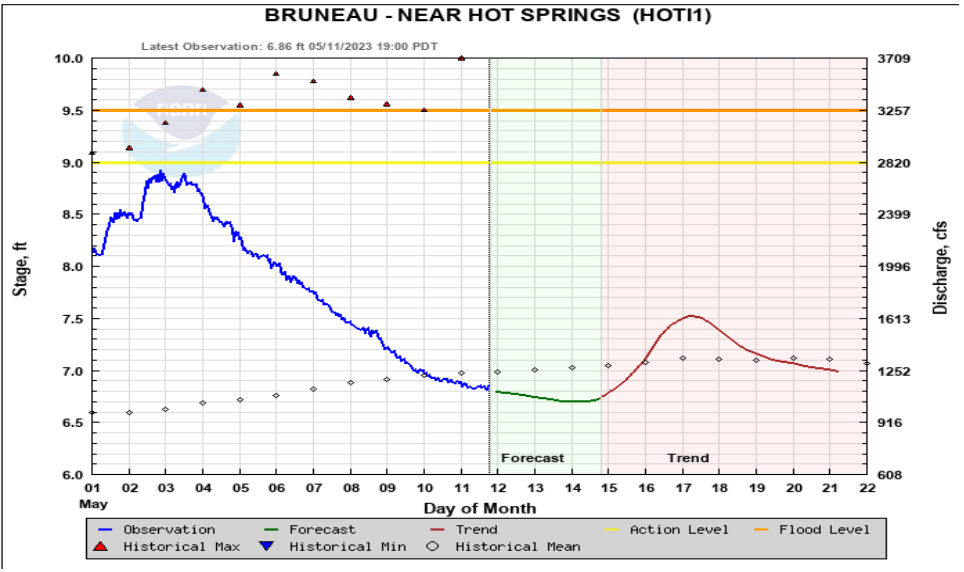
Owyhee is still flowing at 1500 cfs at beginning of June.

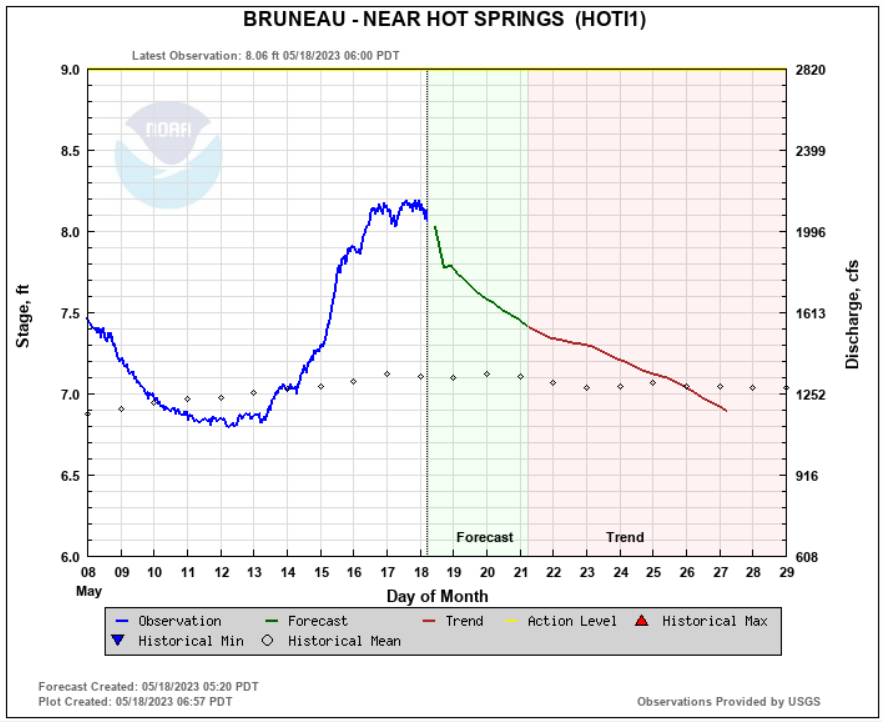
Repeat of 1982 since April 11.



The Bruneau is at 1600 cfs and tracking 1982.

We'll see if June rains provide another increase.

