BUREAU OF RECLAMATION

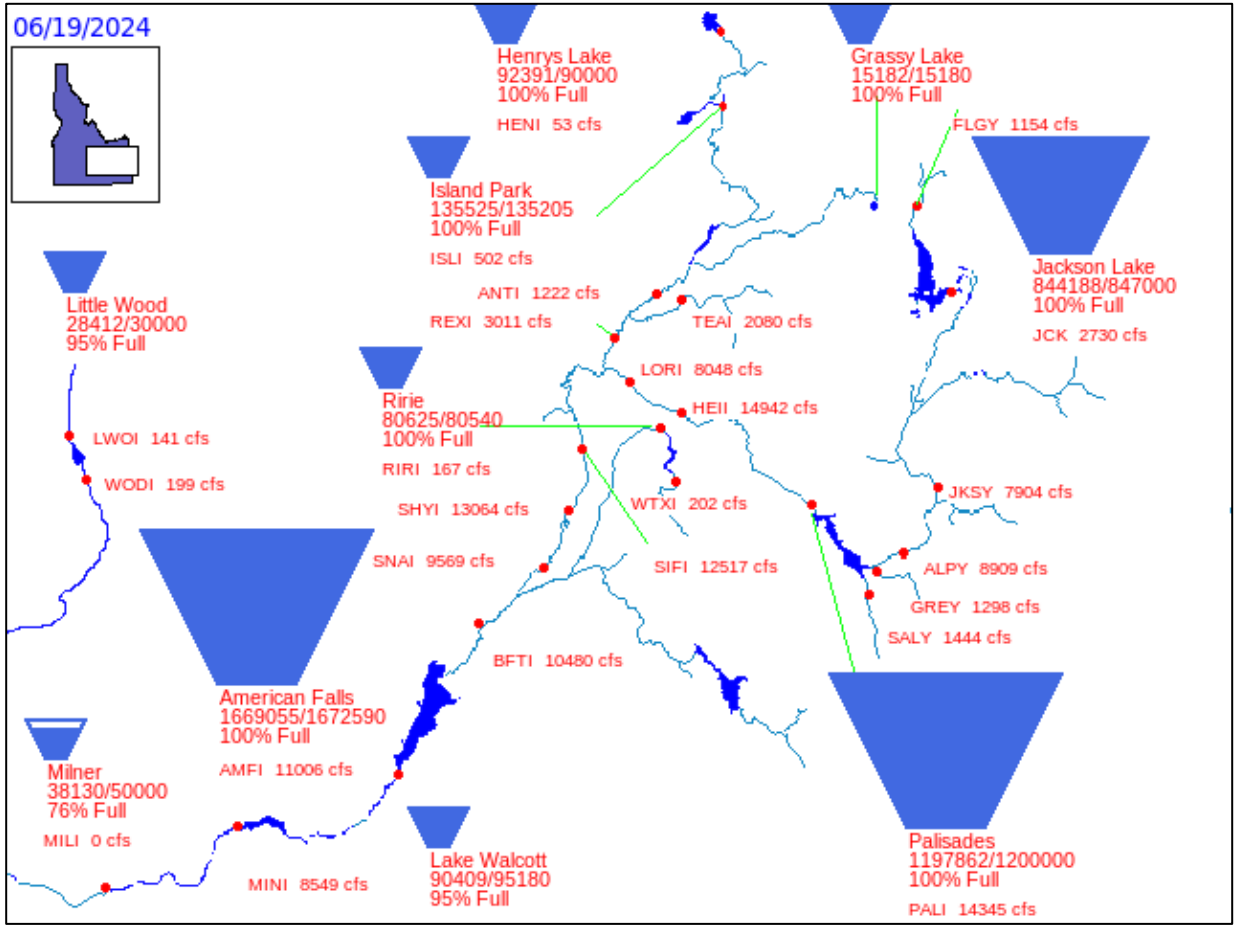
Snake River Water Management Public Information Meeting

