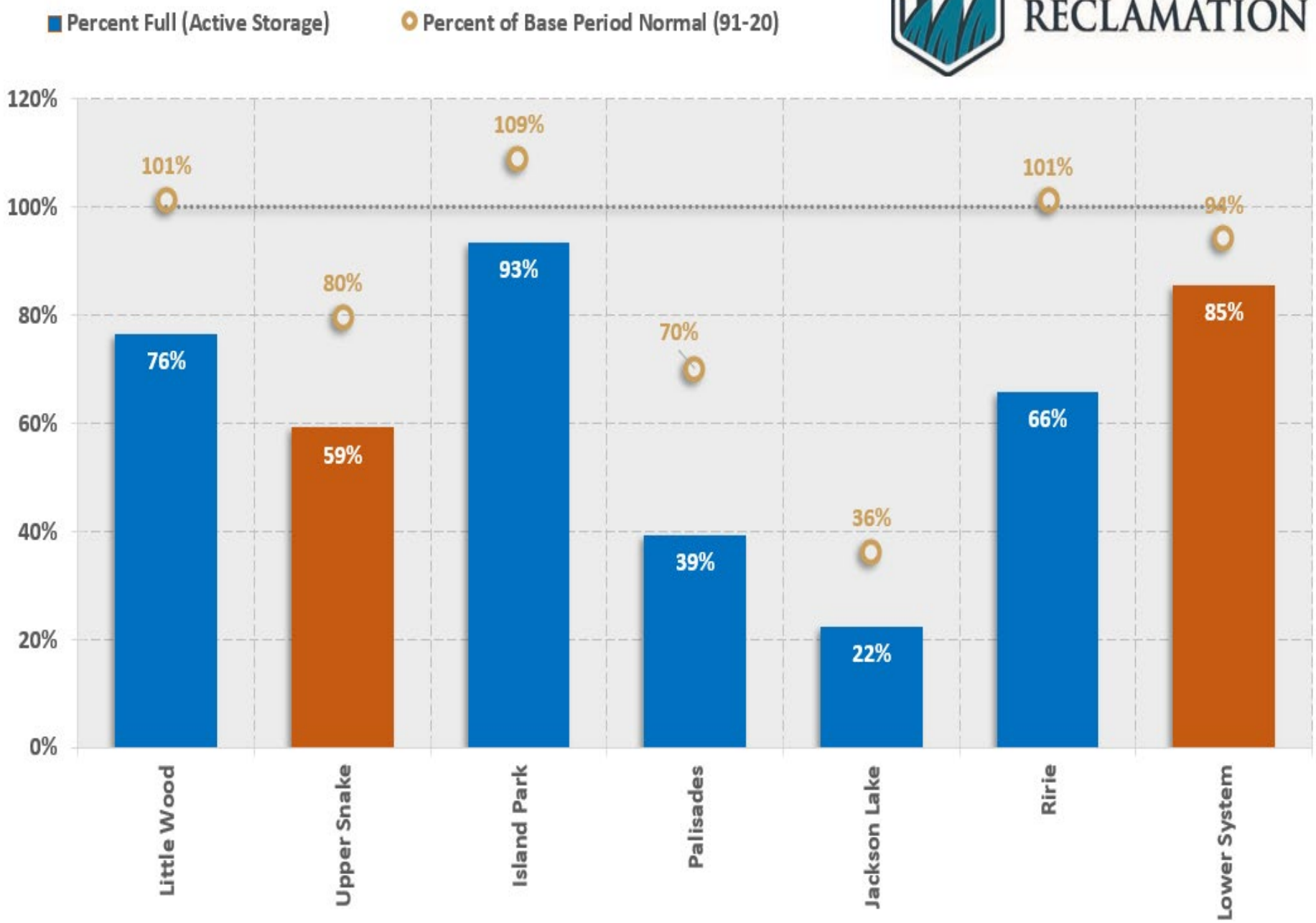
BUREAU OF RECLAMATION

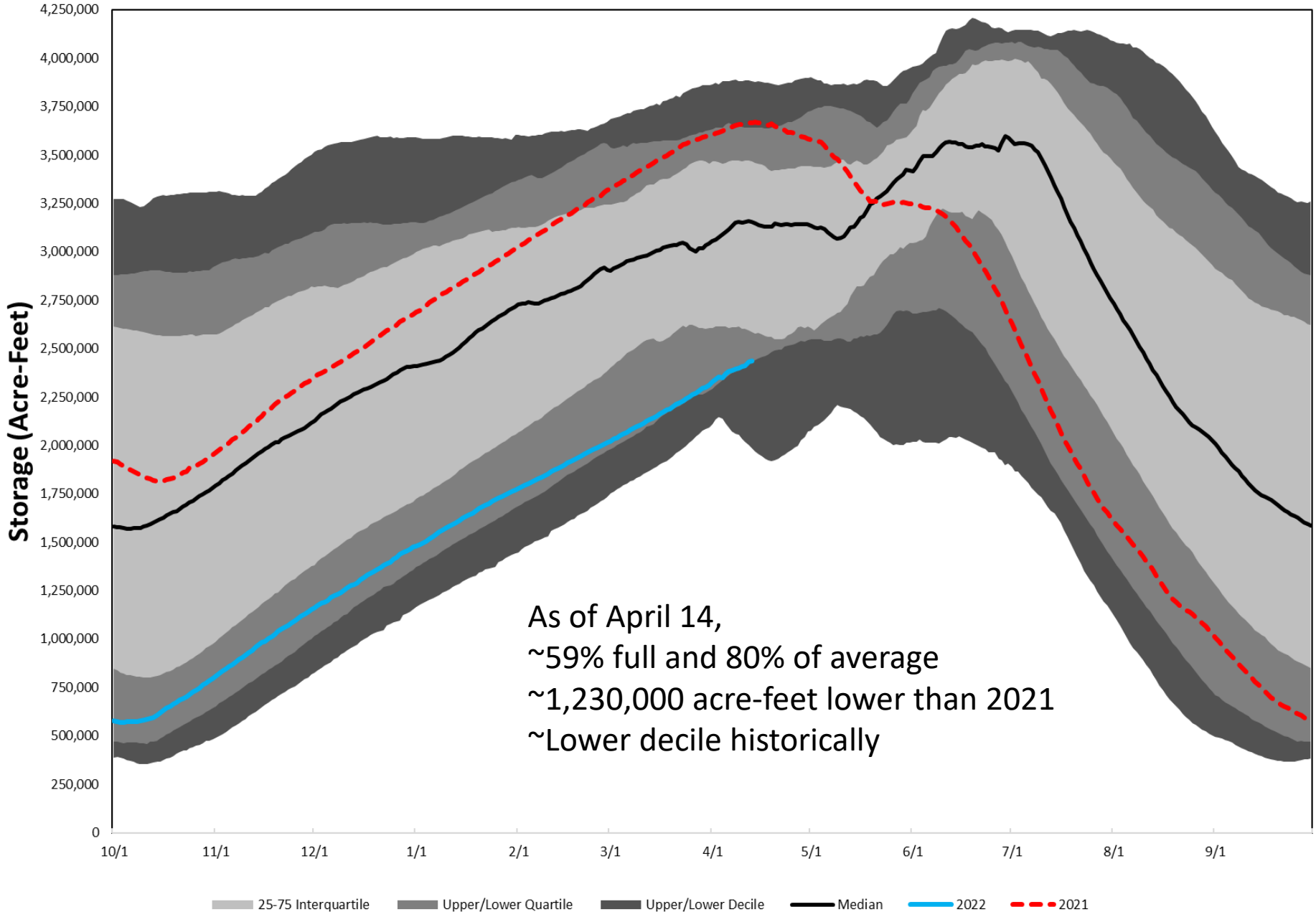
Idaho Water Supply Meeting
April 15, 2022
Snake River above King Hill