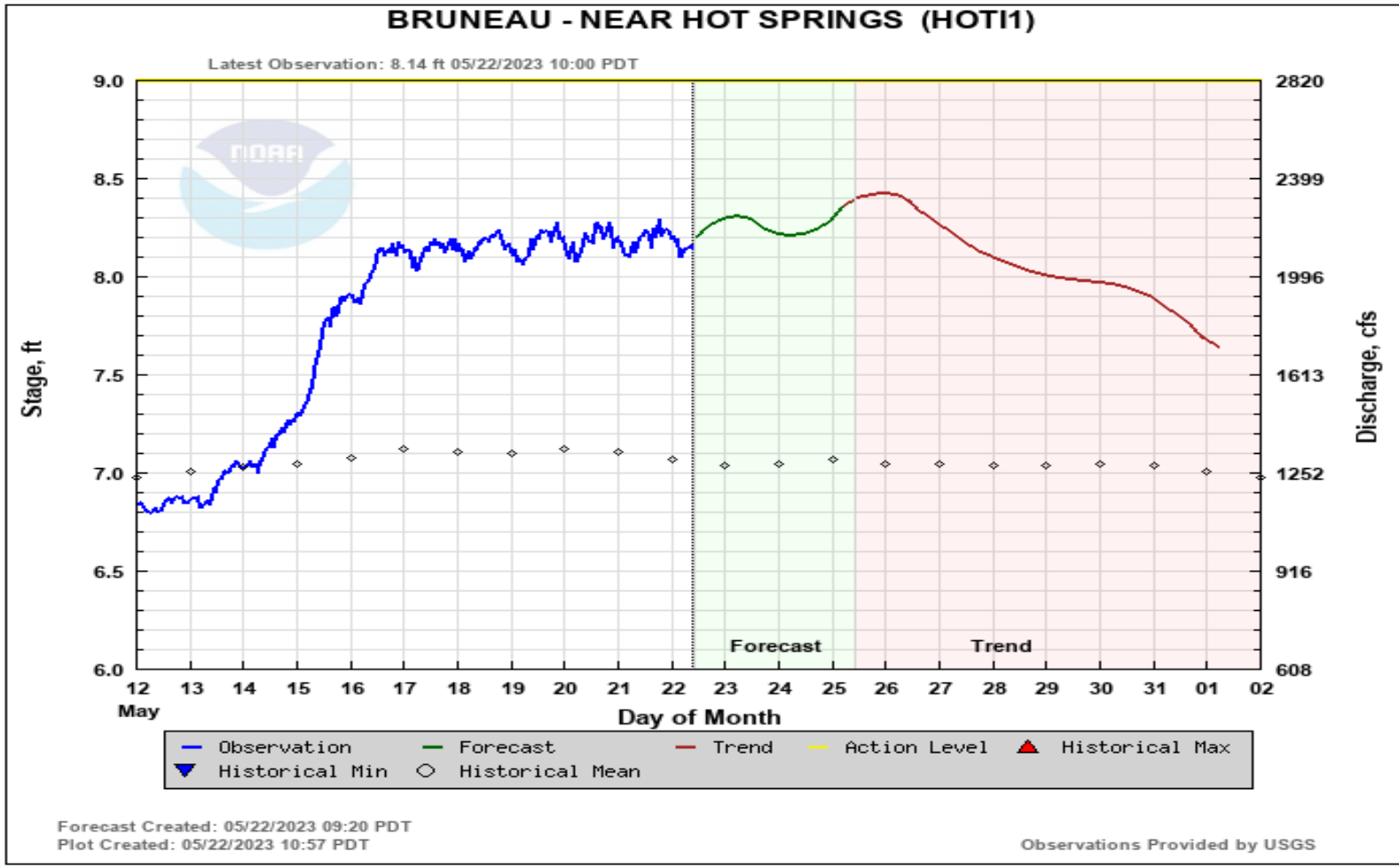


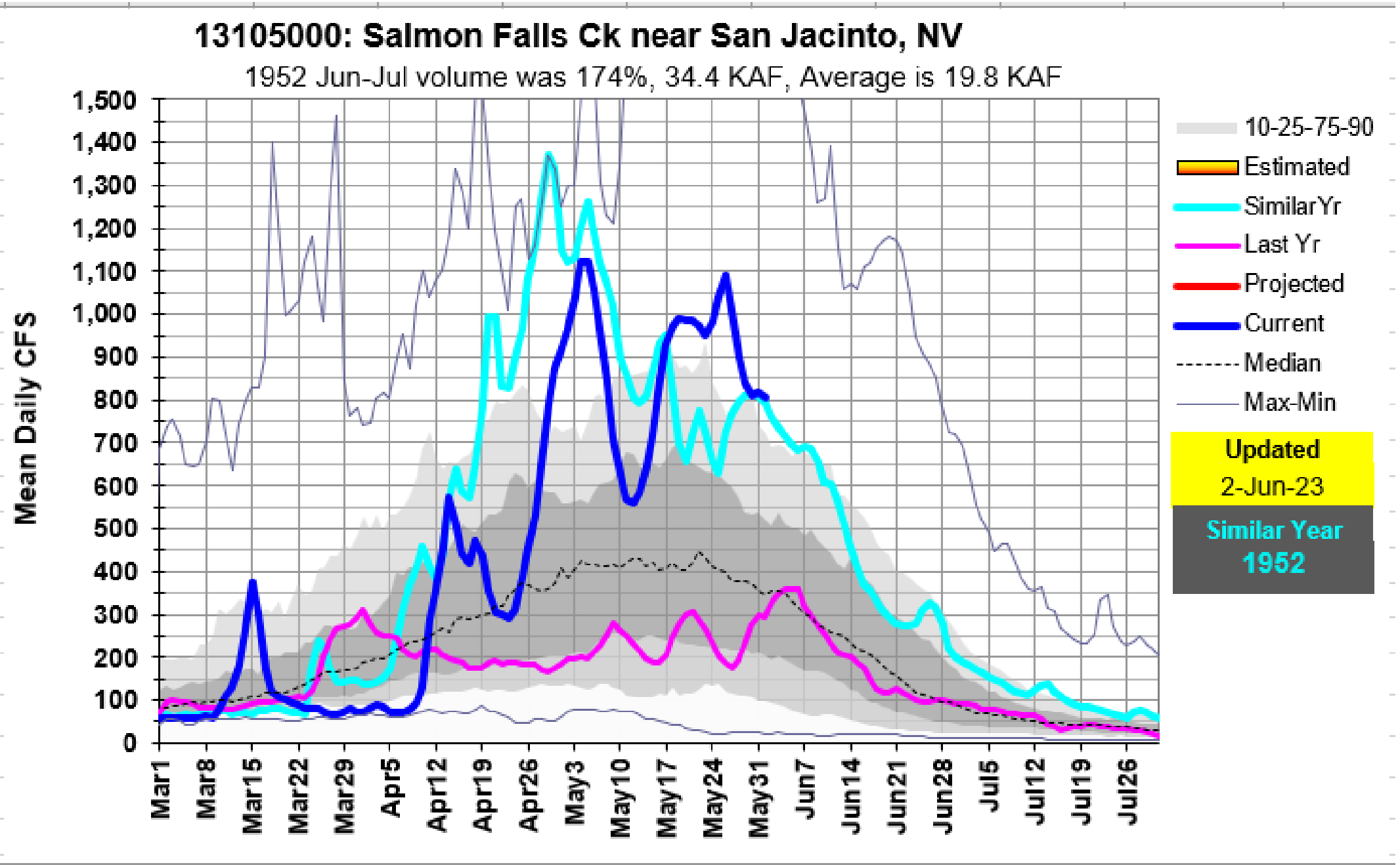


Why its important to understand how much snow remains and snow2flow relationships in watersheds to produce/sustain flows.

Left - May 12 & 18 Forecast & Trend runs.

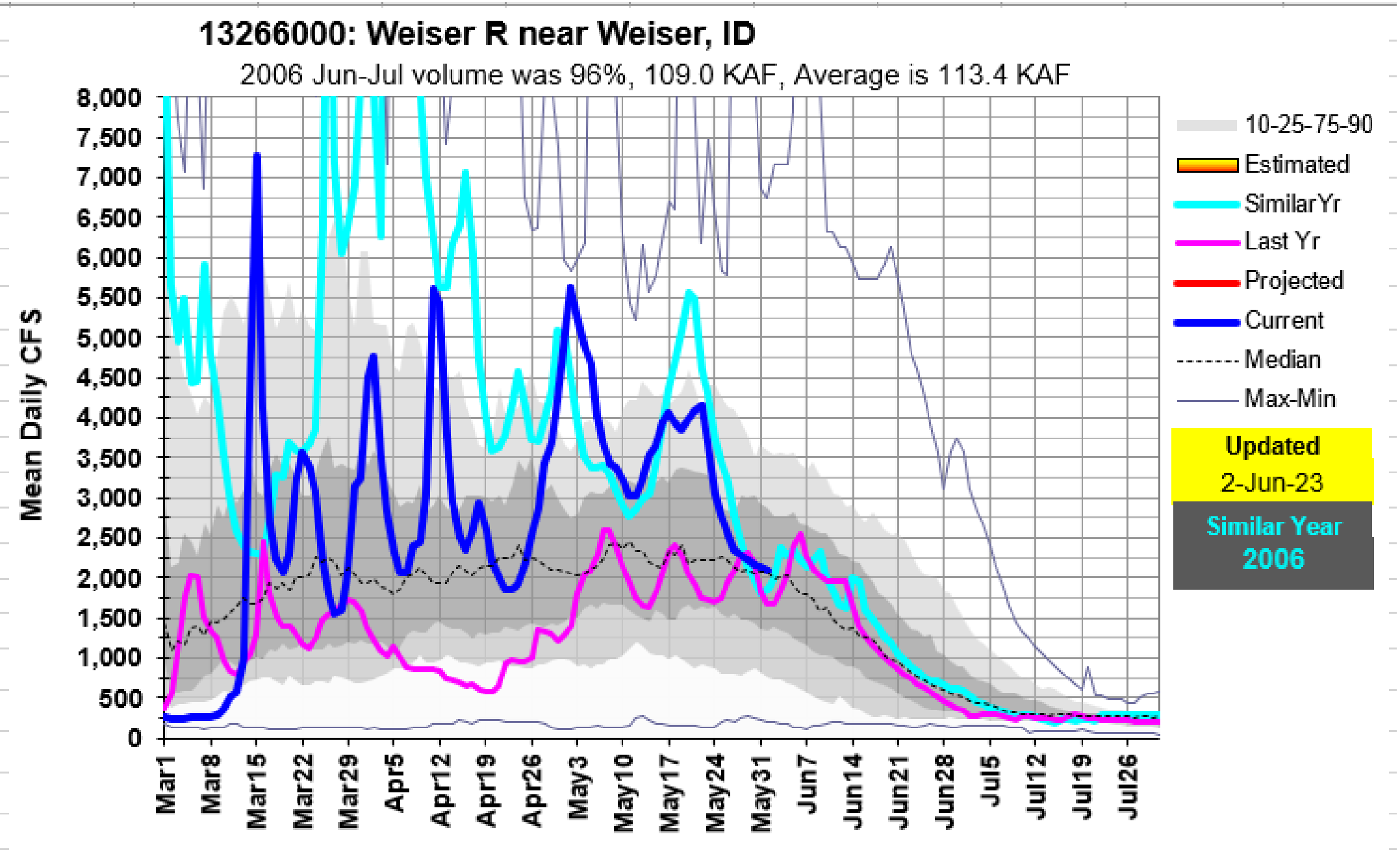
Below May 22 run showing potential increase, possibly from rain (?), cooler temps arrived with yesterday's cold front.