Water Operations and Fall Ramp Down Update

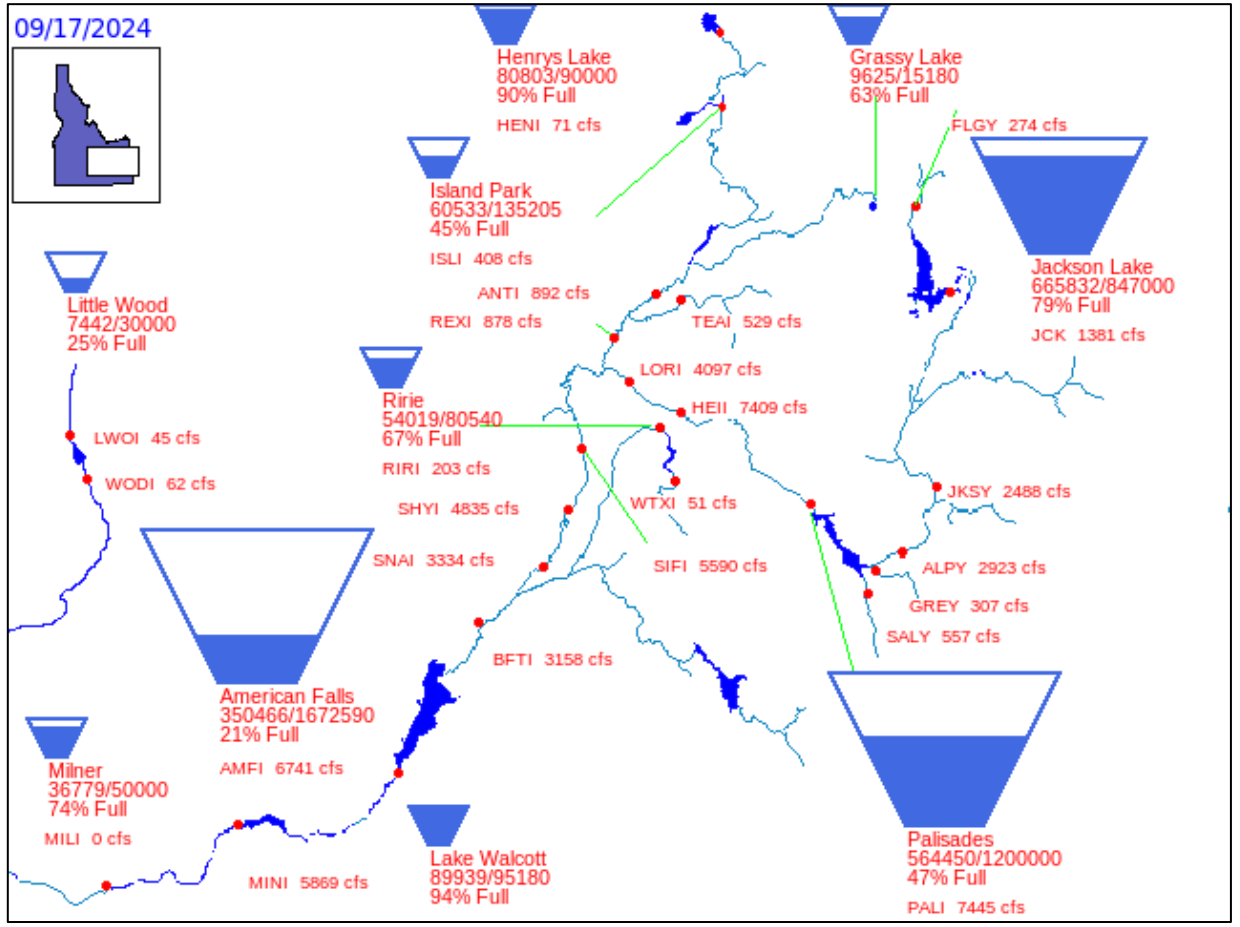
September 18, 2024

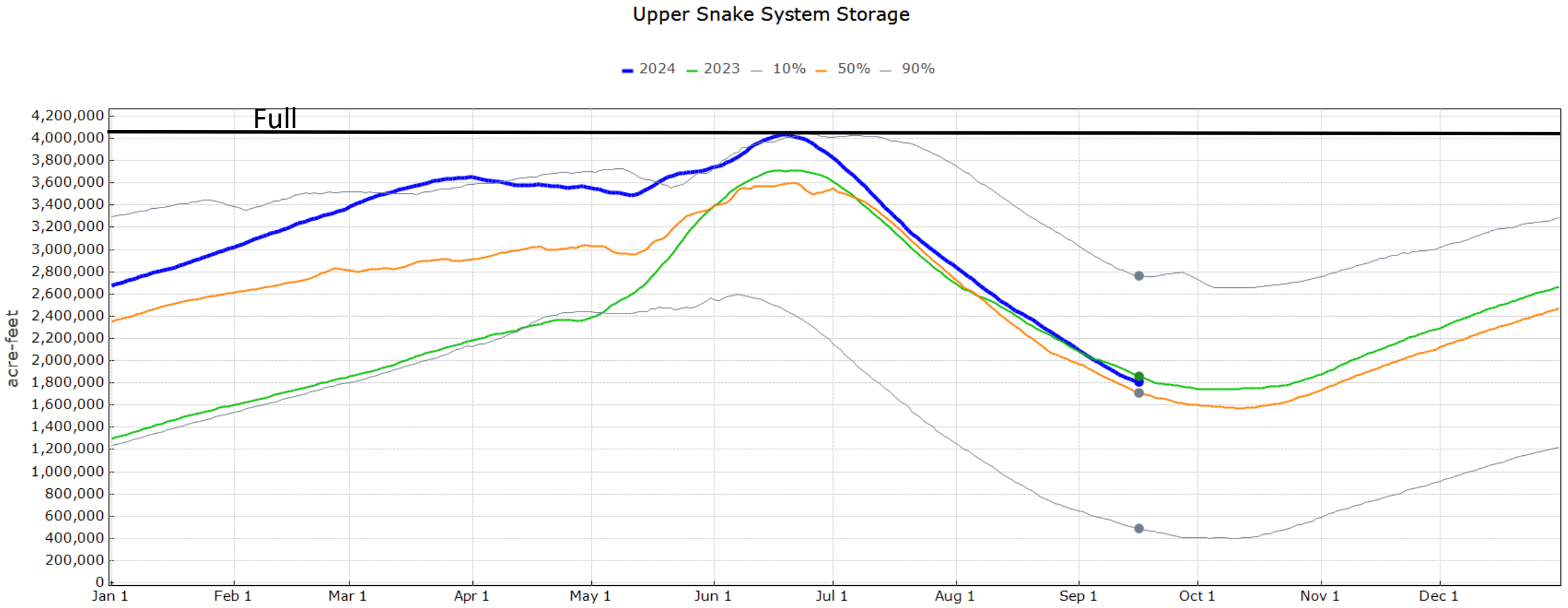
Brian Stevens

Where we've been – System 99.7% Full



Where we're at currently – System 44% Full



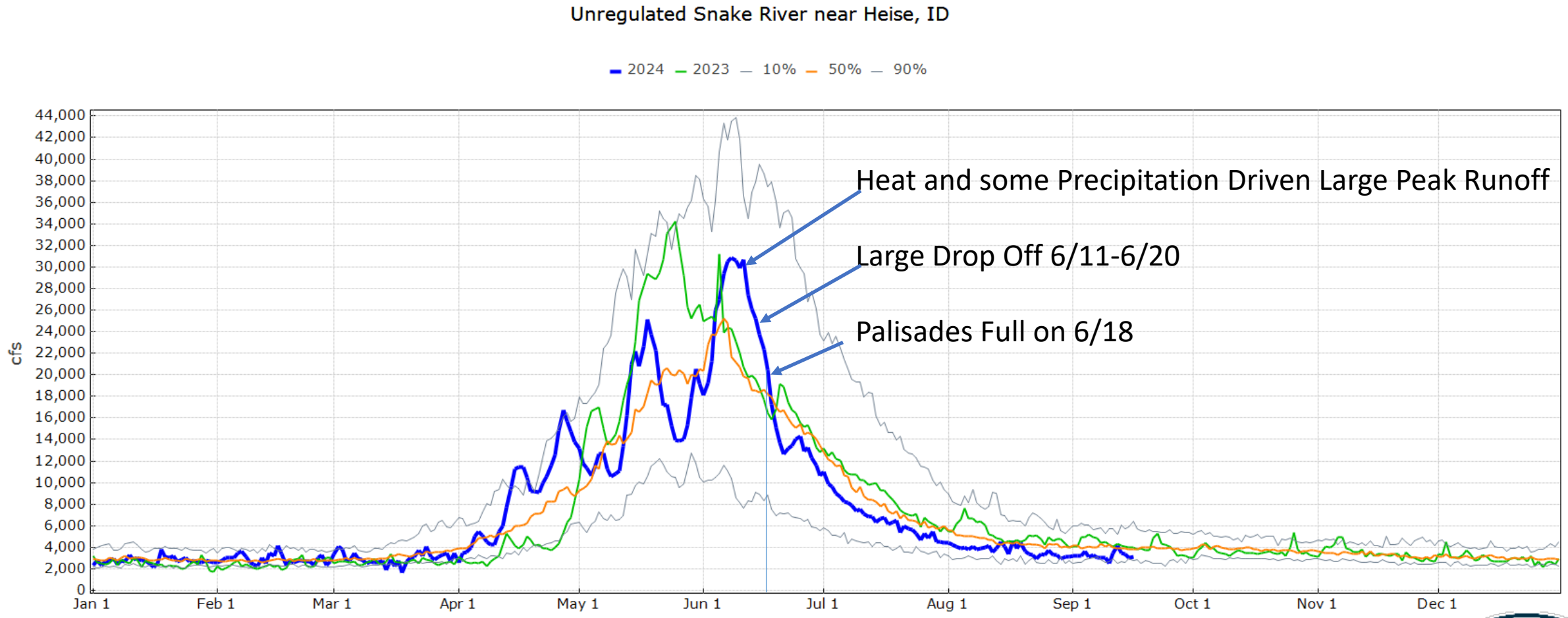


