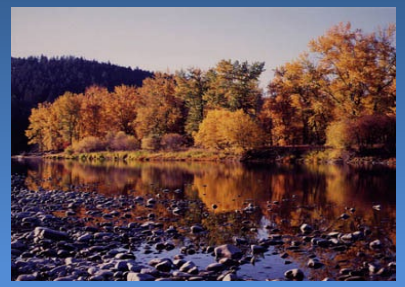
Northwest River Forecast Center



May 2023 Idaho NWRFC Water Supply Briefing

Geoffrey Walters, PE
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Take Home Messages

Despite below normal precipitation totals, and due to colder temperatures, snowpack is near to above normal

Increases in ESP water supply forecast volumes correspond to recent snowpack melt off

In the Upper and Middle Snake, most ESP traces are above normal. North Idaho and Lower Snake Tributaries are a mix of above and below normal

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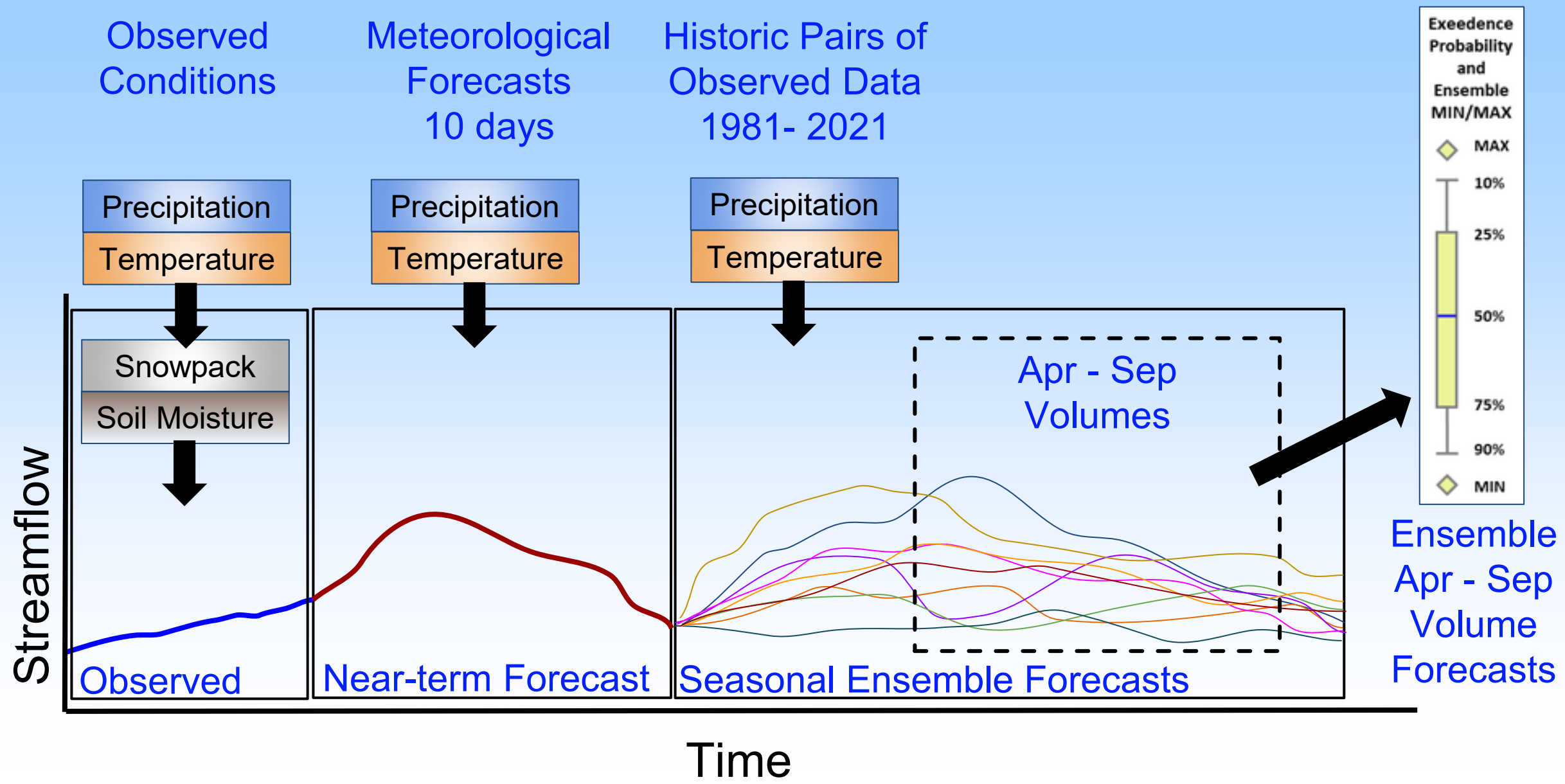
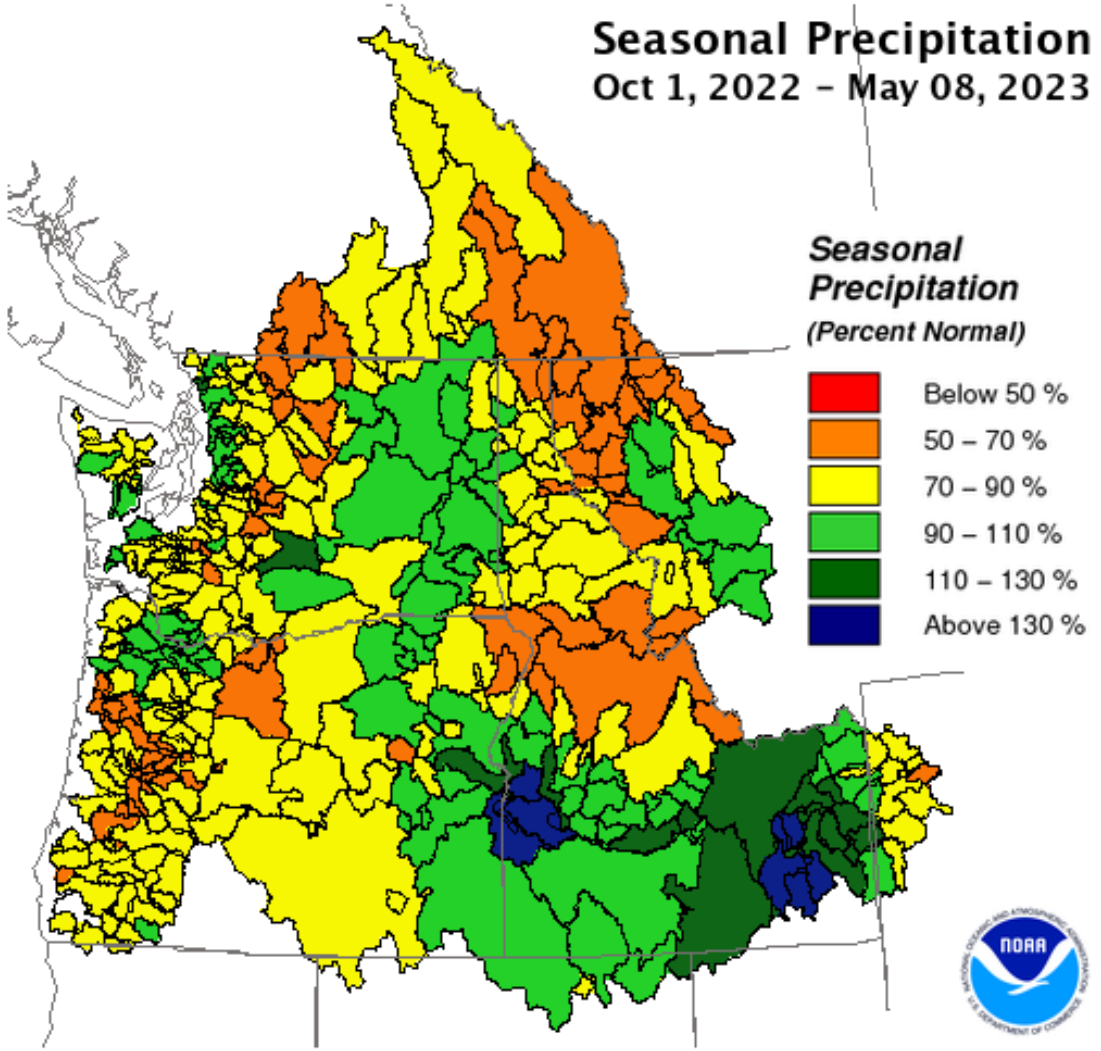
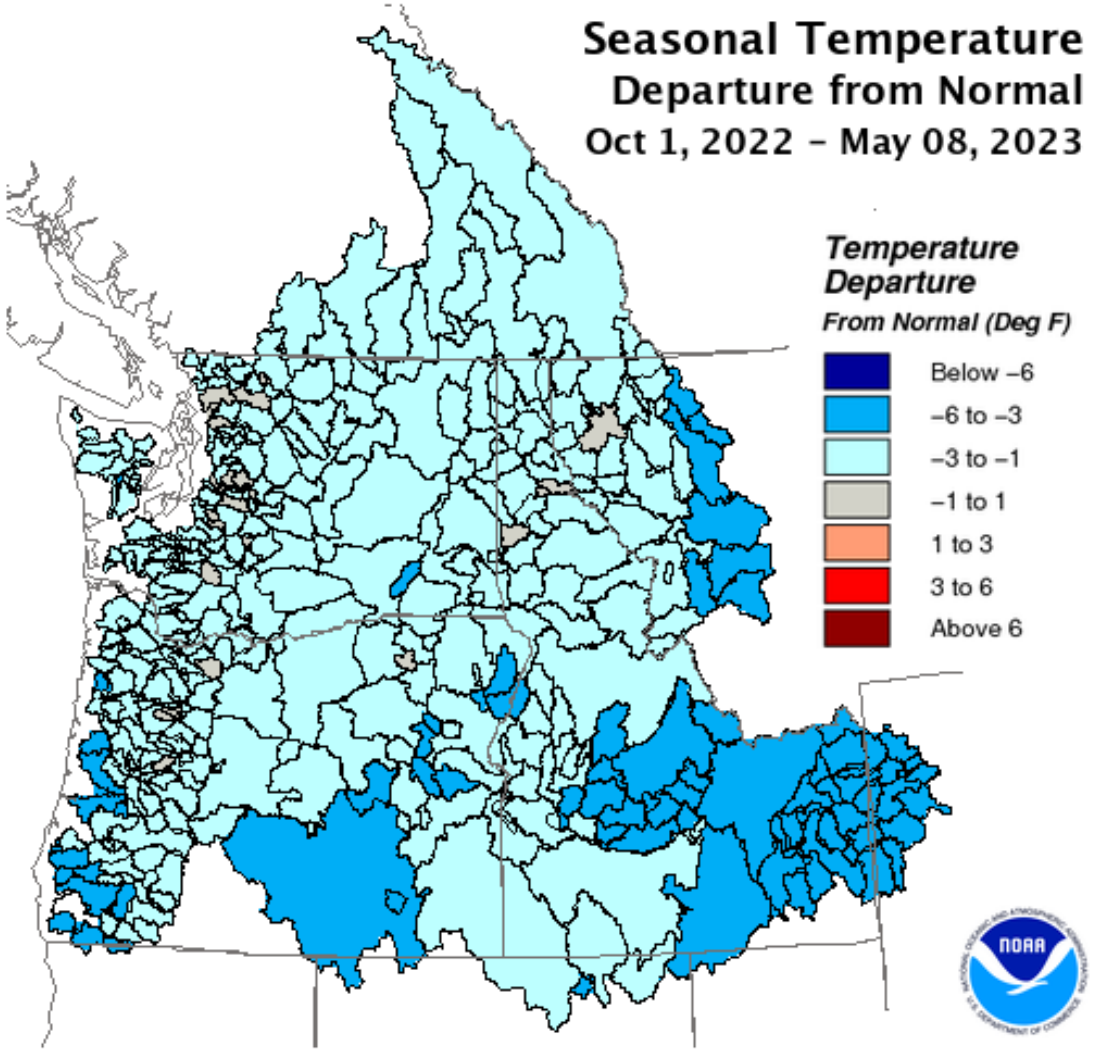
NWRFC Forecast Technique