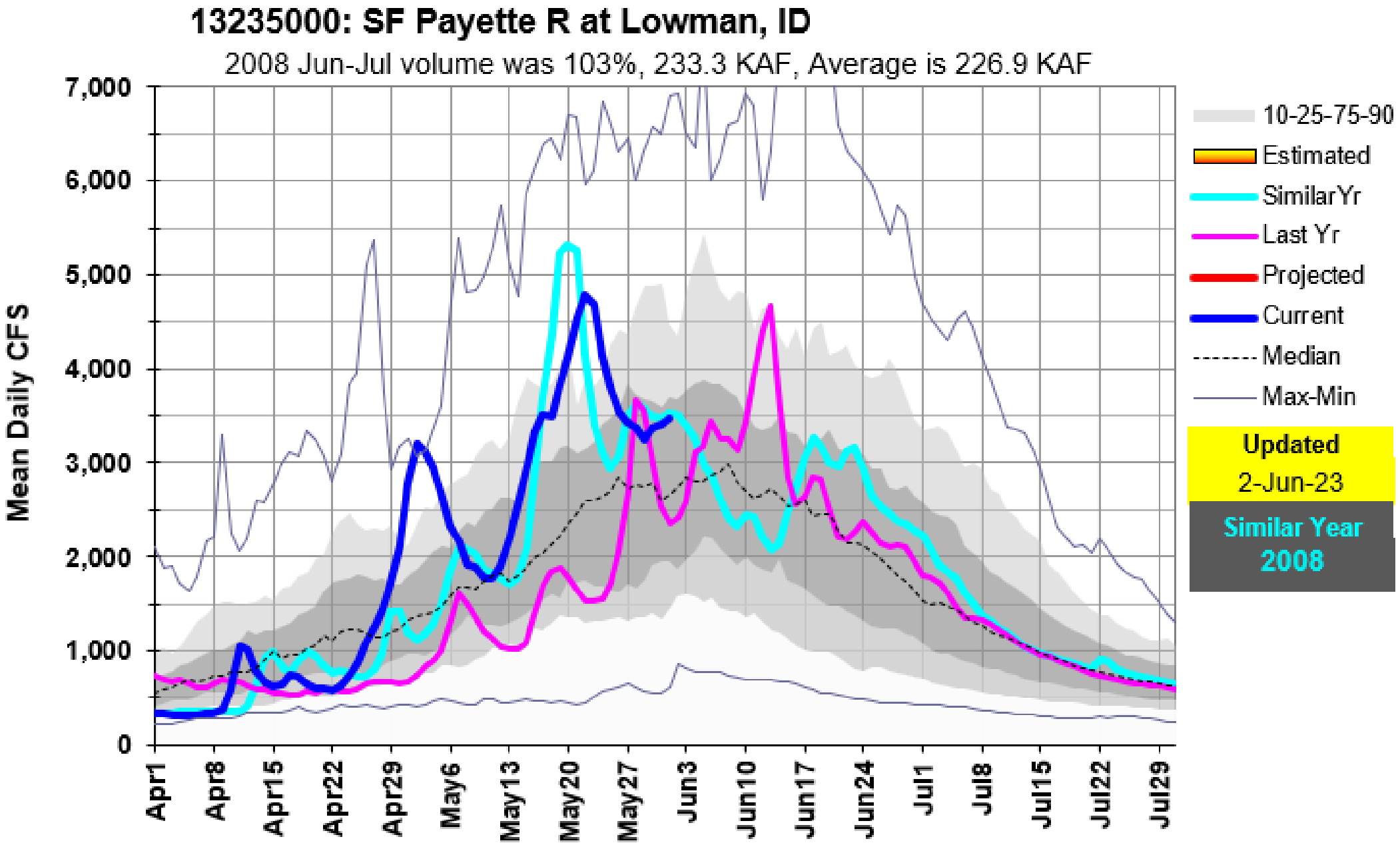


Salmon Falls Creek is still flowing at 800 cfs.

More rains could push recession flows to remain at 1952 levels.

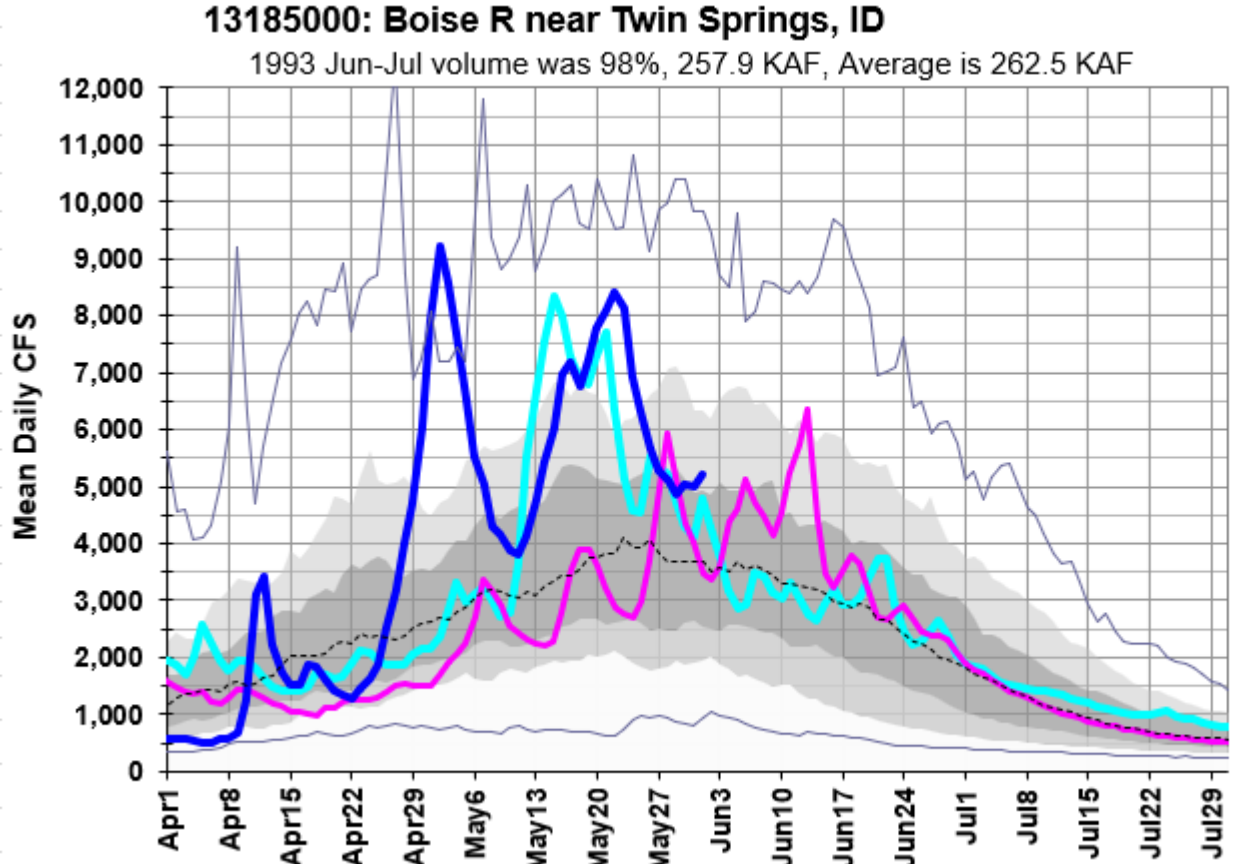


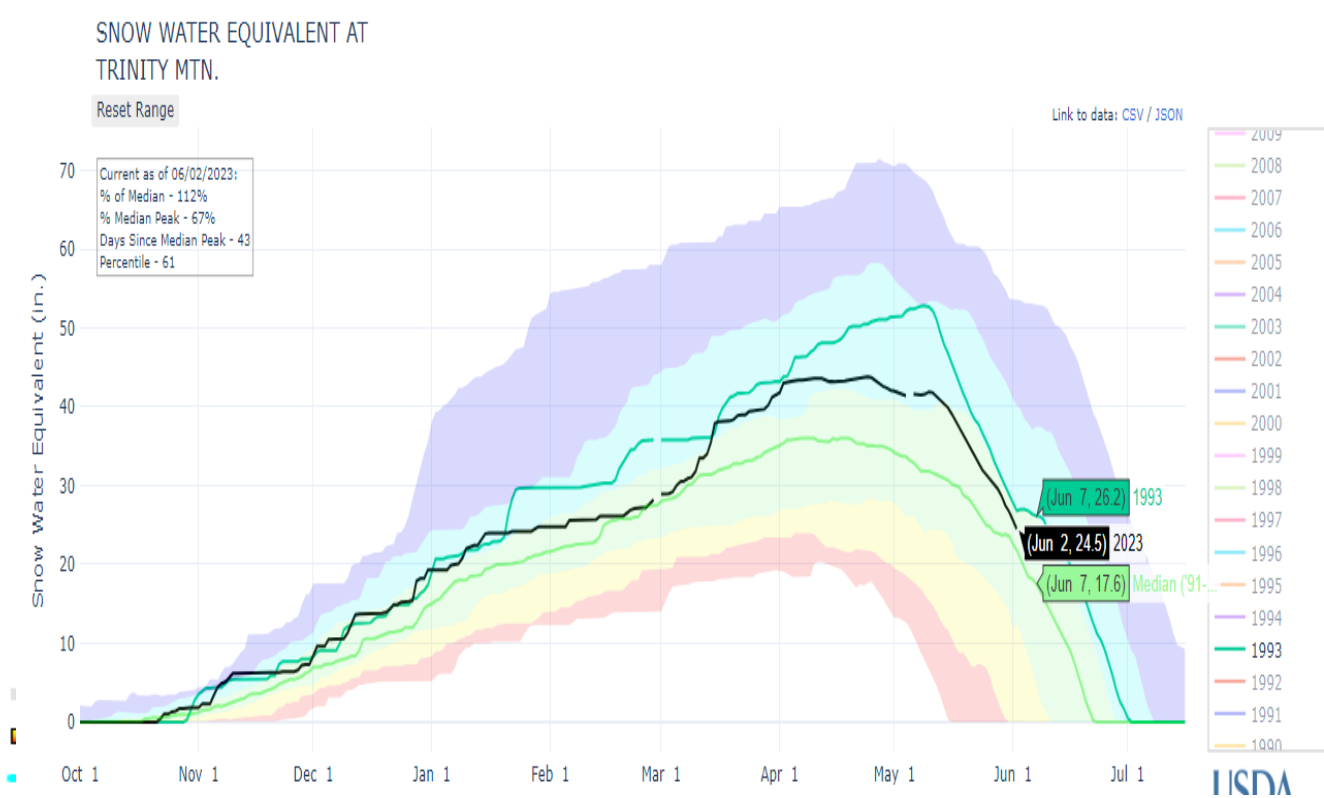
The Weiser will be flowing near average as the fiddlers make music down by the river in June.