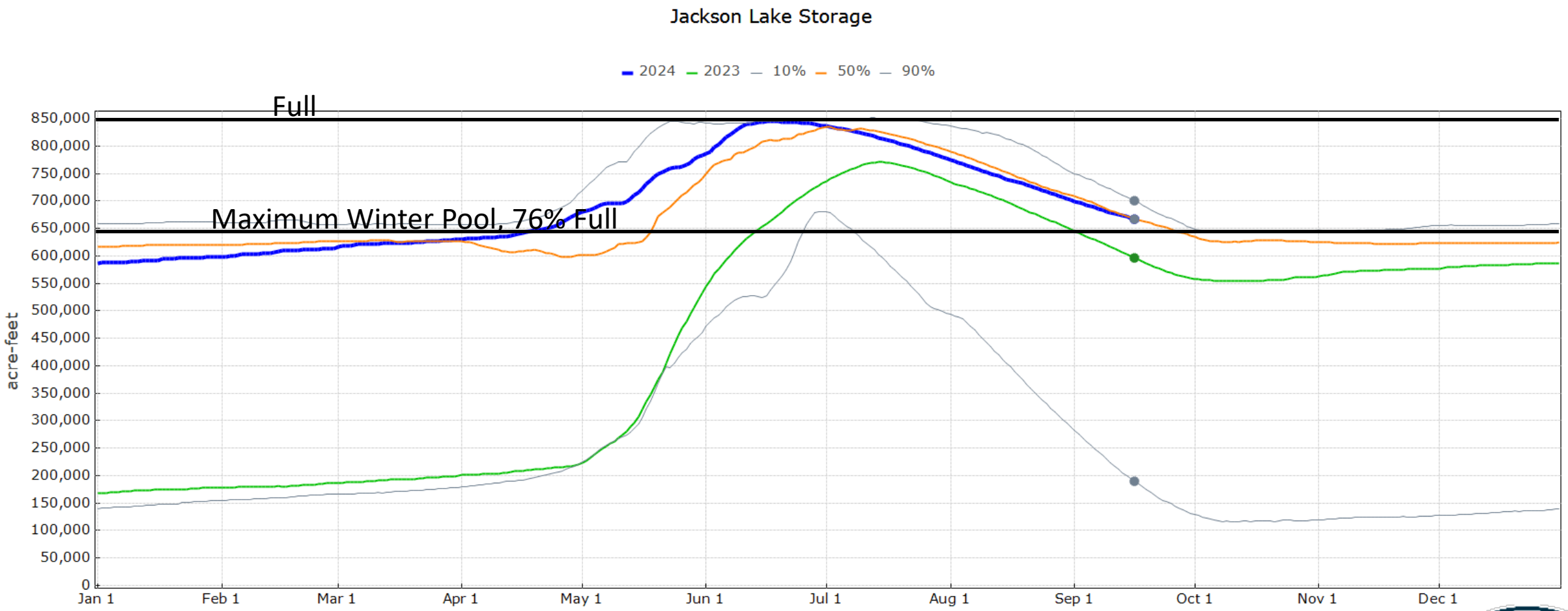
***Peak Storage 6/19/24, 99.7% Full, 13 KAF below full**

***<u>All storage accounts received a full fill</u>**

***Palisades peak outflow 6/13 at 20,000 cfs**

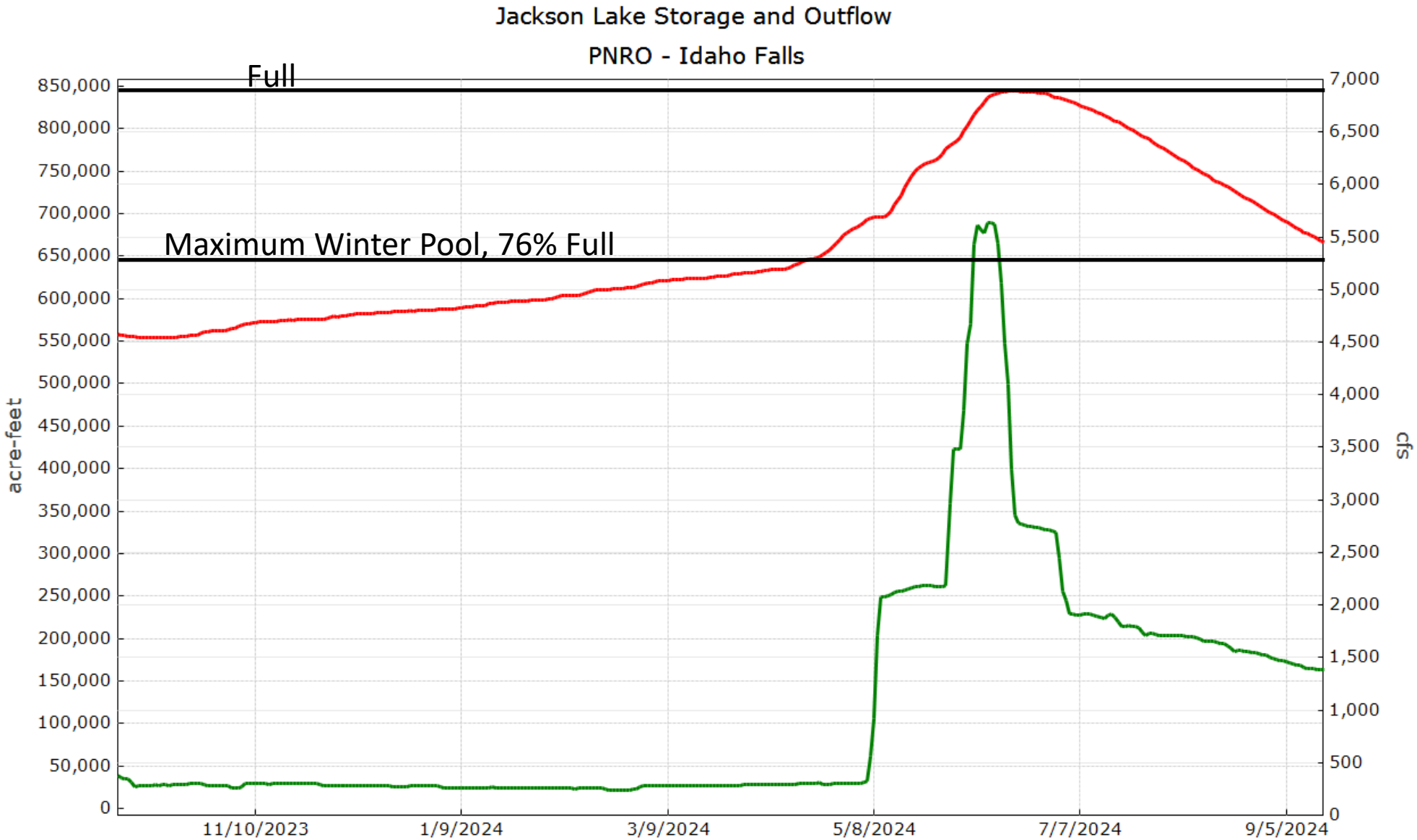
***Currently 55 KAF Lower than Last Year**

