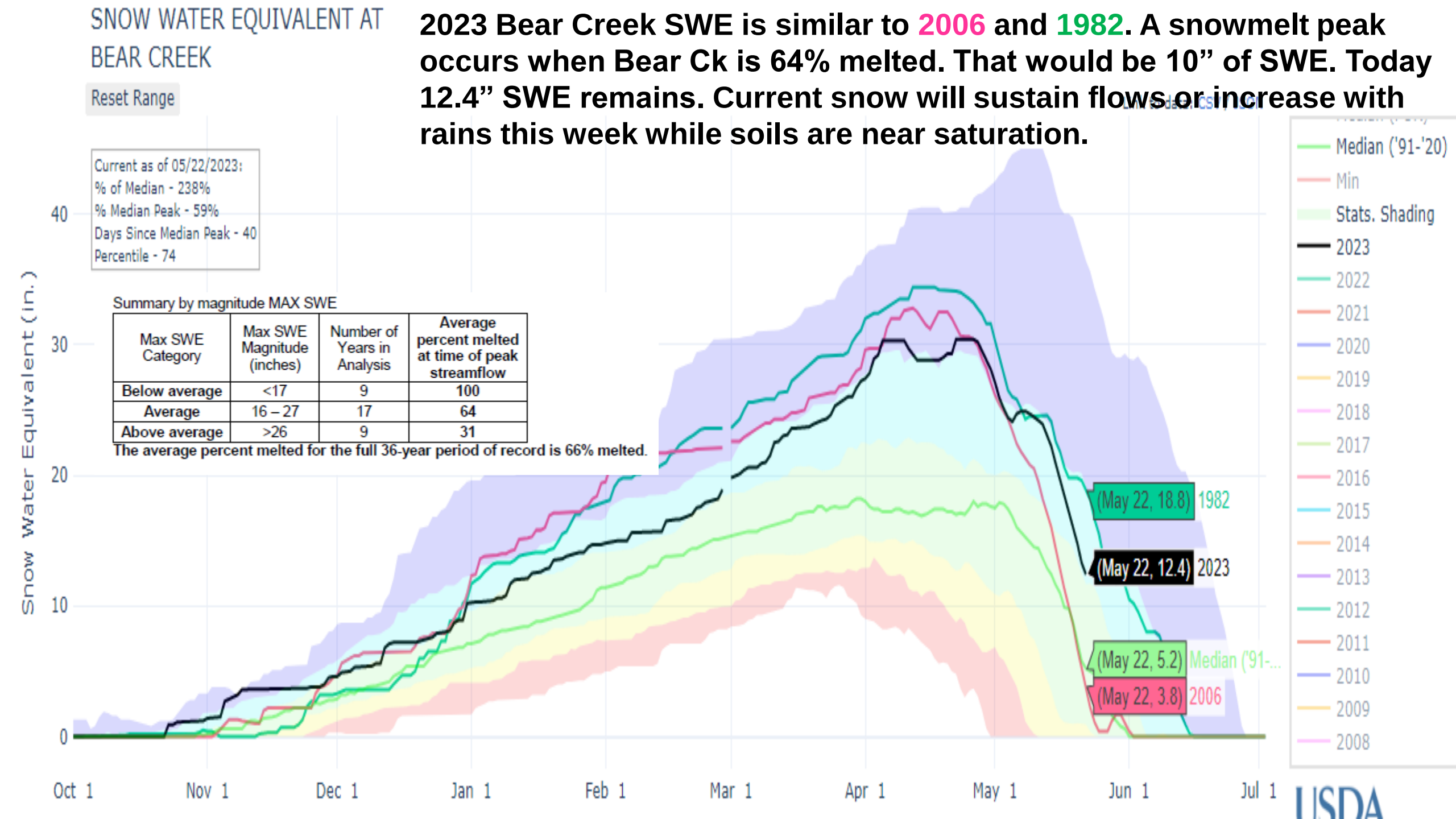
2023 Bear Creek SWE is similar to 2006 and 1982. A snowmelt peak occurs when Bear Ck is 64% melted. That would be 10” of SWE. Today 12.4” SWE remains. Current snow will sustain flows or increase with rains this week while soils are near saturation.