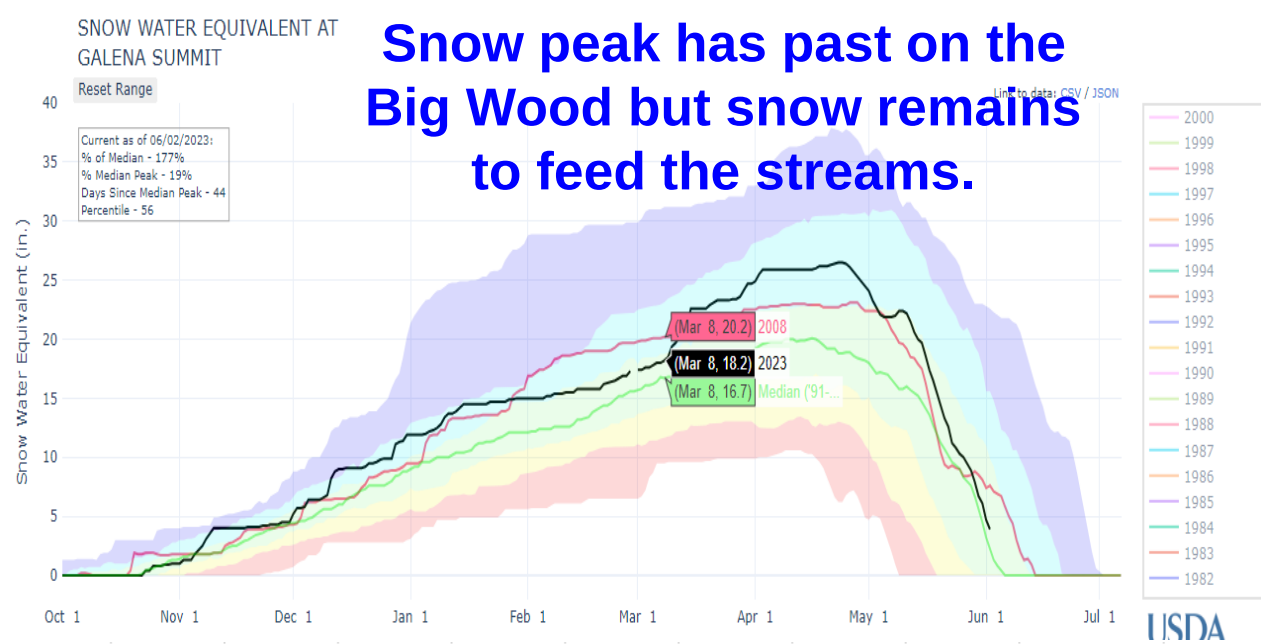
Fun summer flows on the Payette system.

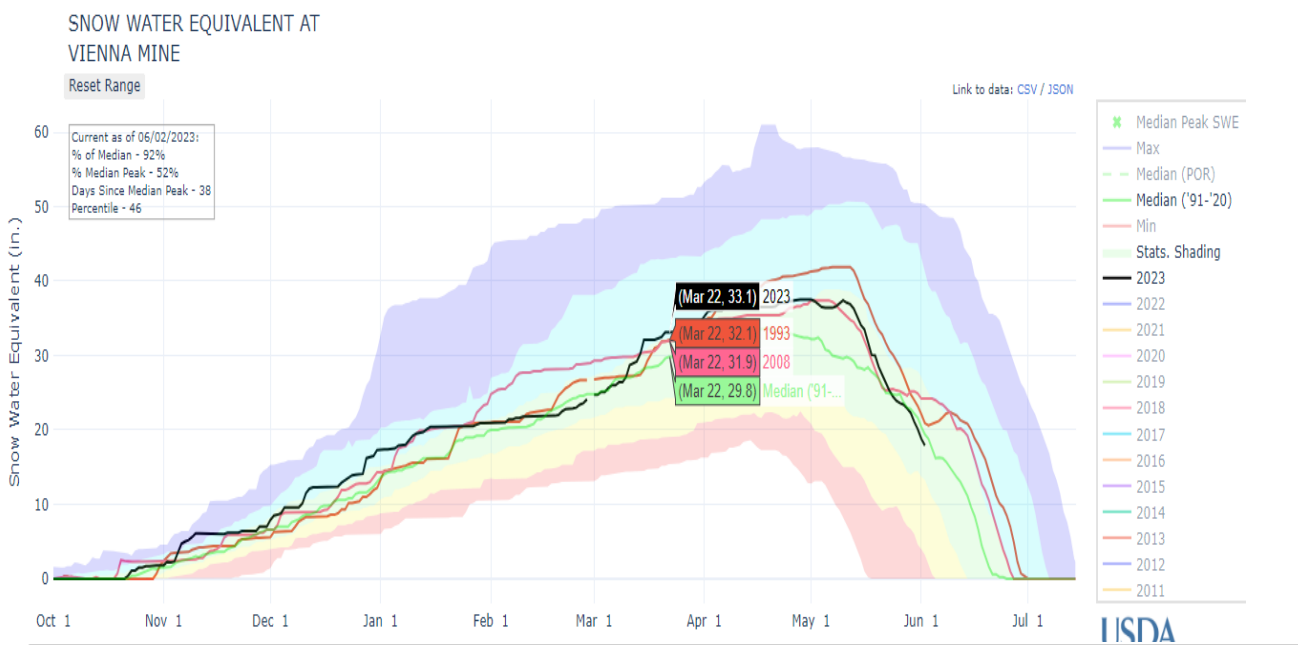
Still snow to melt in the higher Boise elevations.