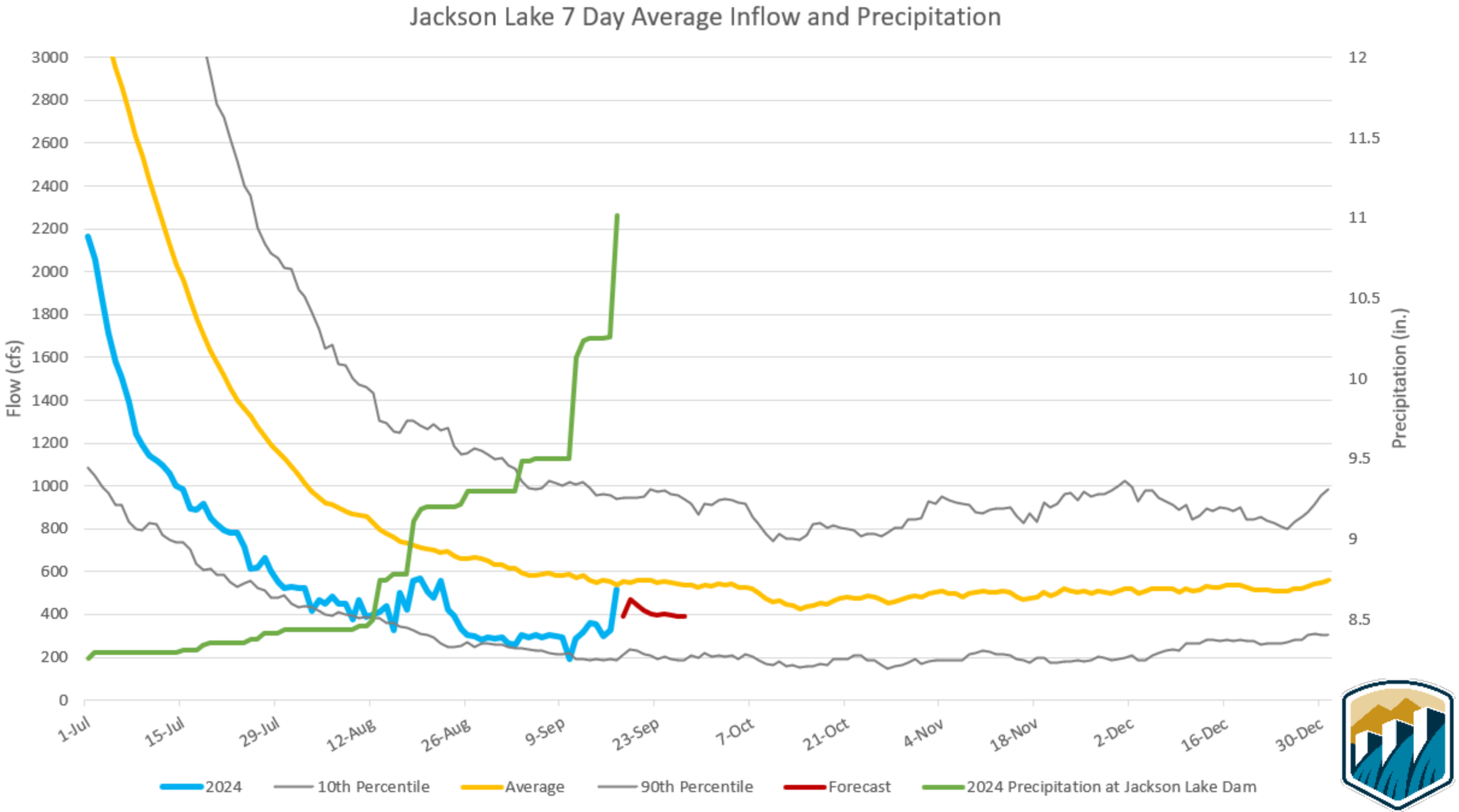

Unregulated Snake River near Heise, ID
2024
2023
10%
50%
90%
cfs
44,000
42,000
40,000
38,000
36,000
34,000
32,000
30,000
28,000
26,000
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
Aug 1
Sep 1
Oct 1
Nov 1
Dec 1
Heat and some Precipitation Driven Large Peak Runoff
Large Drop Off 6/11-6/20
Palisades Full on 6/18



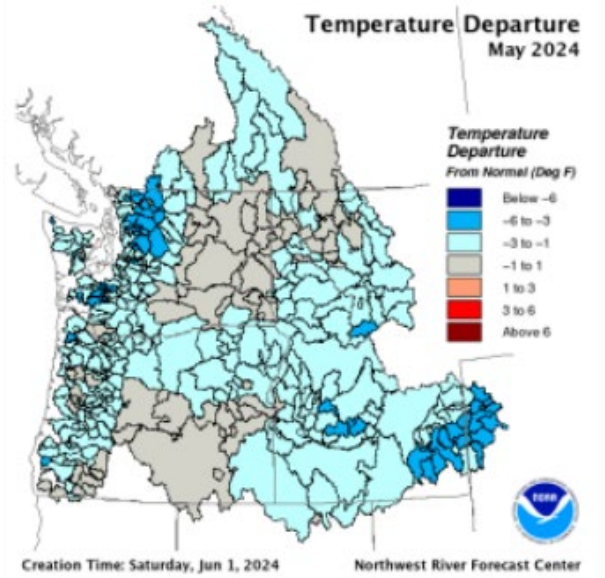
***Peak Storage 6/17/24, 99.8% Full, 2 KAF from full**