Bear Creek has been melting 1.2 to 1.5” /day since May 15 (Change in SWE column 7) with daily Air Temp Avg (last column) 46 to 51 F. Snow to feed river starts running out when SWE is 64% melted (column 6) which is when 10” SWE remains, currently at 12.4”. Without more input, RAIN, flows will start dropping, but remember Owyhee stayed higher longer than expected this year…

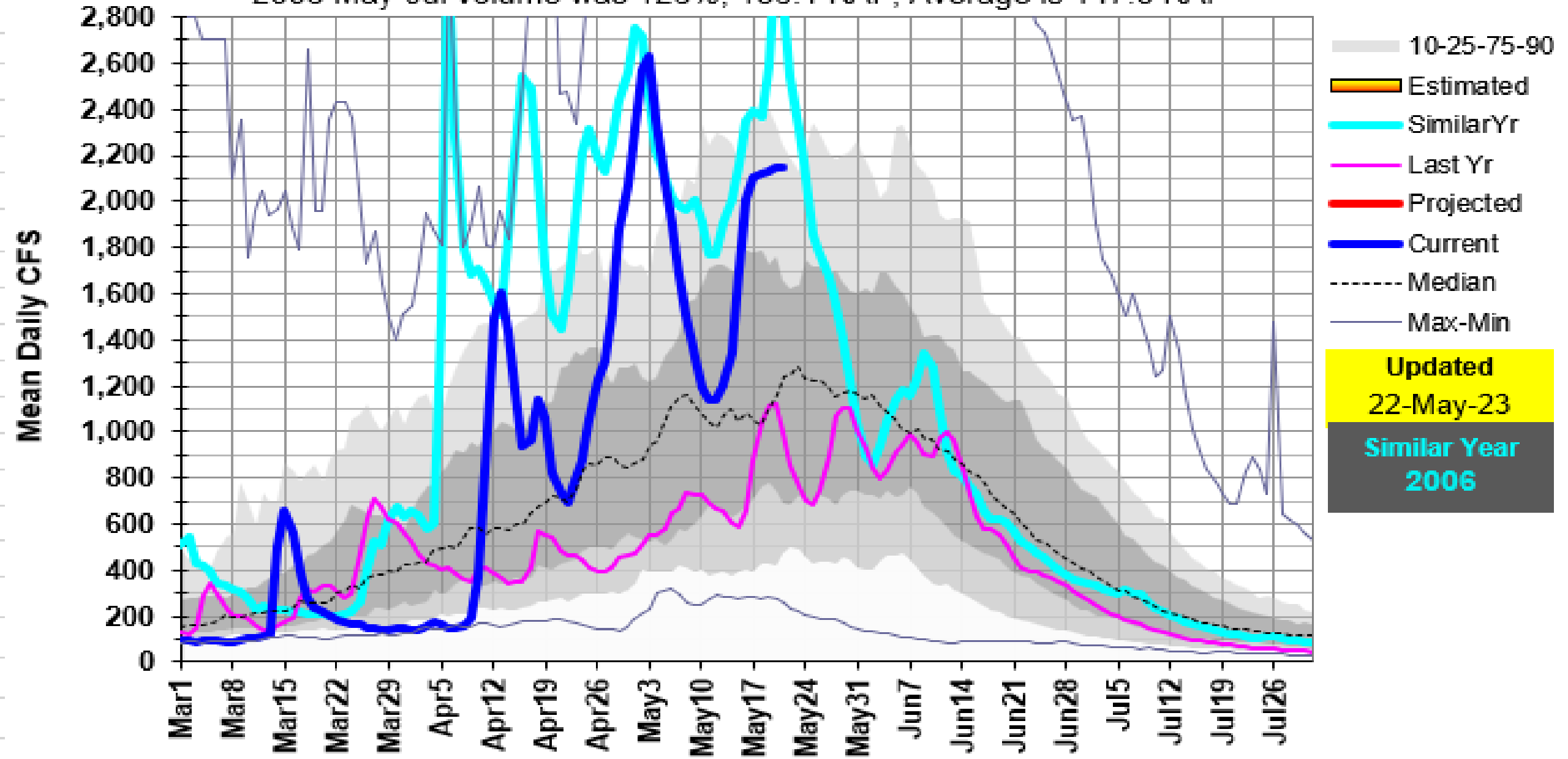
Reporting Frequency: Daily; Date Range: 2023-05-10 to 2023-05-22