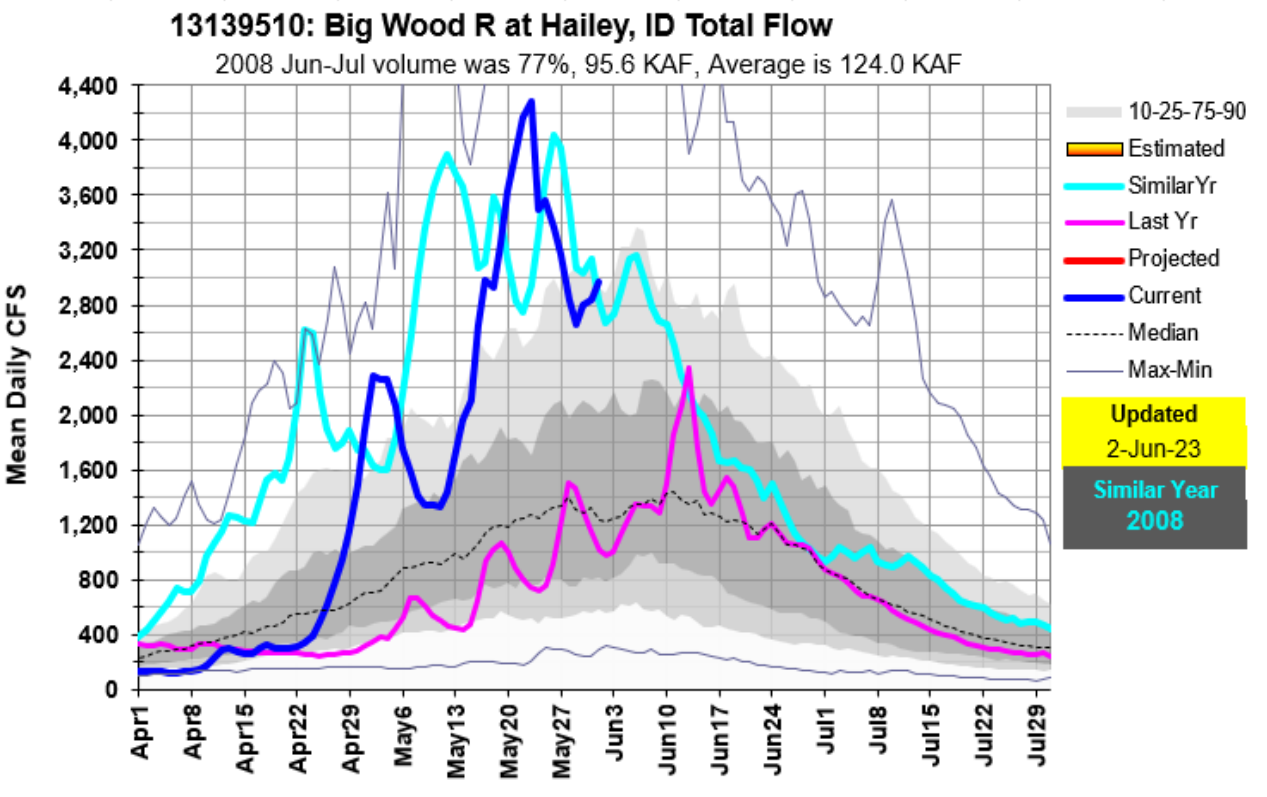


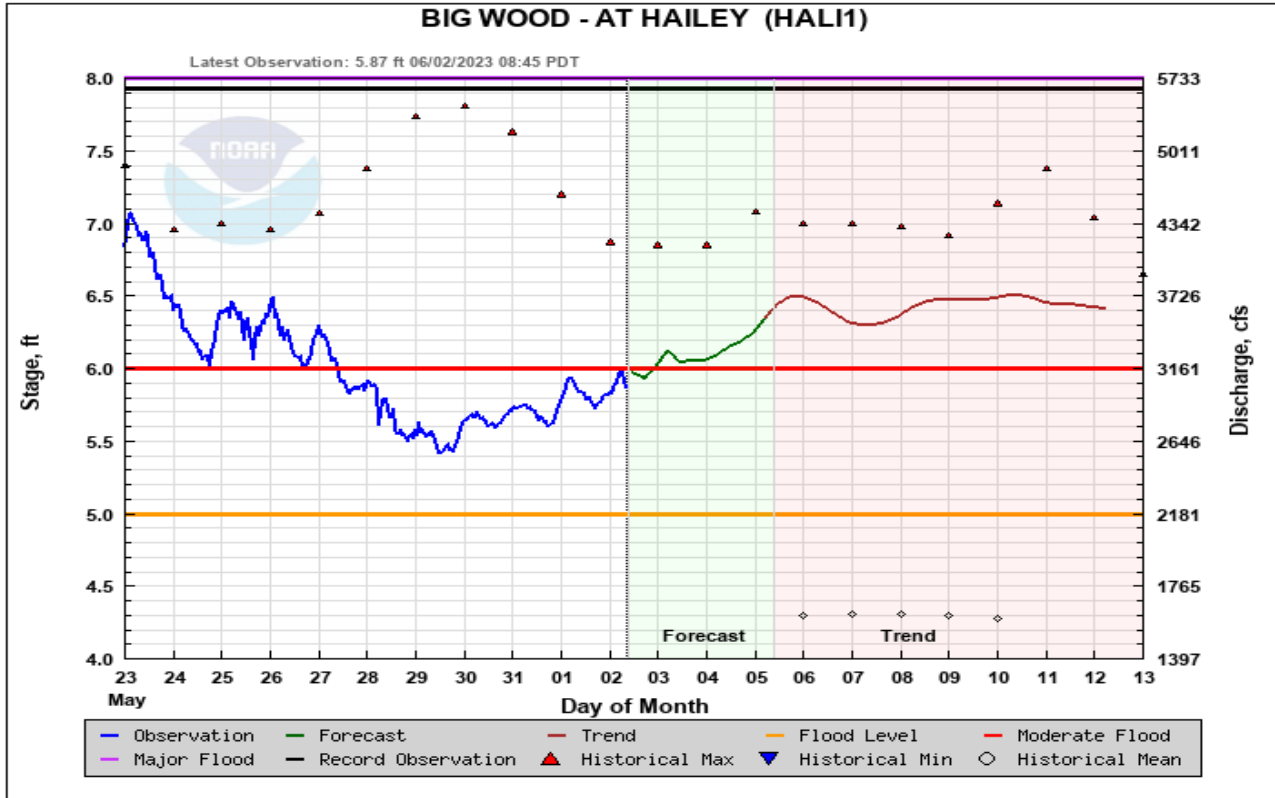


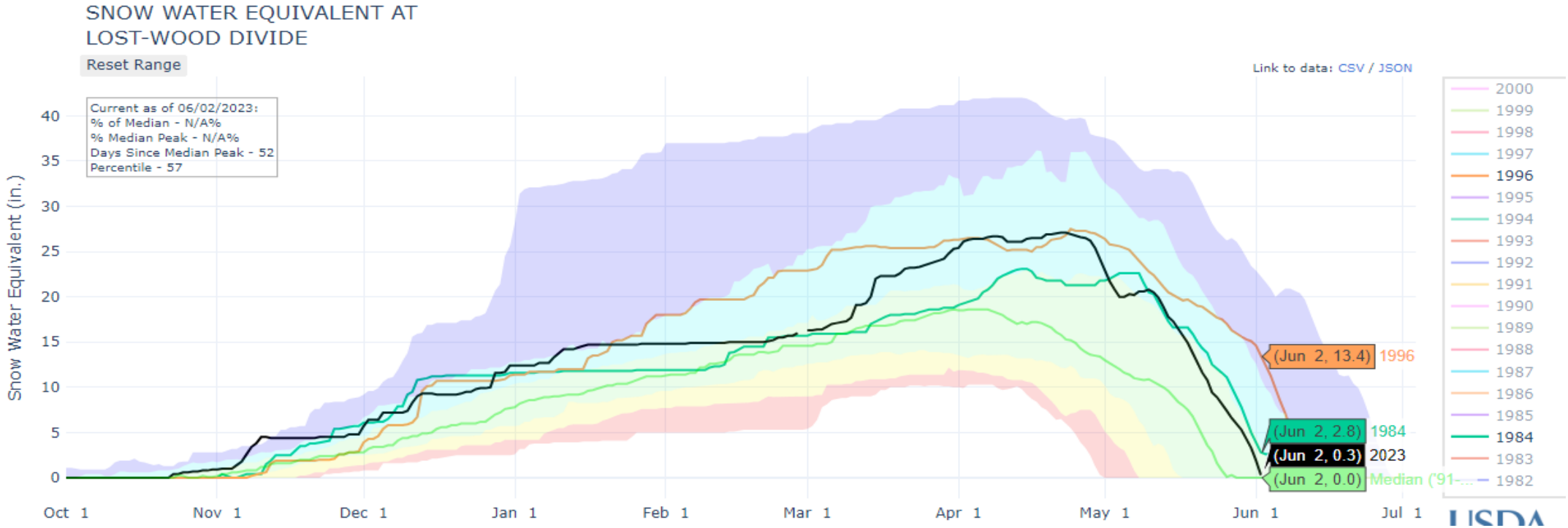
Snow peak has past on the Big Wood but snow remains to feed the streams.