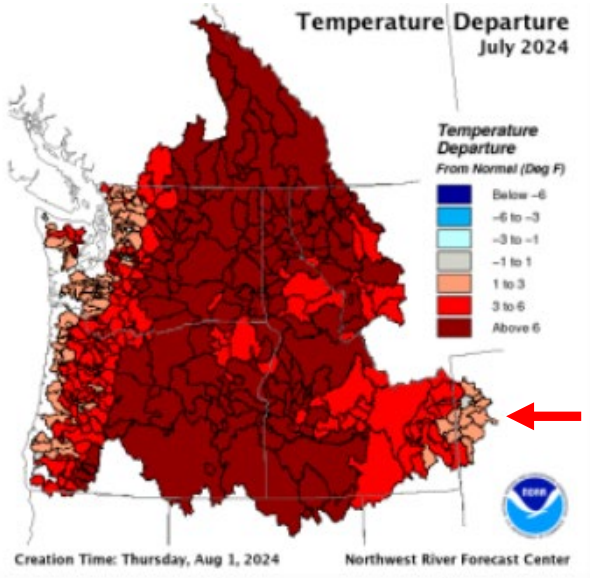
***Currently 69 KAF Higher than Last Year**

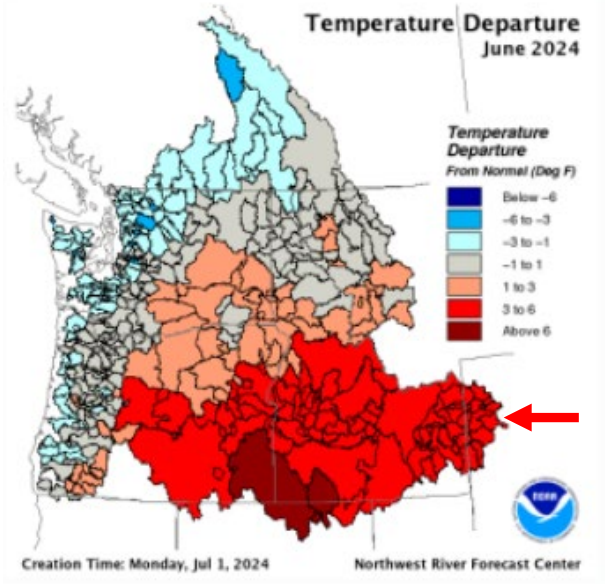

Jackson Lake Storage and Outflow
PNRO - Idaho Falls
Full
Maximum Winter Pool, 76% Full
JCK AF
JCK QD
acre-feet
cfs
850,000
800,000
750,000
700,000
650,000
600,000
550,000
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
7,000
6,500
6,000
5,500
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
11/10/2023
1/9/2024
3/9/2024
5/8/2024
7/7/2024
9/5/2024
Chart Options
Print Chart

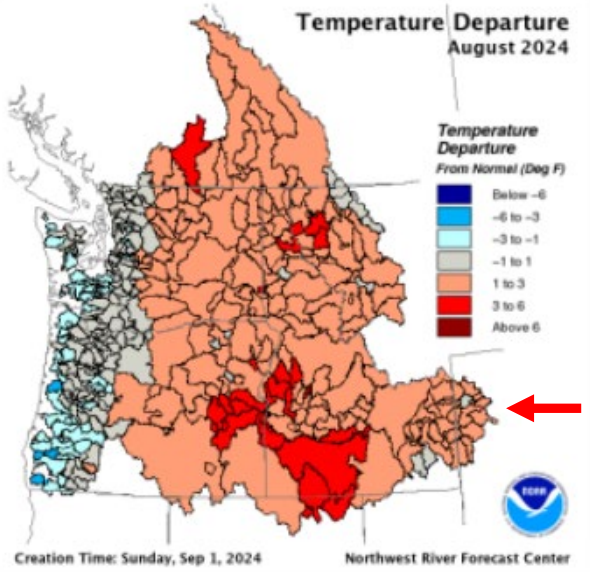

Jackson Lake 7 Day Average Inflow and Precipitation
Flow (cfs)
Precipitation (in.)
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
12
11.5
11
10.5
10
9.5
9
8.5
1-Jul
15-Jul
29-Jul
12-Aug
26-Aug
9-Sep
23-Sep
7-Oct
21-Oct
4-Nov
18-Nov
2-Dec
16-Dec
30-Dec
2024
10th Percentile
Average
90th Percentile
Forecast
2024 Precipitation at Jackson Lake Dam