Snake above King Hill Storage (Apr 14)

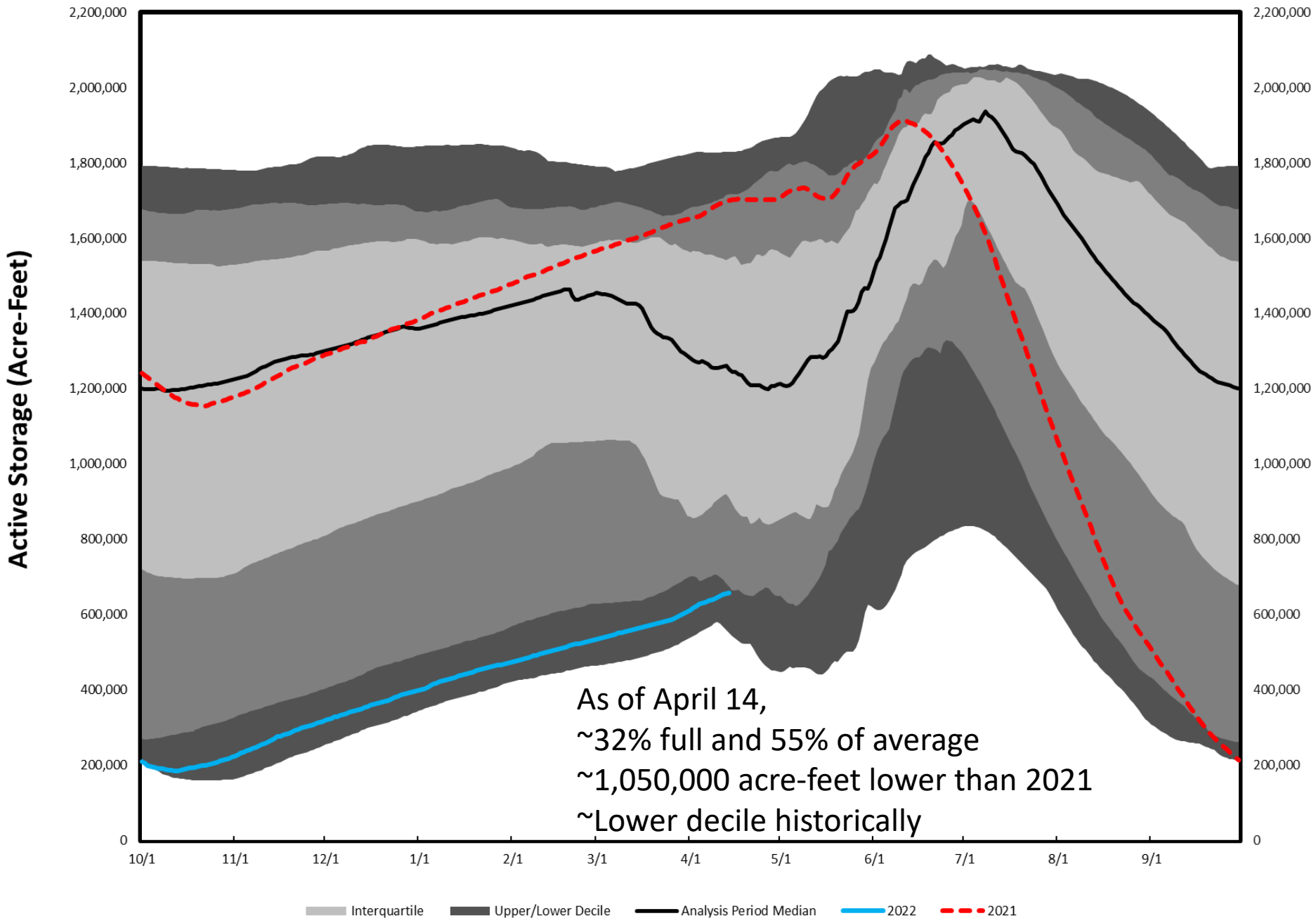


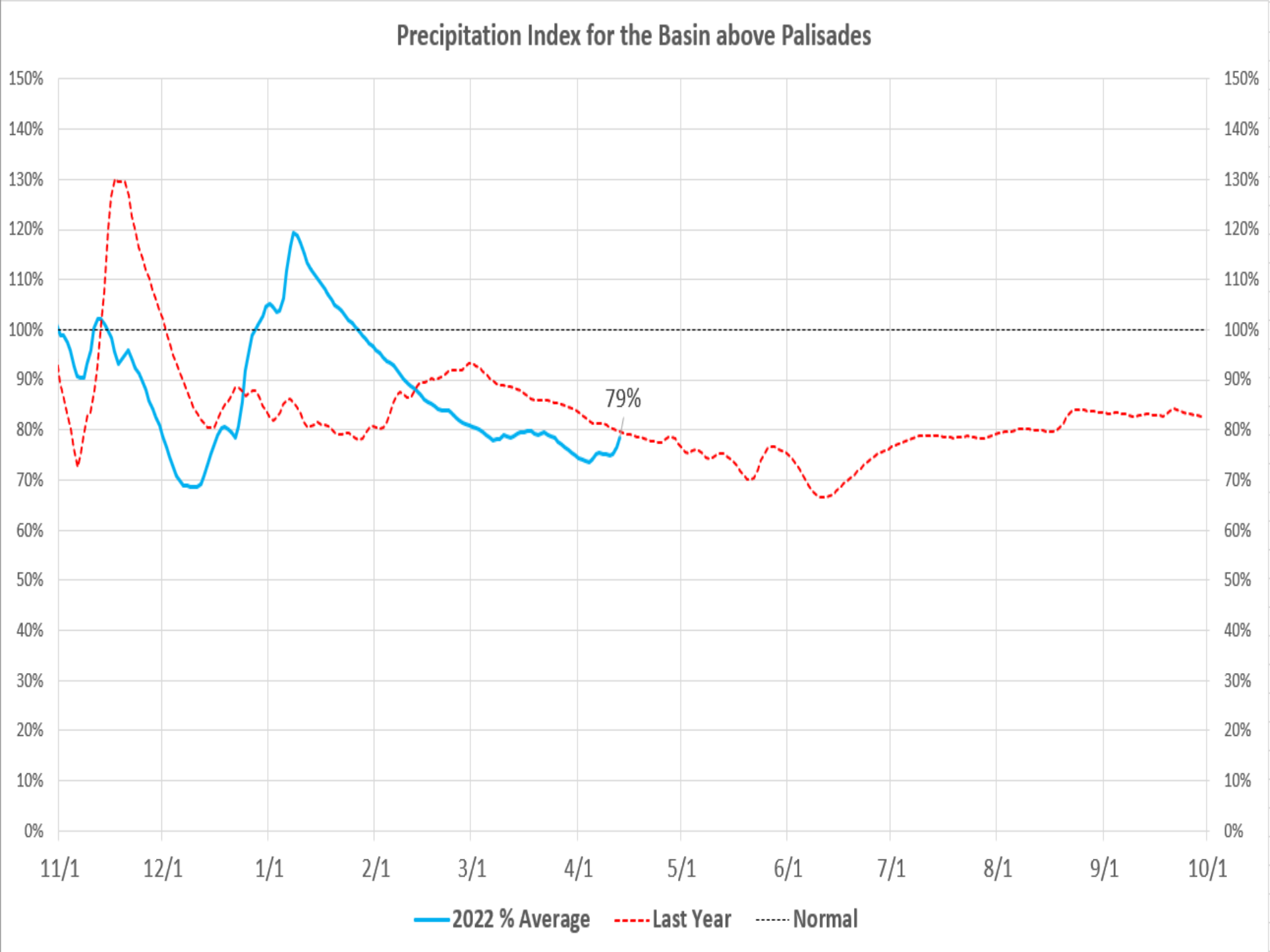
Upper Snake Reservoir System Total Storage (Acre-Feet)

Analysis Period 1977-2021



Jackson and Palisades Storage (1958-2021)