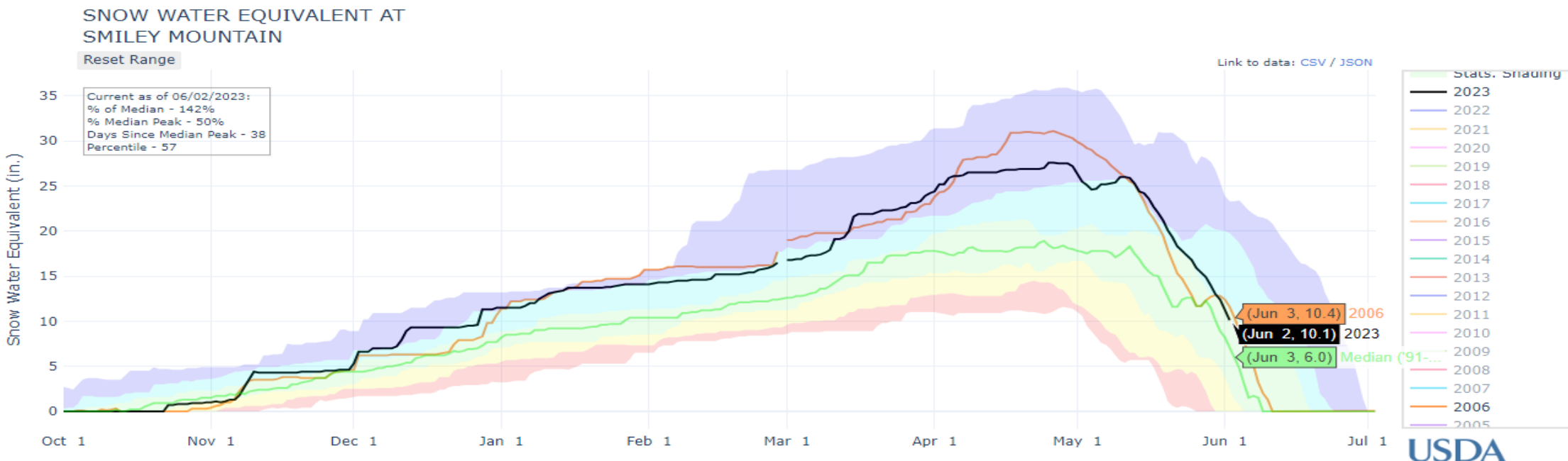




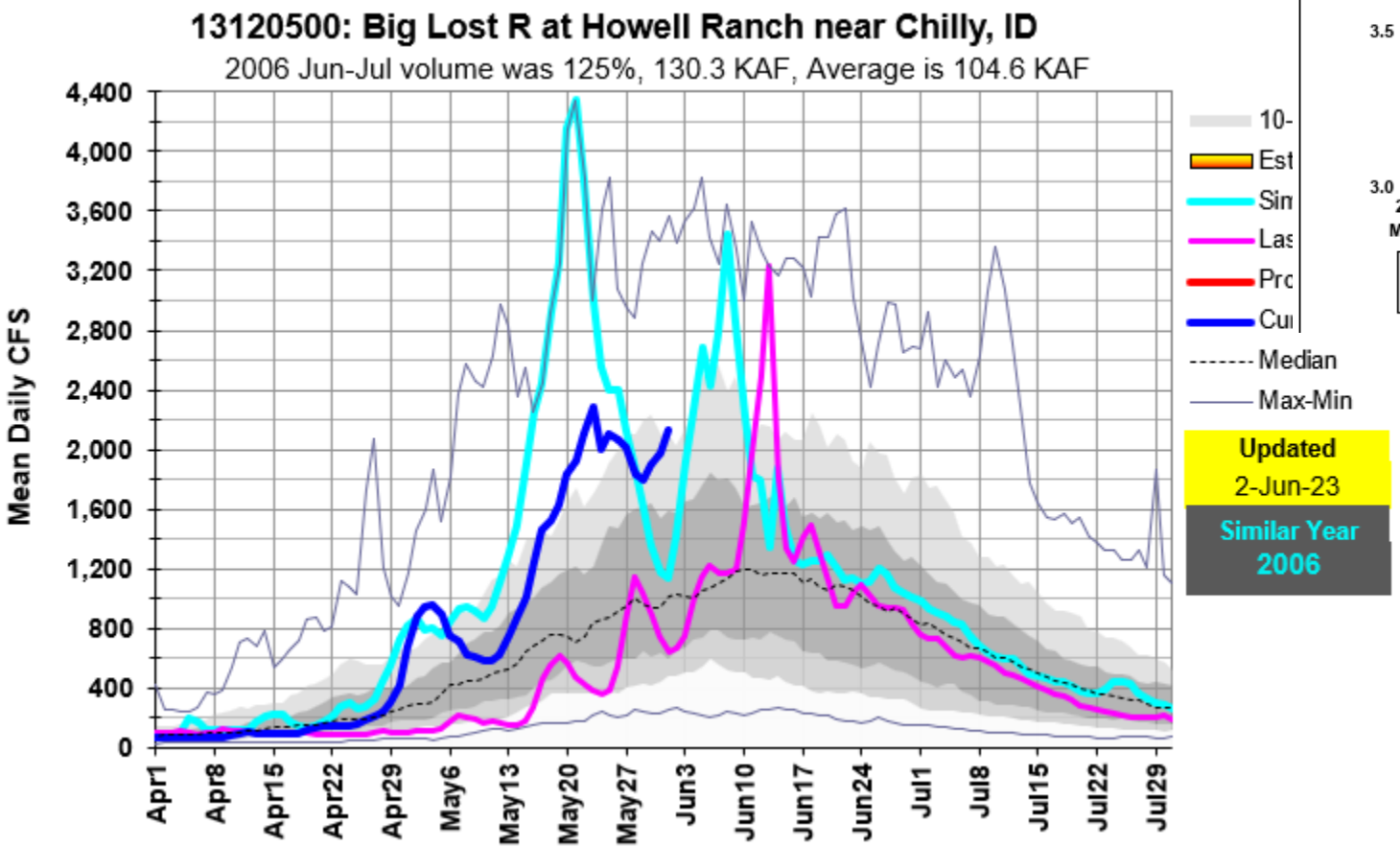


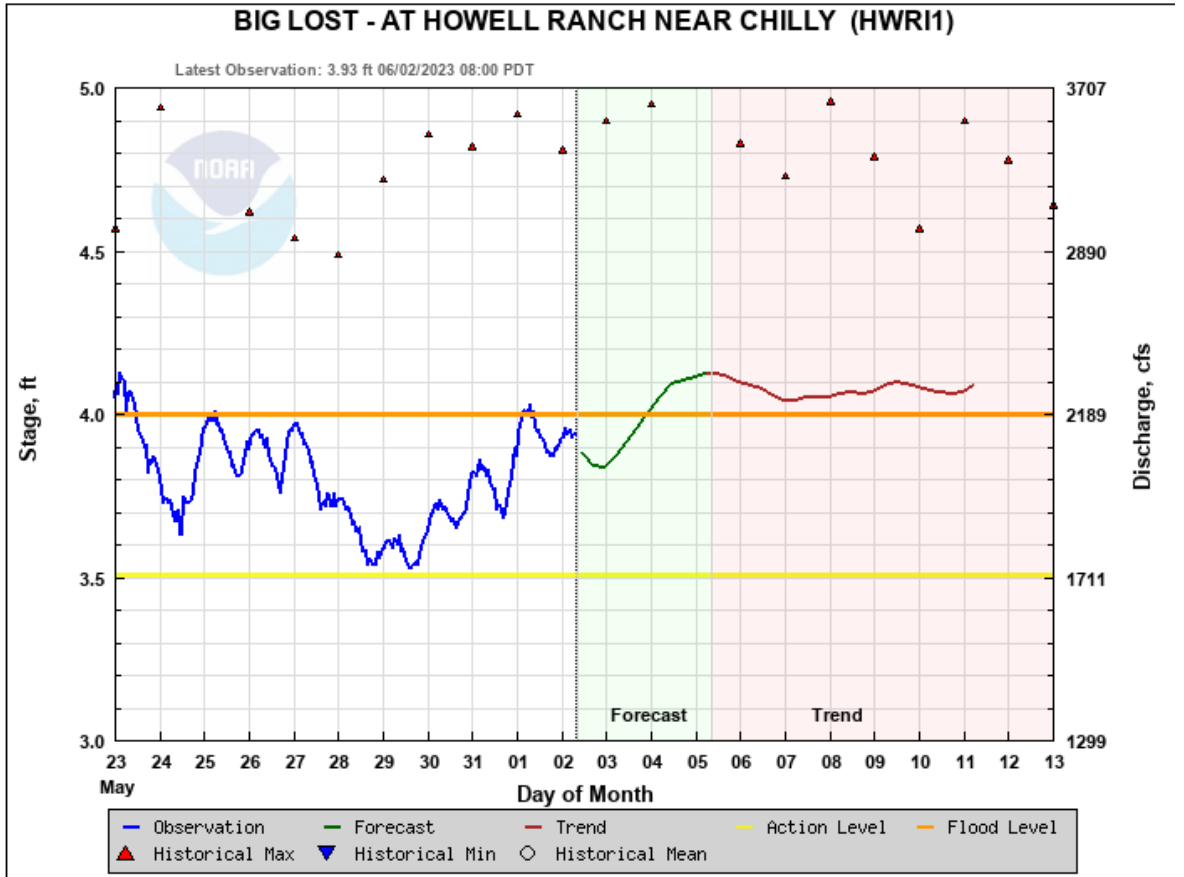


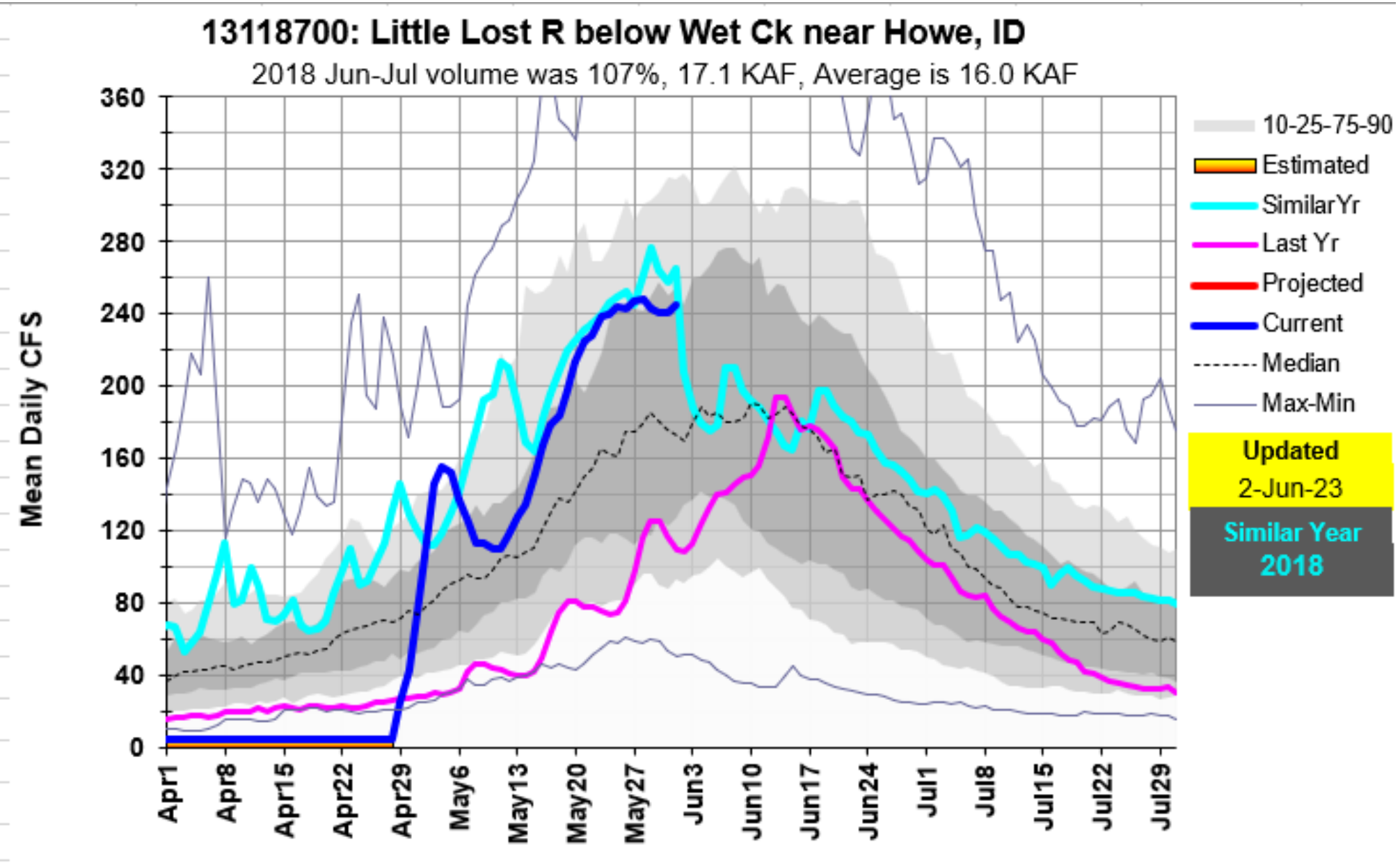

SNOW WATER EQUIVALENT AT
LOST-WOOD DIVIDE
Reset Range
Link to data: CSV / JSON
Current as of 06/02/2023:
% of Median - N/A%
% Median Peak - N/A%
Days Since Median Peak - 52
Percentile - 57
Snow Water Equivalent (in.)
0
5
10
15
20
25
30
35
40
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
(Jun 2, 13.4) 1996
(Jun 2, 2.8) 1984
(Jun 2, 0.3) 2023
(Jun 2, 0.0) Median ('91-...
2000
1999
1998
1997
1996
1995
1994
1993
1992
1991
1990
1989
1988
1987
1986
1985
1984
1983
1982
USDA


SNOW WATER EQUIVALENT AT
SMILEY MOUNTAIN
Reset Range
Link to data: CSV / JSON
Current as of 06/02/2023:
% of Median - 142%
% Median Peak - 50%
Days Since Median Peak - 38
Percentile - 57
Snow Water Equivalent (in.)
0
5
10
15
20
25
30
35
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
(Jun 3, 10.4) 2006