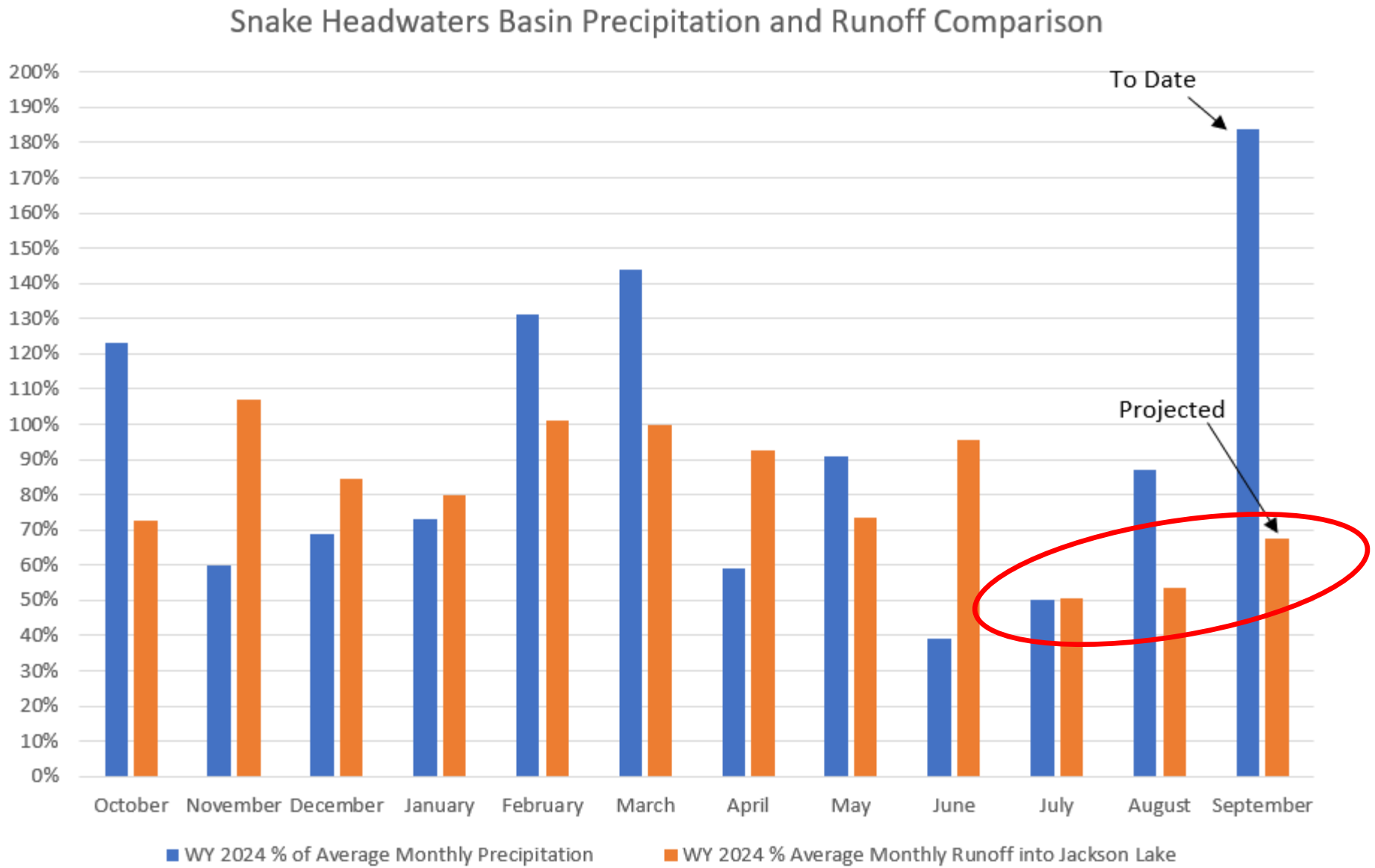
Hot June, July and August










Snake Headwaters Basin Precipitation and Runoff Comparison
200%
190%
180%
170%
160%
150%
140%
130%
120%
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
To Date
Projected
October
November
December
January
February
March
April
May
June
July
August
September
WY 2024 % of Average Monthly Precipitation
WY 2024 % Average Monthly Runoff into Jackson Lake

2024 Jackson Lake Summer Outflow Summary

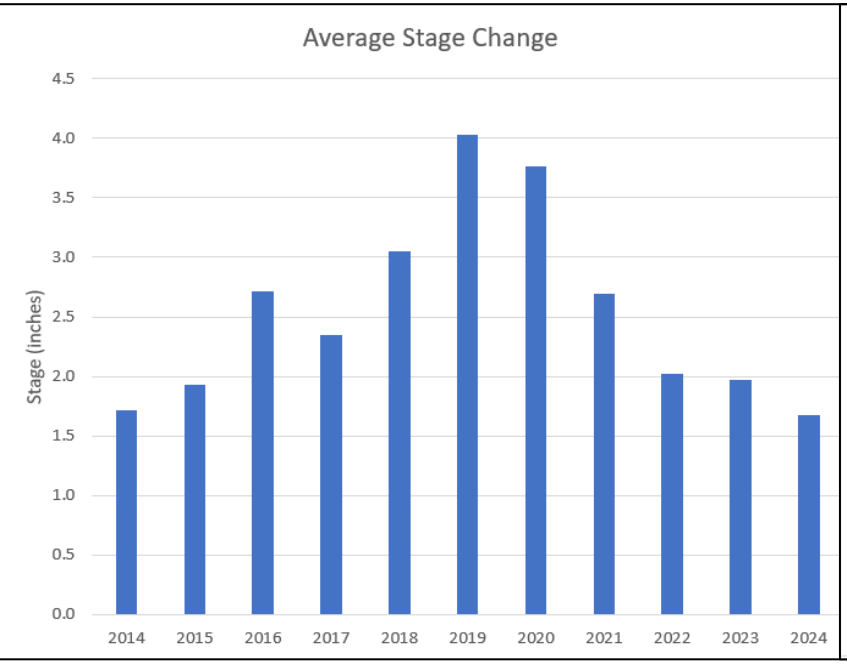
2024 Scenario, Jackson Lake from 99.8% Full on 6/17 to 76% Full on 10/1		
Inflow Levels	Inflow (AF)	Average Outflow Needed (cfs)
90%	555,000	3,590
Average	299,000	2,370
10%	108,000	1,460
Actual	171,000	1,760

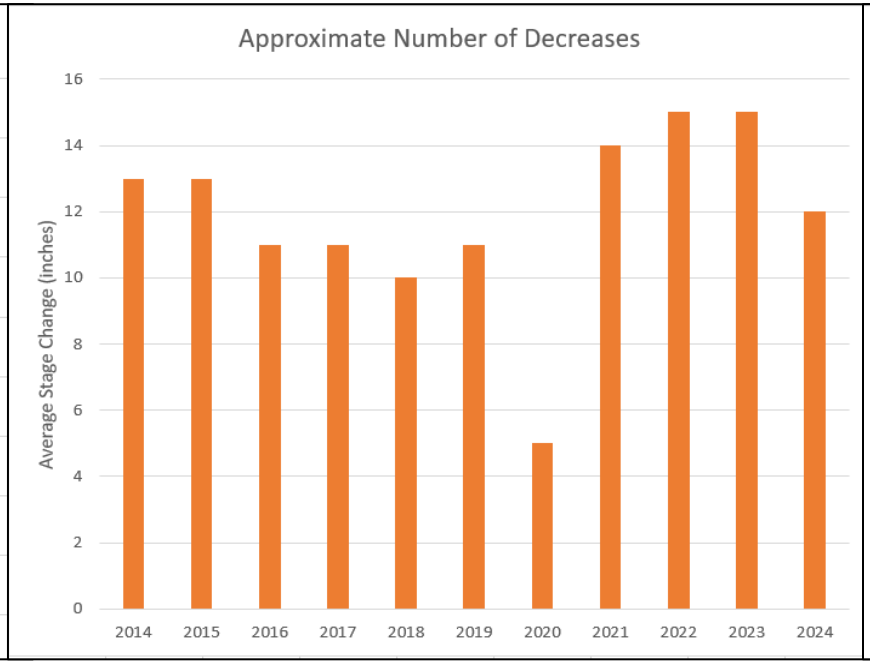
- In May we anticipated approximately 2,000 cfs for the summer flow
- Inflow on 6/17 3,700 cfs
- Outflow on 6/17 3,300 cfs
- Inflow elevated up to 2,500 cfs until 6/26
- Current Outflow 1,380 cfs
- 2024 Average Outflow 6/17-9/30 1,740 cfs
- Factors in Resulting Summer Outflows and Ramp Down Schedule
  - Be close to 76% Full at the end of summer/fall
    - Currently projecting to be 3 KAF over winter pool, 76.7% full, at end of the ramp down
  - Idaho State University Led Ramp Down Study
  - Relatively low summer/fall inflows
    - High Temperatures melting snowpack, summer inflow translated into additional water to fill the reservoir system in June
    - Low summer precipitation
  - September Precipitation
  - No required O&M affects to Lake level or outflow
  - 5 Coordination Meetings with Snake River Agency Groups since late July 2024 on conditions, outlook and requests