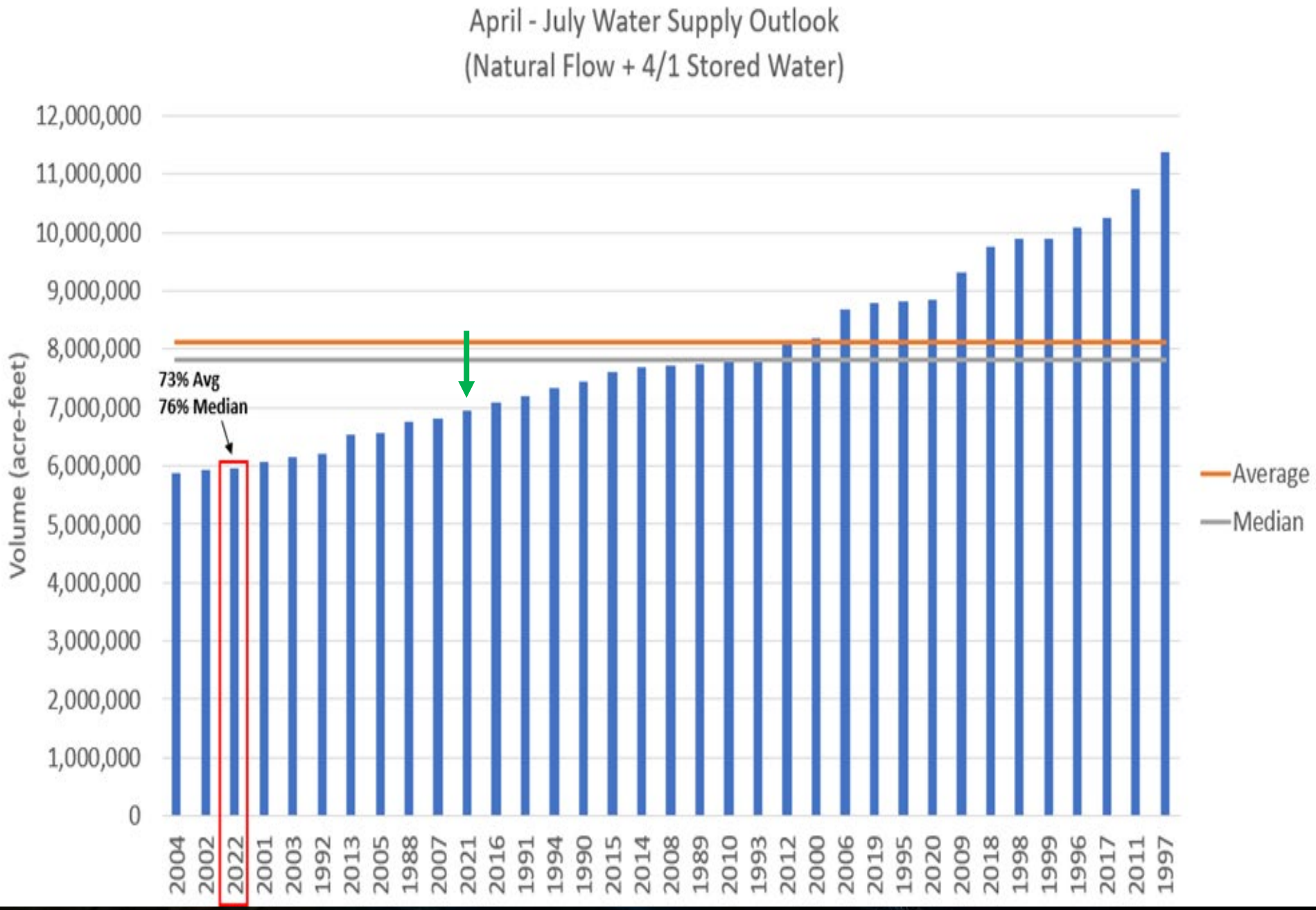



Precipitation Index for the Basin above Palisades
150%
140%
130%
120%
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
79%
11/1
12/1
1/1
2/1
3/1
4/1
5/1
6/1
7/1
8/1
9/1
10/1
2022 % Average
Last Year
Normal