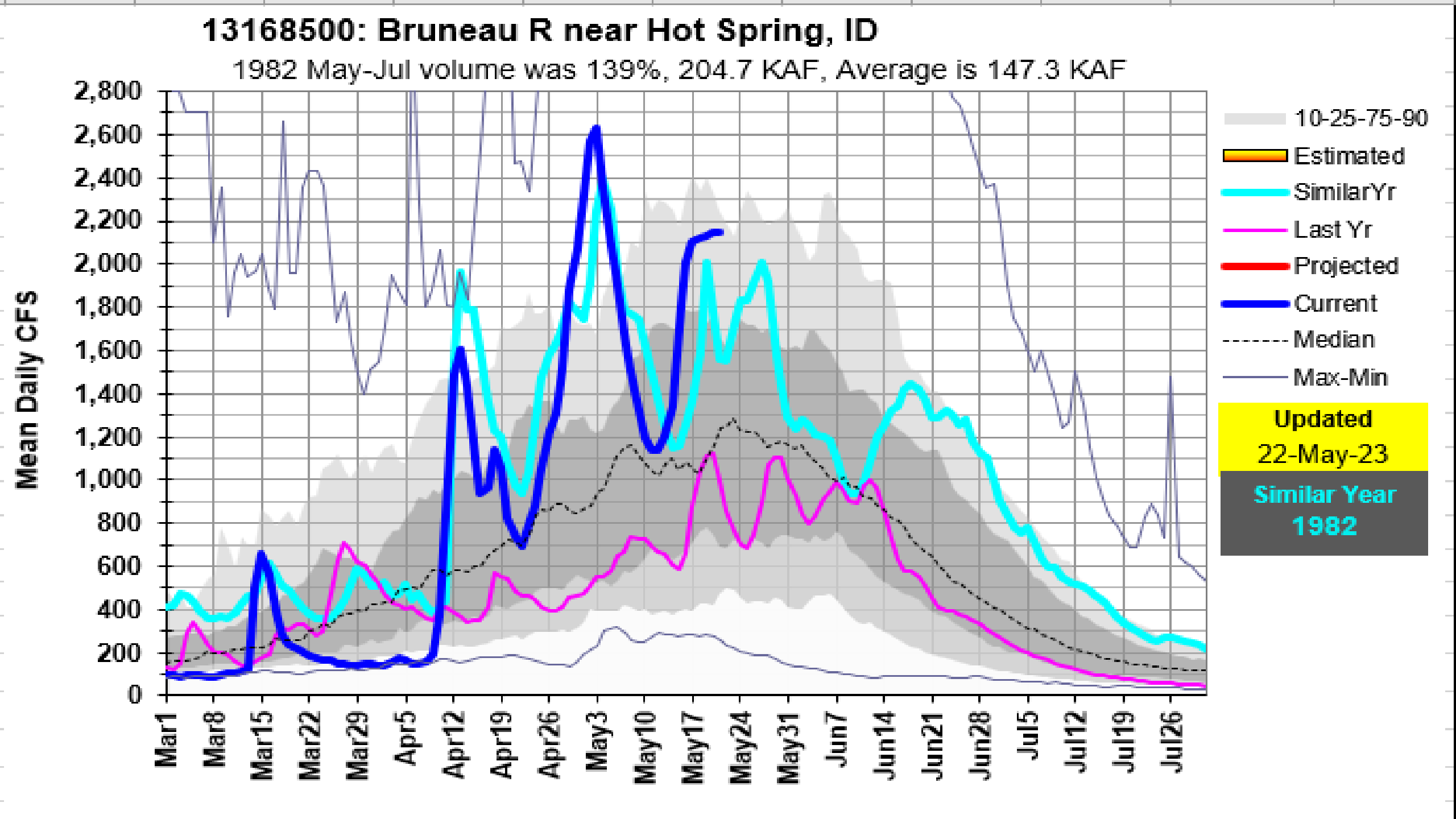
(As of: Mon May 22 08:07:29 GMT-08:00 2023)
Provisional data, subject to revision