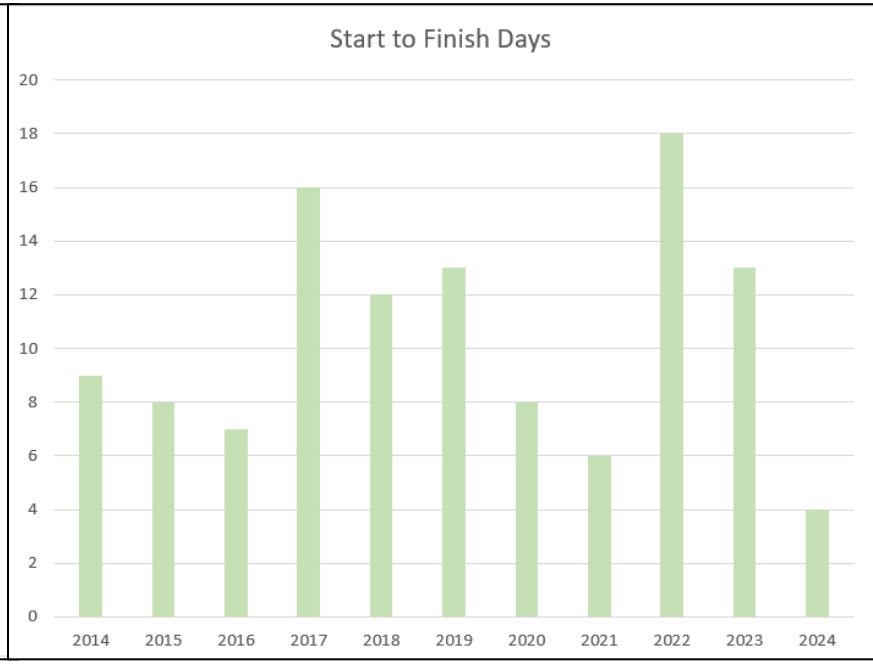
Last 10 Years of Jackson Lake Dam Ramp Downs

		Approximate				
	Year	Start (cfs)	End (cfs)	Average Stage Decrease (inches)	Approximate Number of Decreases	Average Flow Change (cfs)
	2014	1820	505	-1.7	13	-101
	2015	1780	377	-1.9	13	-108
	2016	1890	280	-2.7	11	-147
	2017	2113	510	-2.3	11	-146
	2018	1783	354	-3.0	10	-143
	2019	3220	280	-4.0	11	-269
	2020	1153	280	-3.8	5	-175
	2021	2955	280	-2.69	14	-190
	2022	2465	280	-2.02	15	-140
	2023	2330	280	-1.97	15	-140
Projection	2024	1380	325	-1.68	9	-85

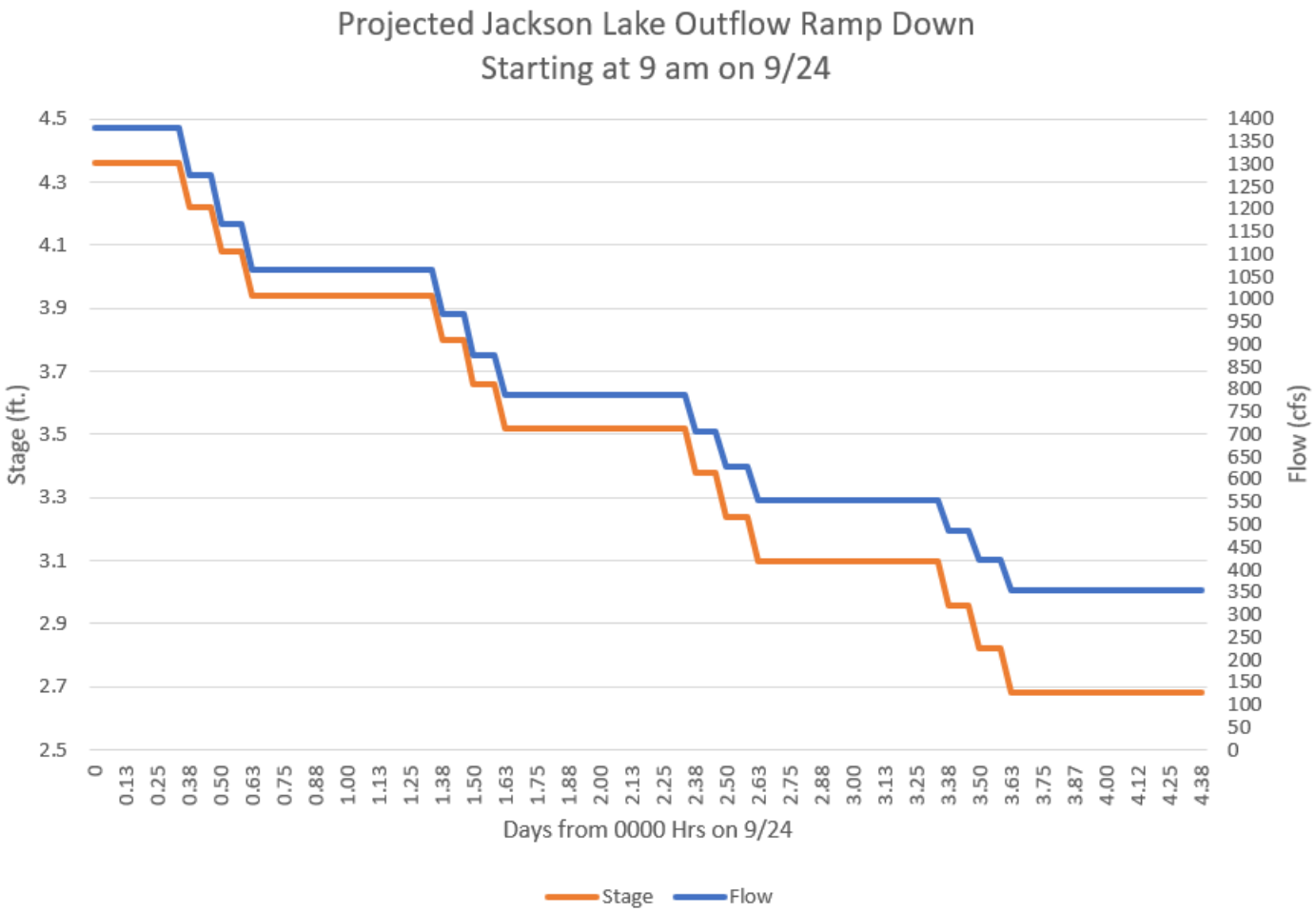
Last 10 Years of Jackson Lake Dam Ramp Downs