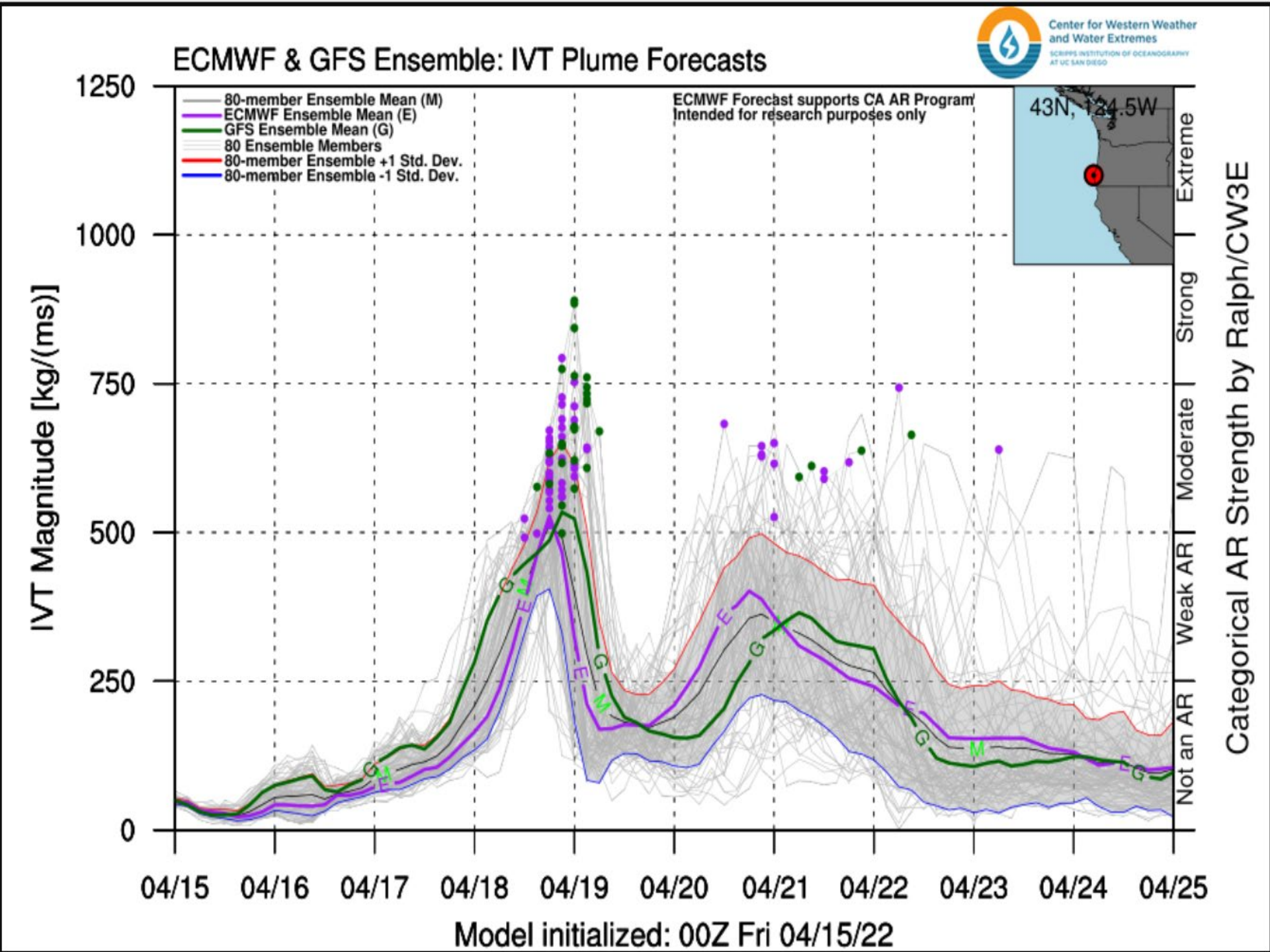
CURRENT MONTHLY FORECAST SUMMARY
APR 1, 2022

FORECAST POINT	FORECAST PERIOD	1991-2020 AVERAGE (KAF)	FORECAST (KAF)	PERCENT NORMAL
*** HEISE	APR-JUL	3304	2150	65% (-10%)
JACKSON LAKE	APR-JUL	770	503	65% (-10%)
ISLAND PARK	APR-JUL	200	110	55% (-16%)
TETON	APR-JUL	347	215	62% (-11%)
*** RIRIE	APR-JUN	55	25	46% (-17%)
*** LITTLE WOOD	APR-JUL	72	37	51% (-40%)