Date	Elevation (ft)	Station Name	Snow Depth (in) Start of Day Values	Change In Snow Depth (in)	Snow Water Equivalent (in) Start of Day Values	Change In Snow Water Equivalent (in)	Precipitation Accumulation (in) Start of Day Values	Change In Precipitation Accumulation (in)	Air Temperature Average (degF)
2023-05-10	8040	Bear Creek	53	-2	24.5	-0.2	32.6	0.0	37.6
2023-05-11	8040	Bear Creek	53	0	24.2	-0.3	32.6	0.0	38.8
2023-05-12	8040	Bear Creek	52	-1	23.9	-0.3	32.6	0.0	43.0
2023-05-13	8040	Bear Creek	50	-2	23.1	-0.8	32.6	0.0	43.3
2023-05-14	8040	Bear Creek	48	-2	22.2	-0.9	32.7	0.1	44.8
2023-05-15	8040	Bear Creek	46	-2	20.9	-1.3	33.0	0.3	47.7
2023-05-16	8040	Bear Creek	44	-2	19.7	-1.2	33.0	0.0	47.8
2023-05-17	8040	Bear Creek	41	-3	18.6	-1.1	33.0	0.0	46.0
2023-05-18	8040	Bear Creek	40	-1	17.4	-1.2	33.0	0.0	46.9
2023-05-19	8040	Bear Creek	38	-2	16.2	-1.2	33.0	0.0	50.2
2023-05-20	8040	Bear Creek	36	-2	14.8	-1.4	33.0	0.0	51.4
2023-05-21	8040	Bear Creek	33	-3	13.3	-1.5	33.0	0.0	51.4
2023-05-22	8040	Bear Creek	30	-3	12.4	-0.9	33.1	0.1	

13168500: Bruneau R near Hot Spring, ID

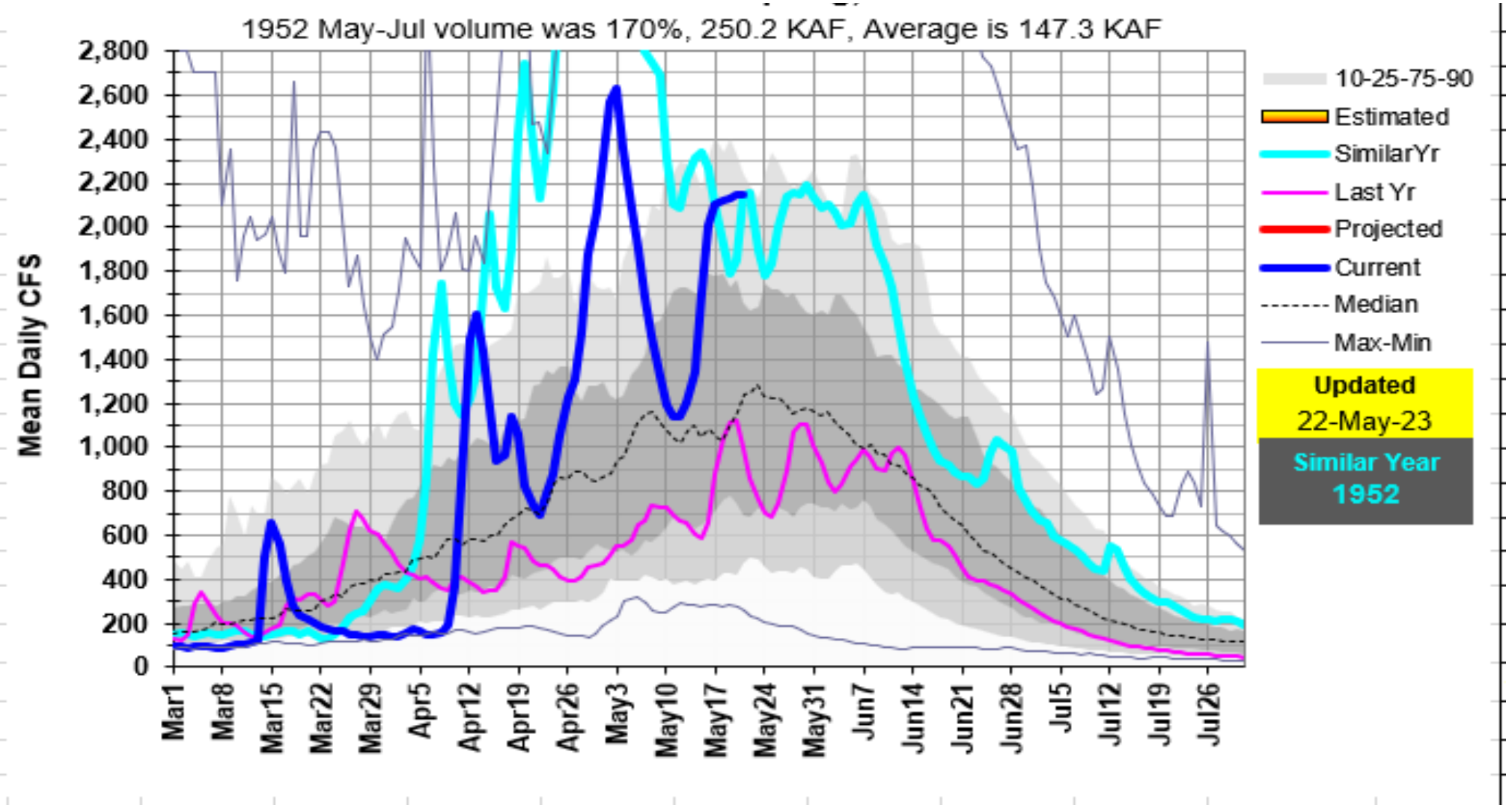
2006 May-Jul volume was 126%, 186.1 KAF, Average is 147.3 KAF