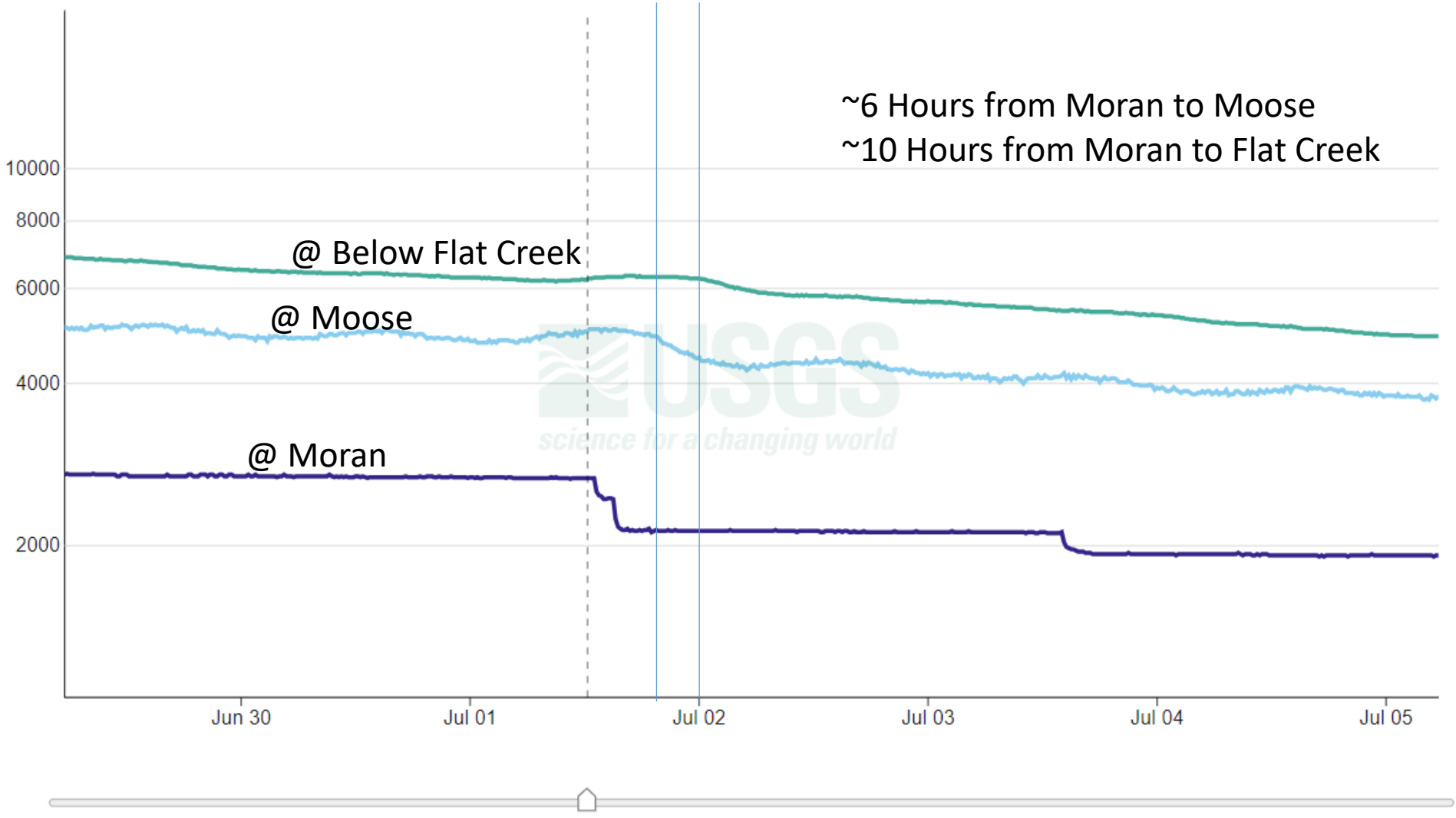
2024 Jackson Lake Ramp Down Schedule

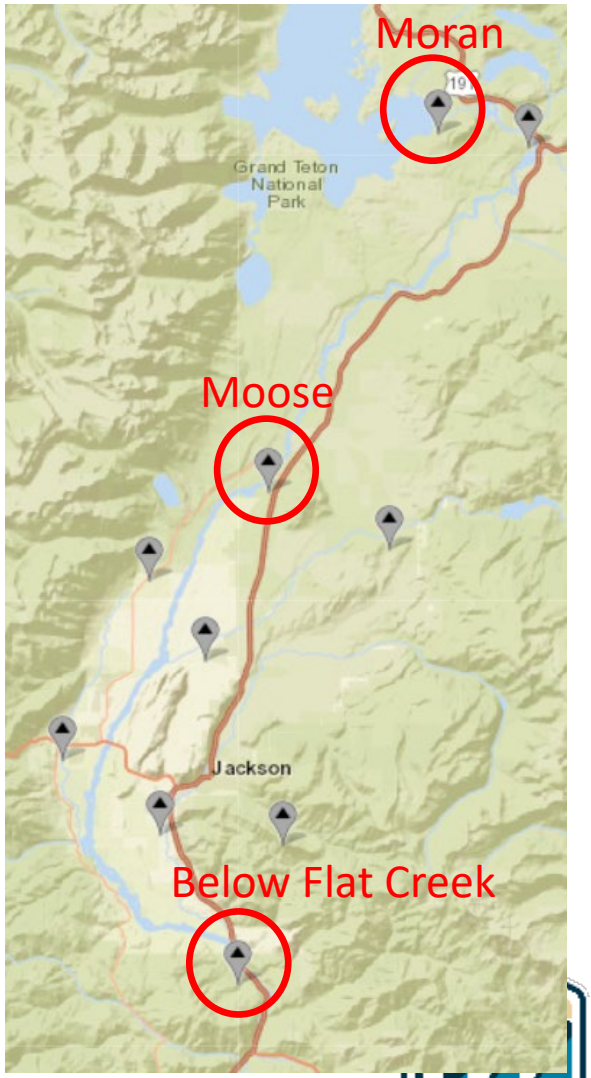


- 1.7 inch reductions in stage at Moran at 9 am, noon and 3 pm
- 4 Days - Tuesday 9/24 to Friday 9/27

Anticipated Snake River Travel Times

~6 Hours from Moran to Moose
~10 Hours from Moran to Flat Creek





For More Information

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Snake River Operations Web Sites

http://www.usbr.gov/pn/snakeriver/water/jacksonlake/index.html
http://www.usbr.gov/pn/hydromet/uppersnake/index.html
USBR HydroMet - http://www.usbr.gov/pn/hydromet/
Northwest River Forecast Center - http://www.nwrfc.noaa.gov/rfc/
NRCS SNOTEL Data - http://www.id.nrcs.usda.gov/snow/