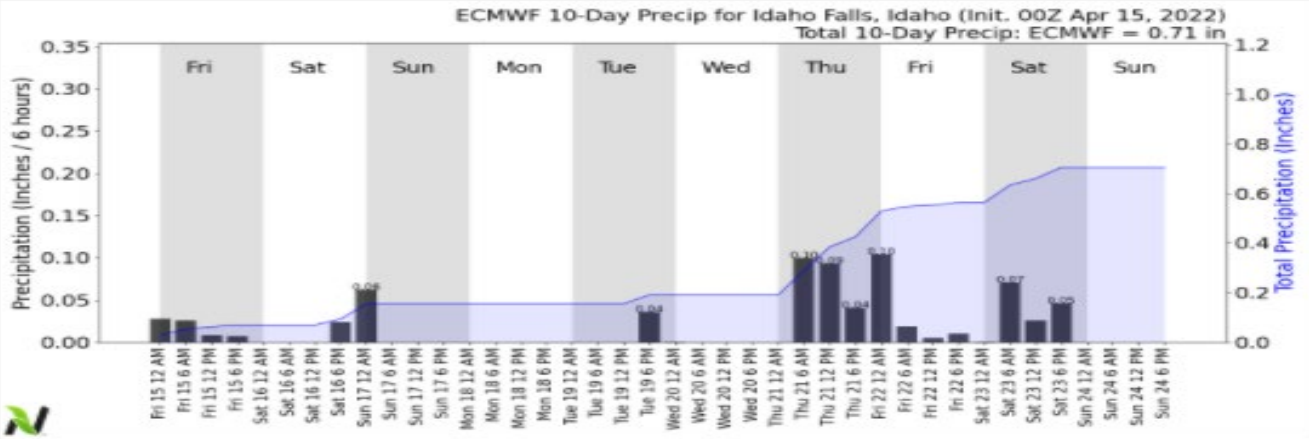
* Coordinated with USACE

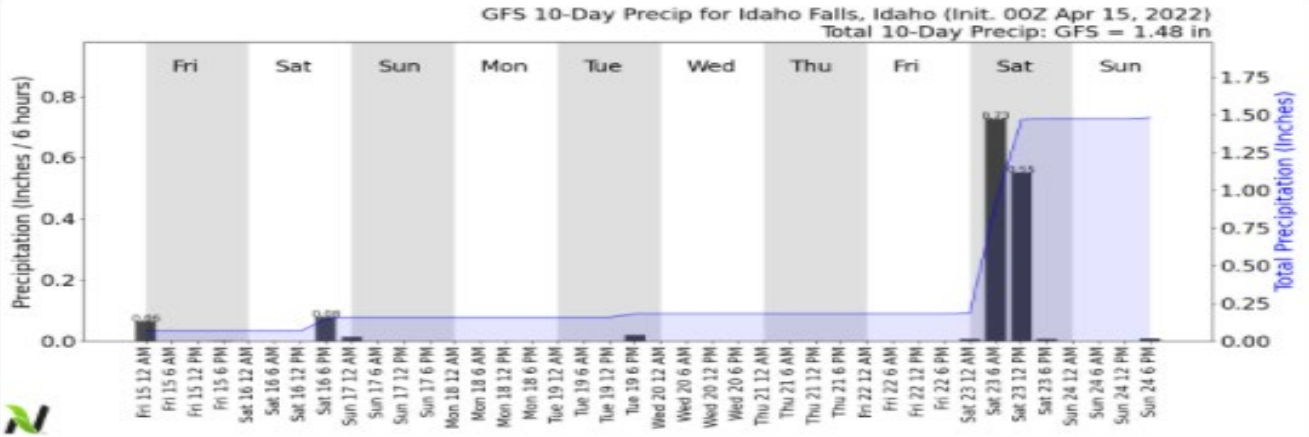


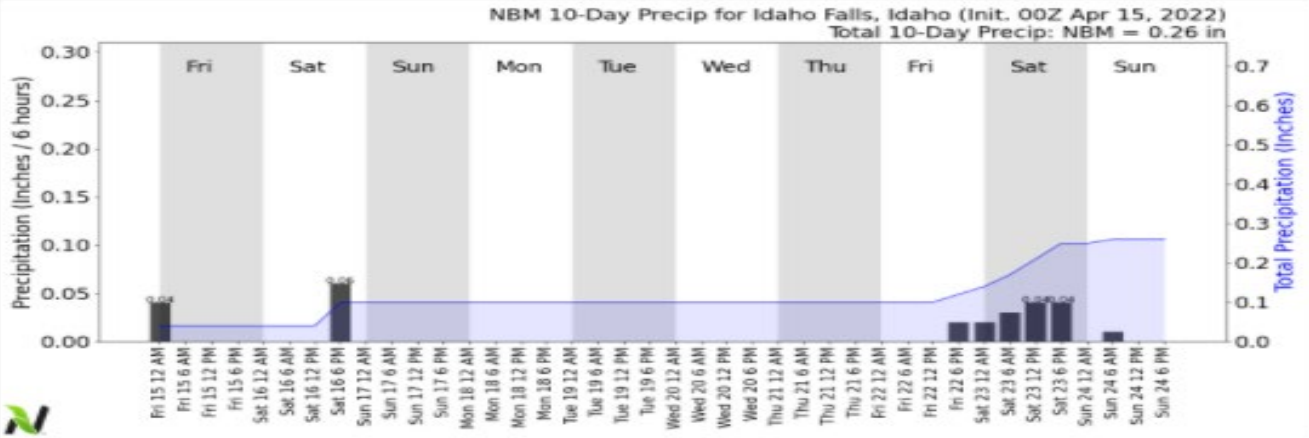
Note: Nov 1-April 5 Total Natural Flow above Milner was lowest 88-22, 2002 2nd lowest