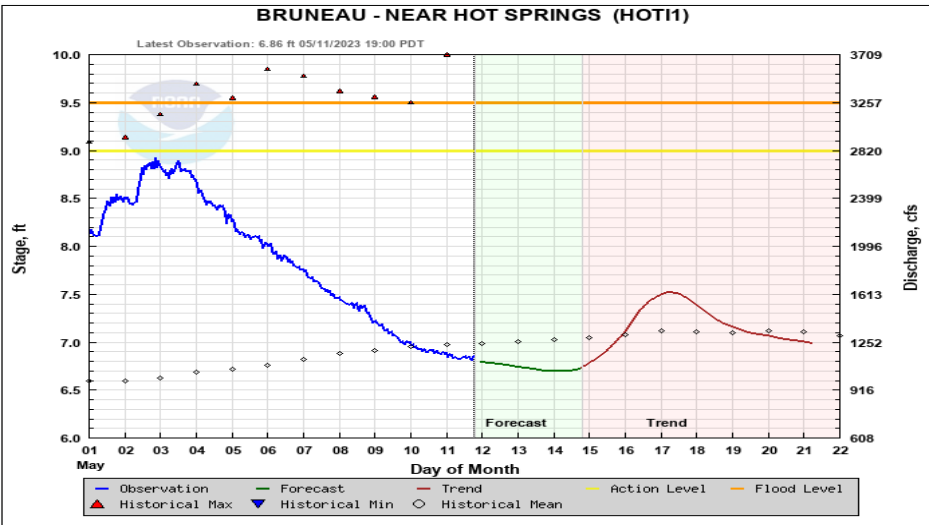



13168500: Bruneau R near Hot Spring, ID
1982 May-Jul volume was 139%, 204.7 KAF, Average is 147.3 KAF
Mean Daily CFS
2,800
2,600
2,400
2,200
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
Mar1
Mar8
Mar15
Mar22
Mar29
Apr5
Apr12
Apr19
Apr26
May3
May10
May17
May24
May31
Jun7
Jun14
Jun21
Jun28
Jul5
Jul12
Jul19
Jul26
10-25-75-90
Estimated
SimilarYr
Last Yr
Projected
Current
Median
Max-Min
Updated
22-May-23
Similar Year
1982

Interesting, similar 2100 cfs flow plateau occurred in 1952. Its all about the watershed and square miles in this 8000 elevation foot band with similar aspect that the Bear Creek SNOTEL site monitors. This is why this Bear Creek SNOTEL is a key site for the Bruneau Watershed.