(Jun 2, 10.1) 2023
(Jun 3, 6.0) Median ('91-...
Stats. Shading
2023
2022
2021
2020
2019
2018
2017
2016
2015
2014
2013
2012
2011
2010
2009
2008
2007
2006
2005
USDA

With Lost-Wood Divide melted out, Smiley Mnt half melted, and the Big Lost White Stallion fading away, means the snowmelt peak just happened or is to happening. Enjoy the flow !







A cold winter kept the water frozen in the basin until late April.

SNOW WATER EQUIVALENT GRAND TARGHEE

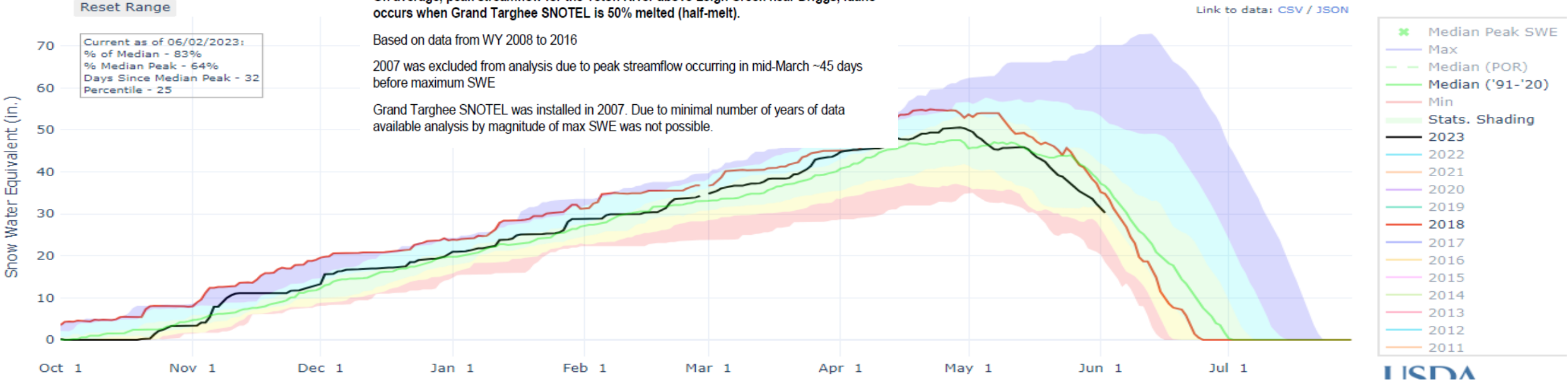
TETON RIVER AND GRAND TARGHEE SNOTEL SITE

On average, peak streamflow for the Teton River above Leigh Creek near Driggs, Idaho occurs when Grand Targhee SNOTEL is 50% melted (half-melt).

Based on data from WY 2008 to 2016

2007 was excluded from analysis due to peak streamflow occurring in mid-March ~45 days before maximum SWE

Grand Targhee SNOTEL was installed in 2007. Due to minimal number of years of data available analysis by magnitude of max SWE was not possible.