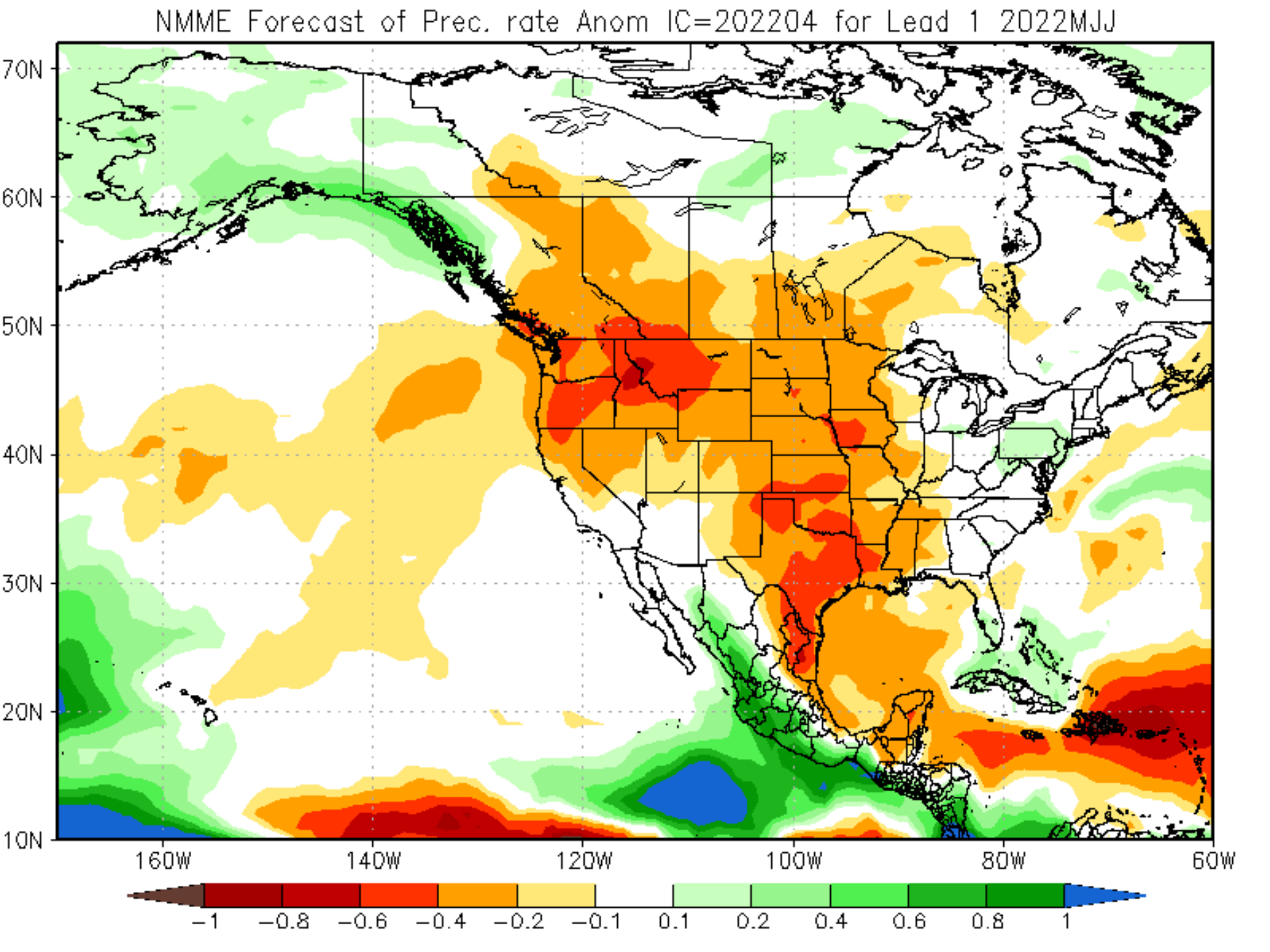

ECMWF & GFS Ensemble: IVT Plume Forecasts
Center for Western Weather and Water Extremes
SCRIPPS INSTITUTION OF OCEANOGRAPHY AT UC SAN DIEGO
80-member Ensemble Mean (M)
ECMWF Ensemble Mean (E)
GFS Ensemble Mean (G)
80 Ensemble Members
80-member Ensemble +1 Std. Dev.
80-member Ensemble -1 Std. Dev.
ECMWF Forecast supports CA AR Program
Intended for research purposes only
43N, 124.5W
IVT Magnitude [kg/(ms)]
1250
1000
750
500
250
0
04/15
04/16
04/17
04/18
04/19
04/20
04/21
04/22
04/23
04/24
04/25
Model initialized: 00Z Fri 04/15/22
Categorical AR Strength by Ralph/CW3E
Extreme
Strong
Moderate
Weak AR
Not an AR

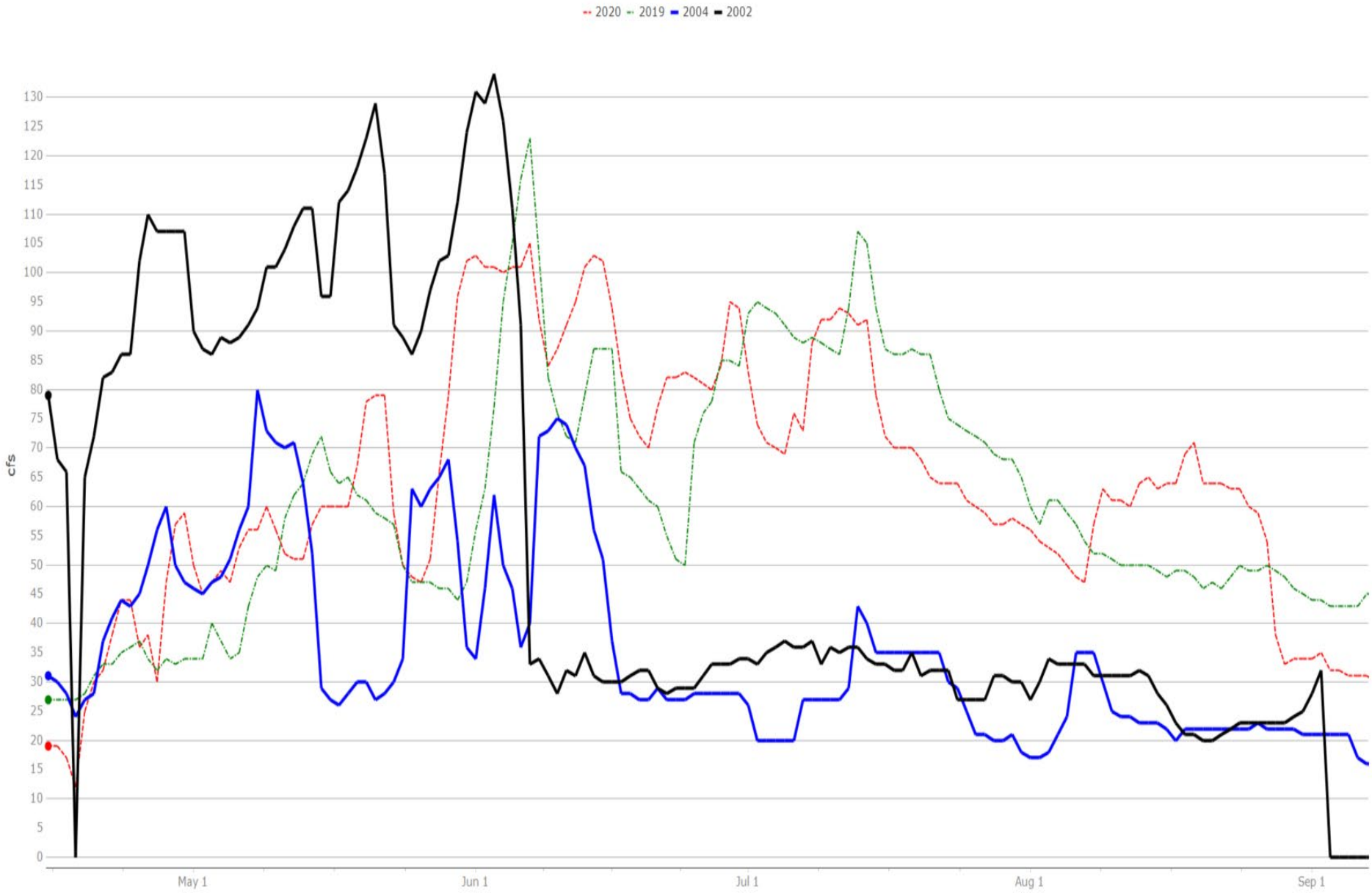
ECMWF, GFS, NBM 10-Day Precipitation Forecasts (every 6 hours)