Link to Bear Creek data.
https://wcc.sc.egov.usda.gov/nwcc/site?sitenum=321

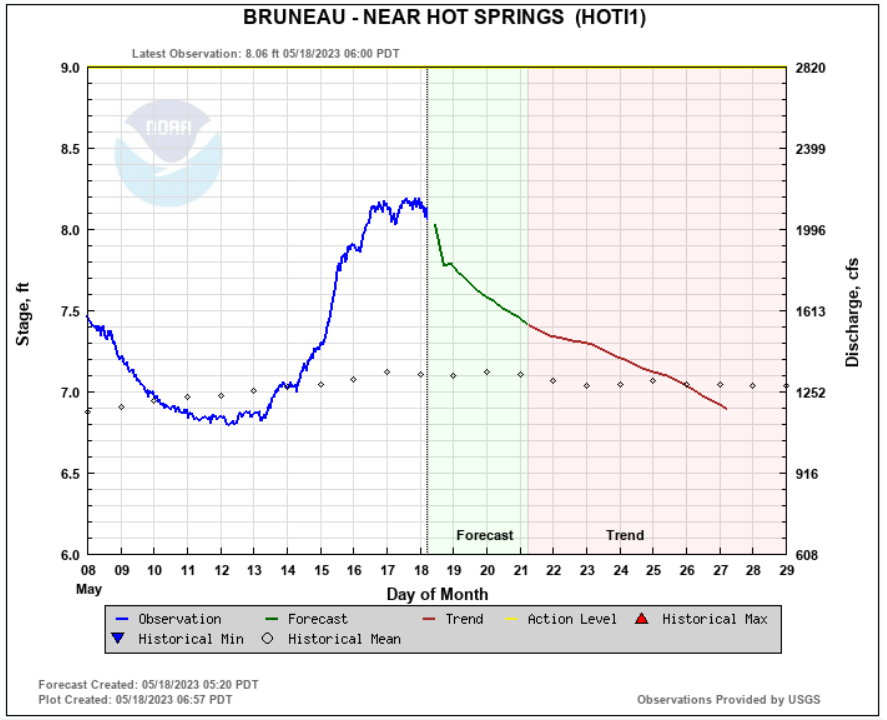


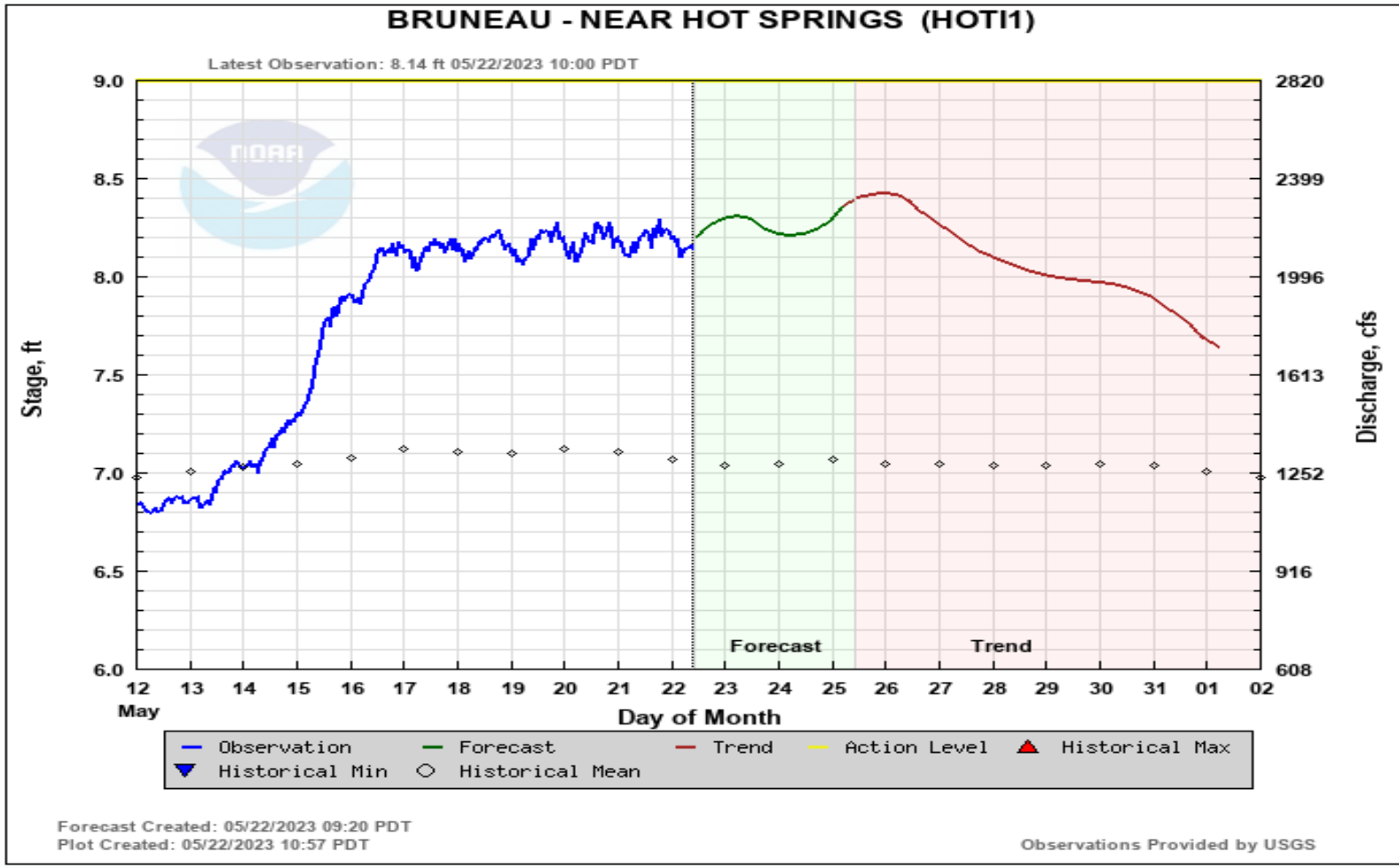


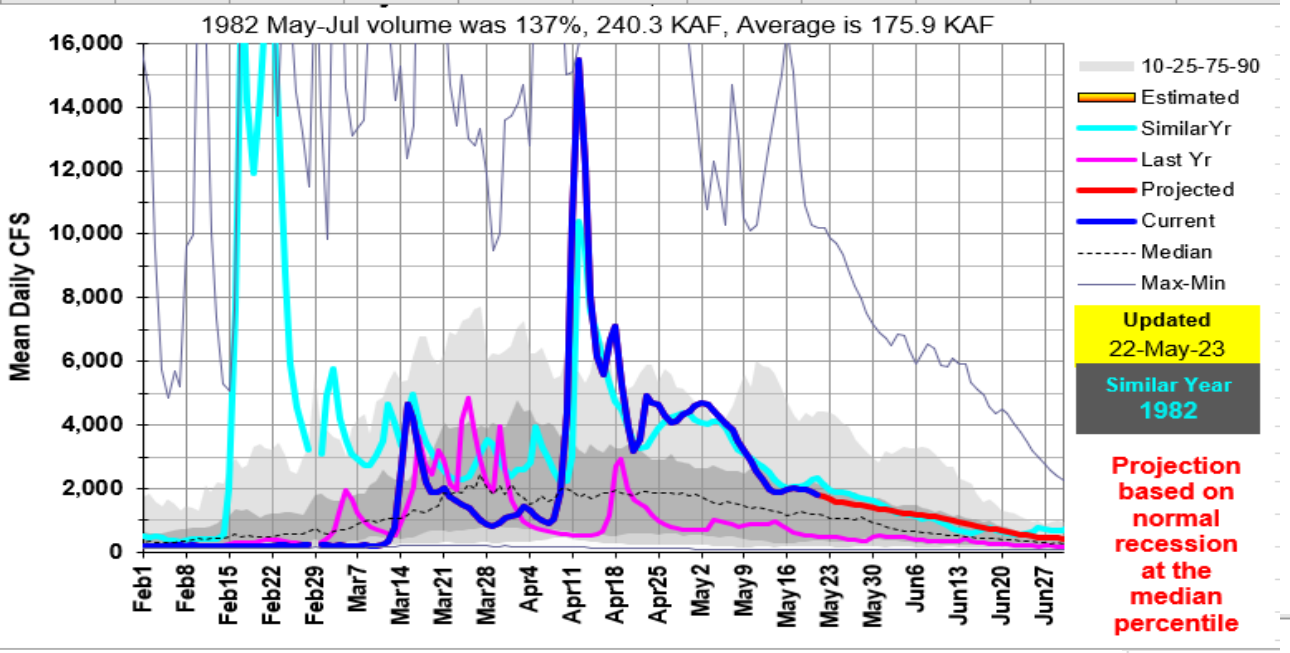
Why its important to understand how much snow remains and snow2flow relationships in watersheds to produce/sustain flows.

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.







Owyhee snow & flow tracked 1982 very close.