SNOW WATER EQUIVALENT AT PHILLIPS BENCH

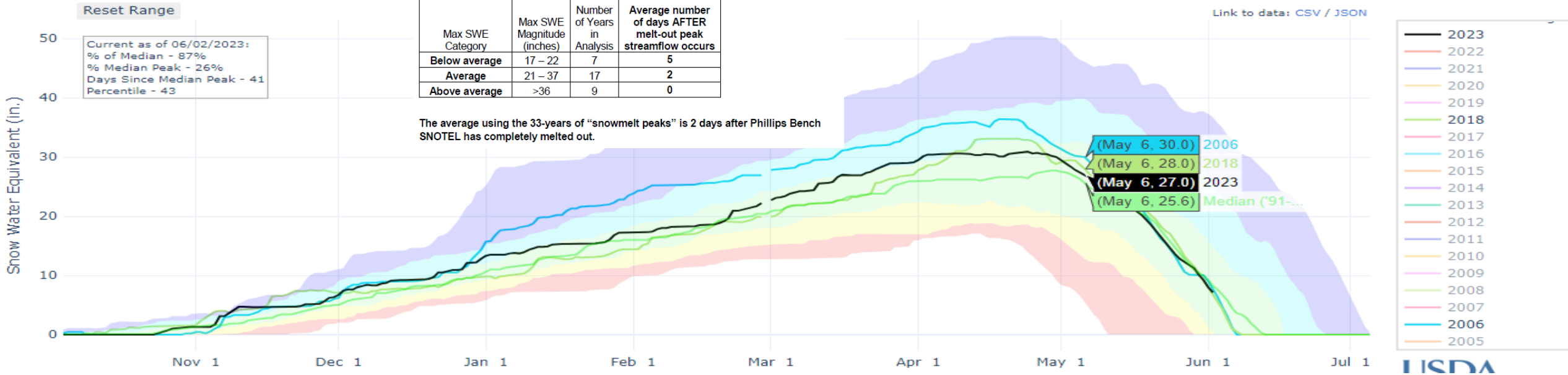
TETON RIVER AND PHILLIPS BENCH SNOTEL SITE

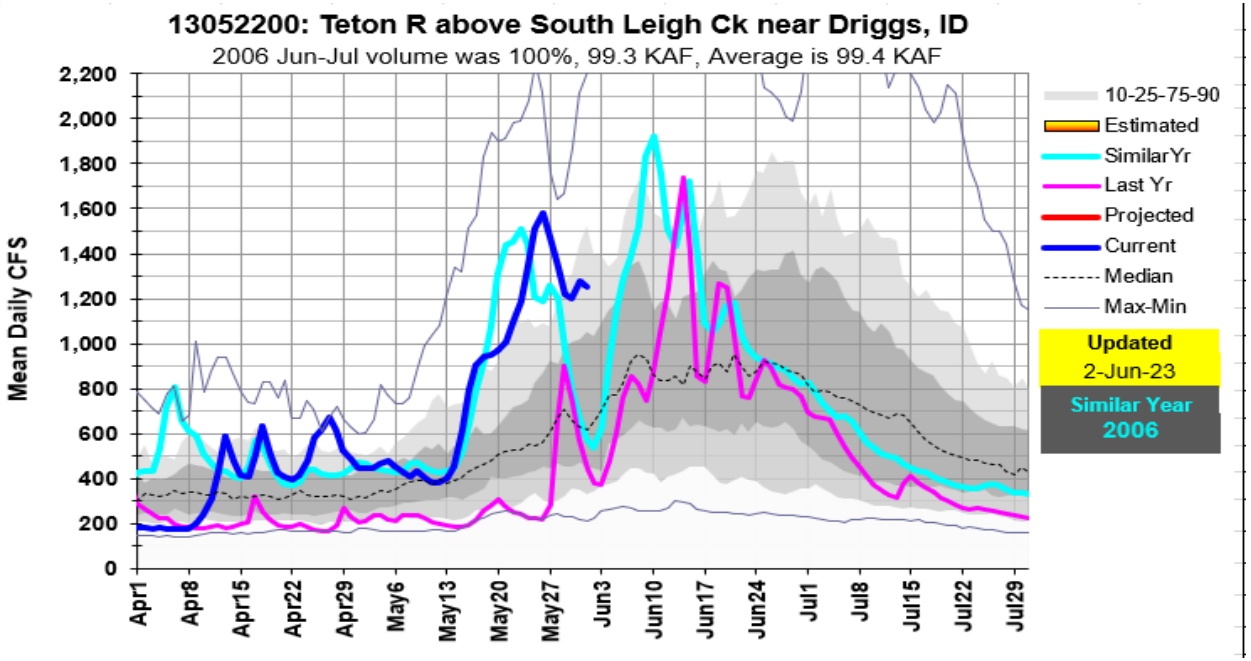
On average, peak streamflow for the Teton River above Leigh Creek near Driggs, Idaho occurs zero to 5 days AFTER Phillips Bench SNOTEL has completely melted out.

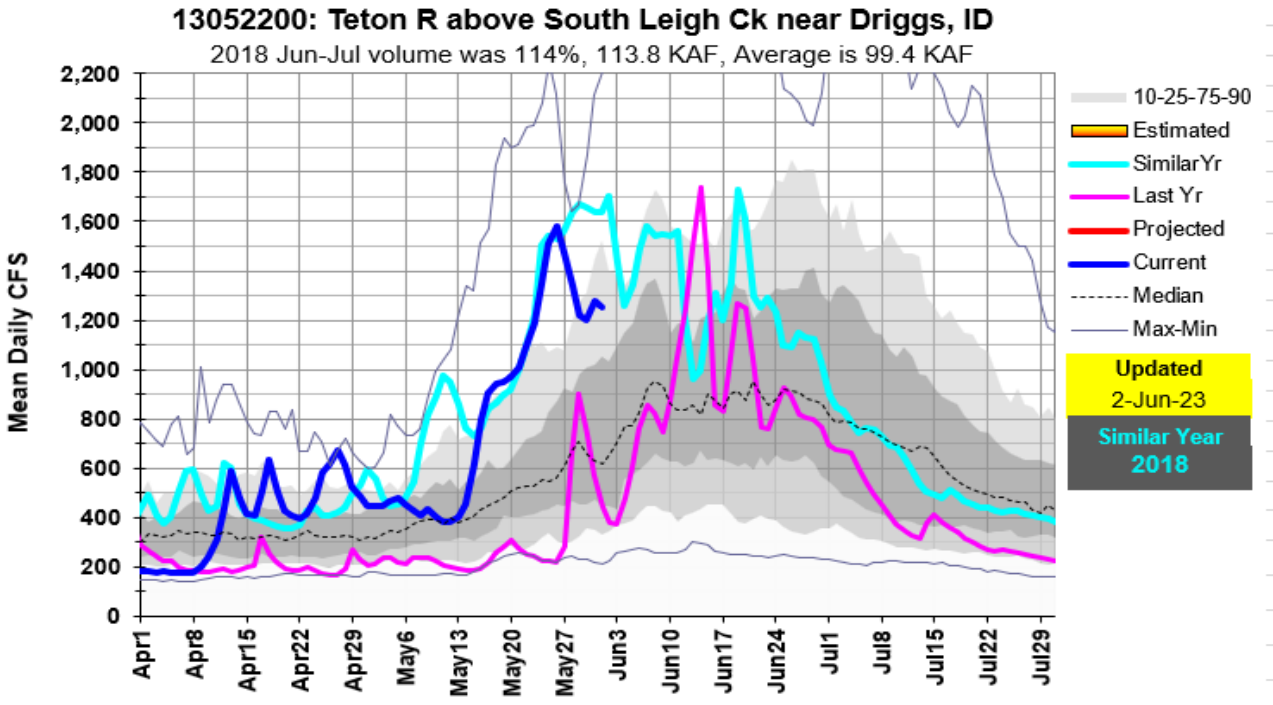
Summary of years using only "snowmelt peak" and categorized by max SWE magnitude.

Max SWE Category	Max SWE Magnitude (inches)	Number of Years in Analysis	**Average number of days AFTER melt-out peak streamflow occurs**
Below average	17 – 22	7	**5**
Average	21 – 37	17	**2**
Above average	>36	9	**0**

The average using the 33-years of "snowmelt peaks" is 2 days after Phillips Bench SNOTEL has completely melted out.







There's still time to catch the snowmelt peak on the Teton River with Grand Targhee approaching half melt, and Phillips Bench nearing meltout. Time will tell if this peak exceeds the previous peak.