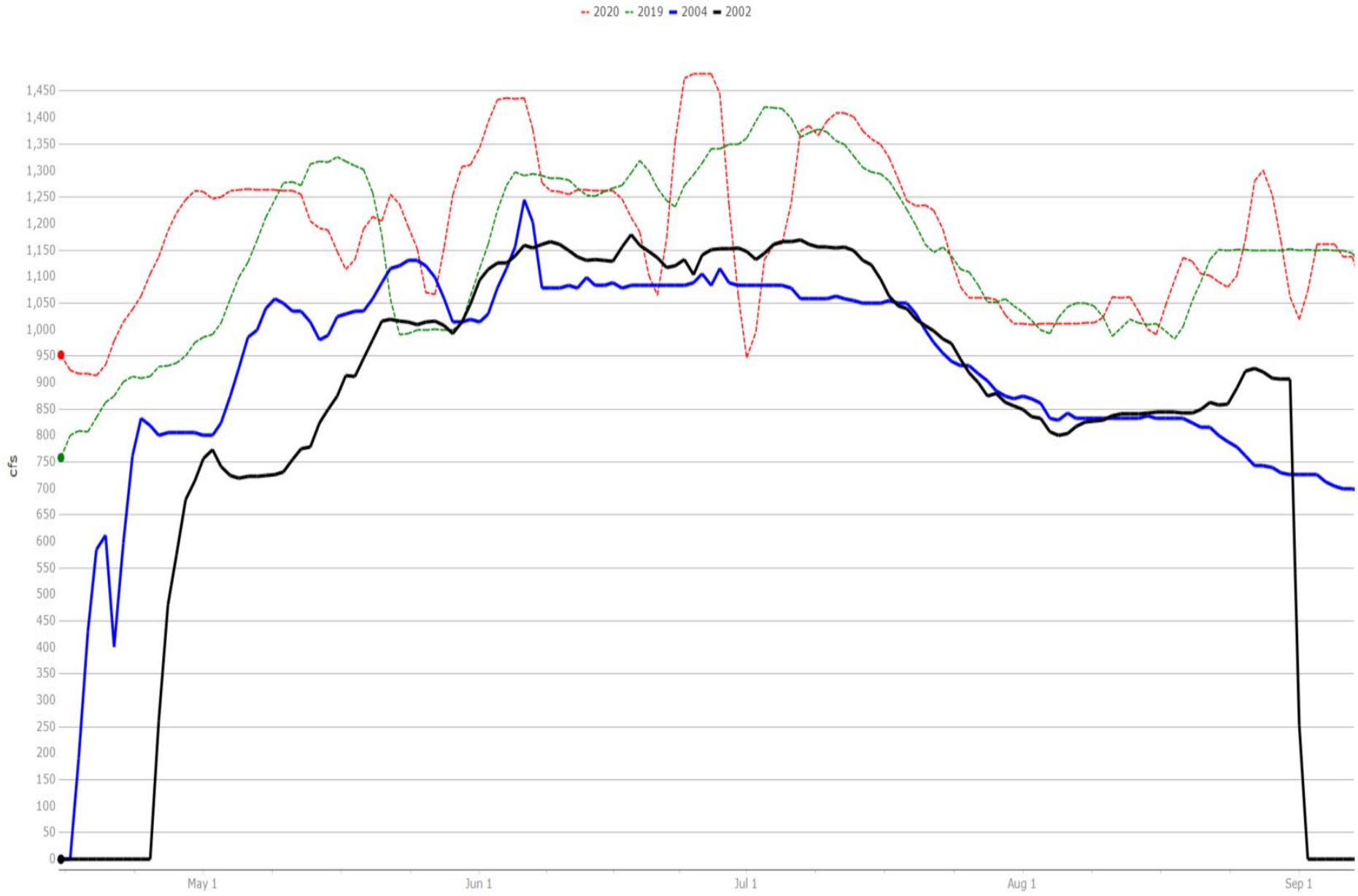




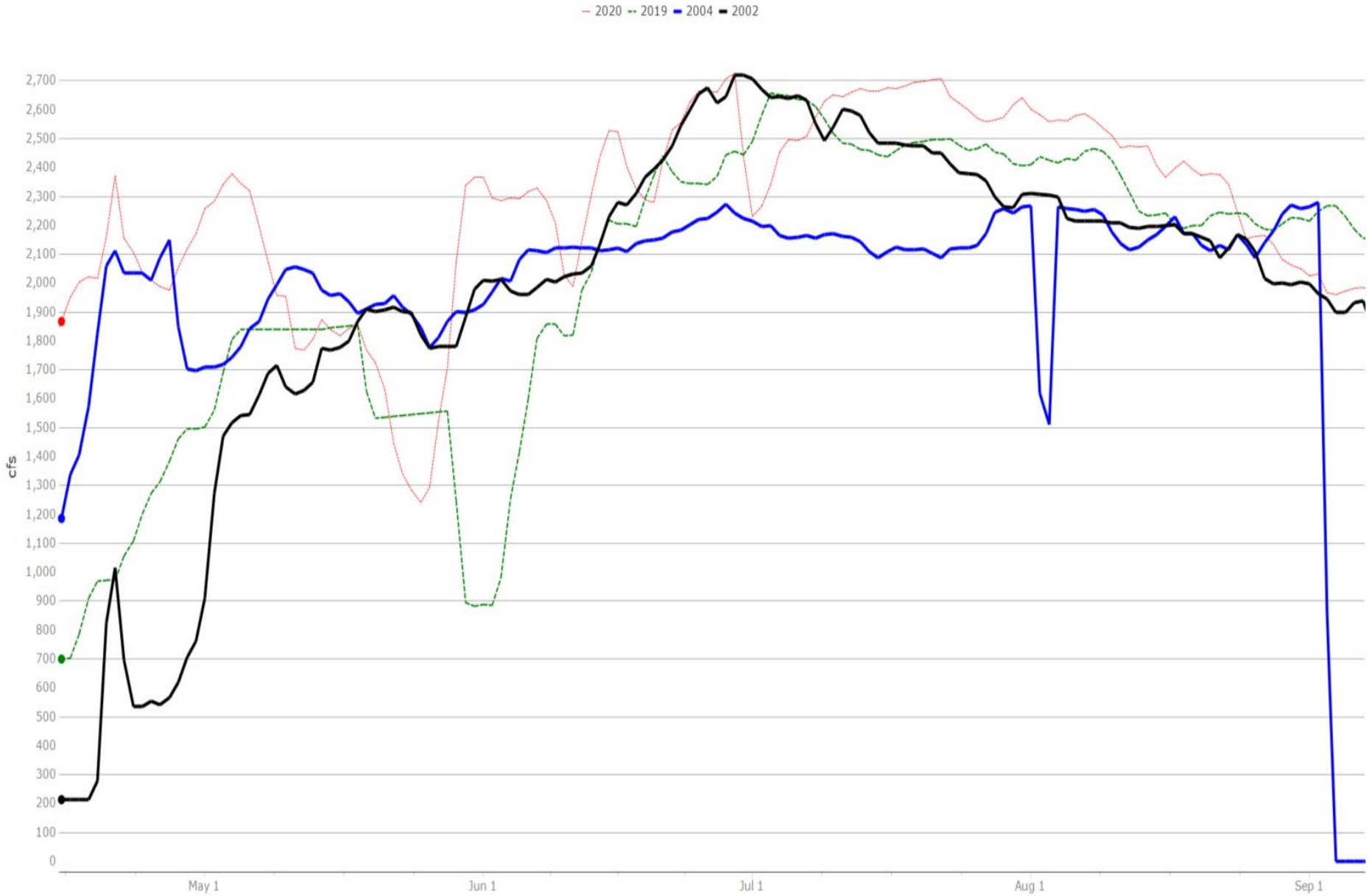

NMME Forecast of Prec. rate Anom IC=202204 for Lead 1 2022MJJ
70N
60N
50N
40N
30N
20N
10N
160W
140W
120W
100W
80W
60W
−1
−0.8
−0.6
−0.4
−0.2
−0.1
0.1
0.2
0.4
0.6
0.8
1



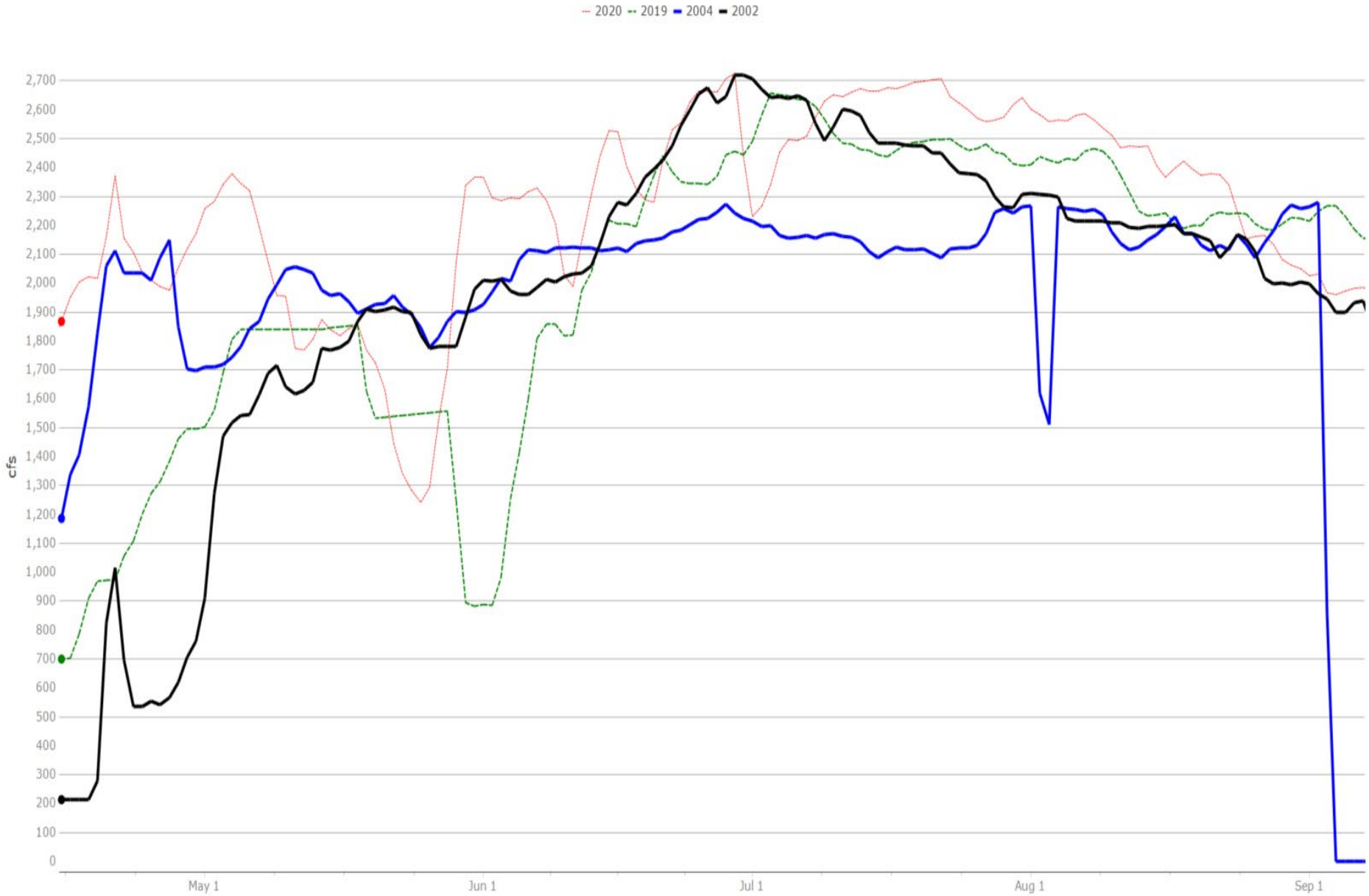
-One example of how water supply impacts diversions – Henry's Fork Canal
-2020 and 2019 "good" years. 2004, not a good year – canal shut off in 2002 in September



-One example of how water supply impacts diversions – South Fork/Mainstem Canal
-2020 and 2019 “good” years. 2004, not a good year. Shut off in 2002 in early September



-One example of how water supply impacts diversions – Lower valley Canal
-2020 and 2019 “good” years. 2004, not a good year – shut off in September



-One example of how water supply impacts diversions – Lower valley Canal
-2020 and 2019 “good” years. 2004, not a good year – shut off in September

Operational Outlook

- Jackson - maintain 280 cfs, anticipating an increase in late April to a fairly consistent flow for the spring-summer-fall
- Palisades – 2,250 cfs, potential for small increases over the next week
- Ririe – 0 cfs, anticipating increase up to ~200 cfs on 4/13-4/14, and then back down to 50 cfs or 0 cfs.
- Island Park - ~425 cfs today, very likely to fill in May
- American Falls: 2,500 cfs, potential for small increases over the next week
- Minidoka – 1300 cfs, potential for small increases over the next week

For More Information

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Upper Snake Field Office

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- Brian Stevens – Water Operations Group Manager (x24)
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- Darrin Fredrickson - Staff Assistant (x17)
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Snake River Operations Web Sites

- Upper Snake water information site - 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/