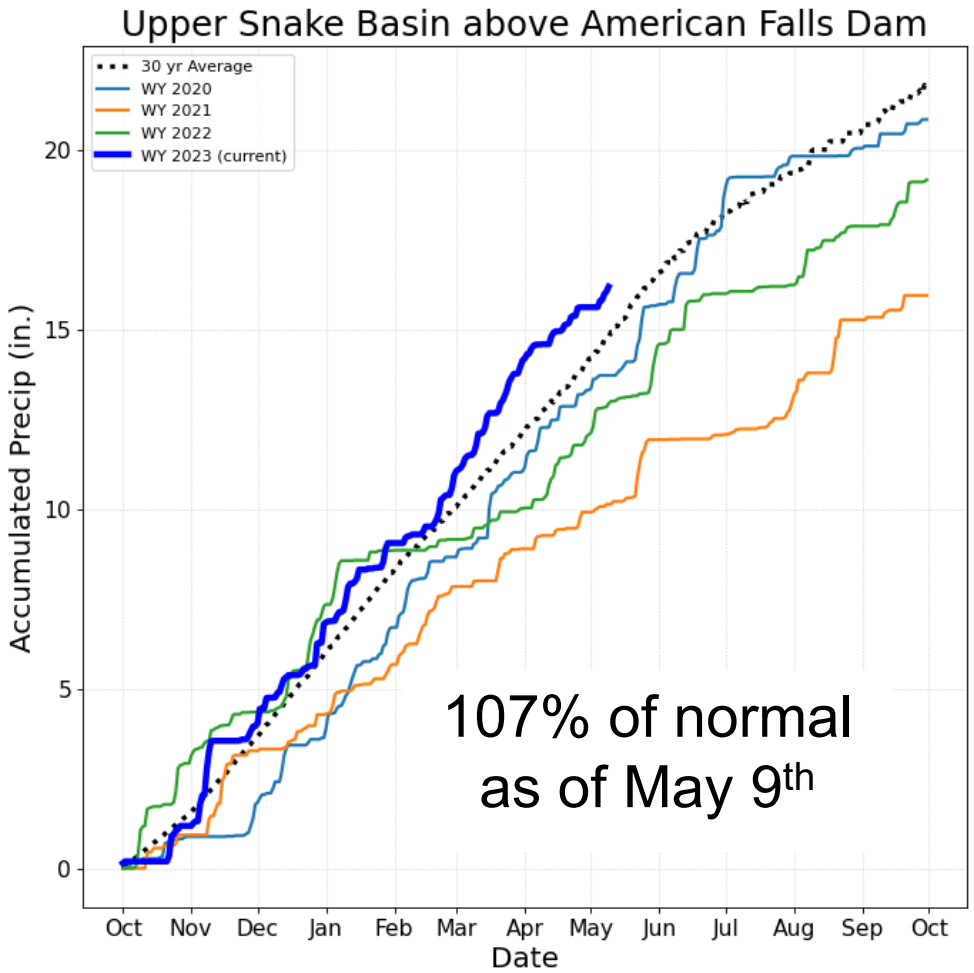


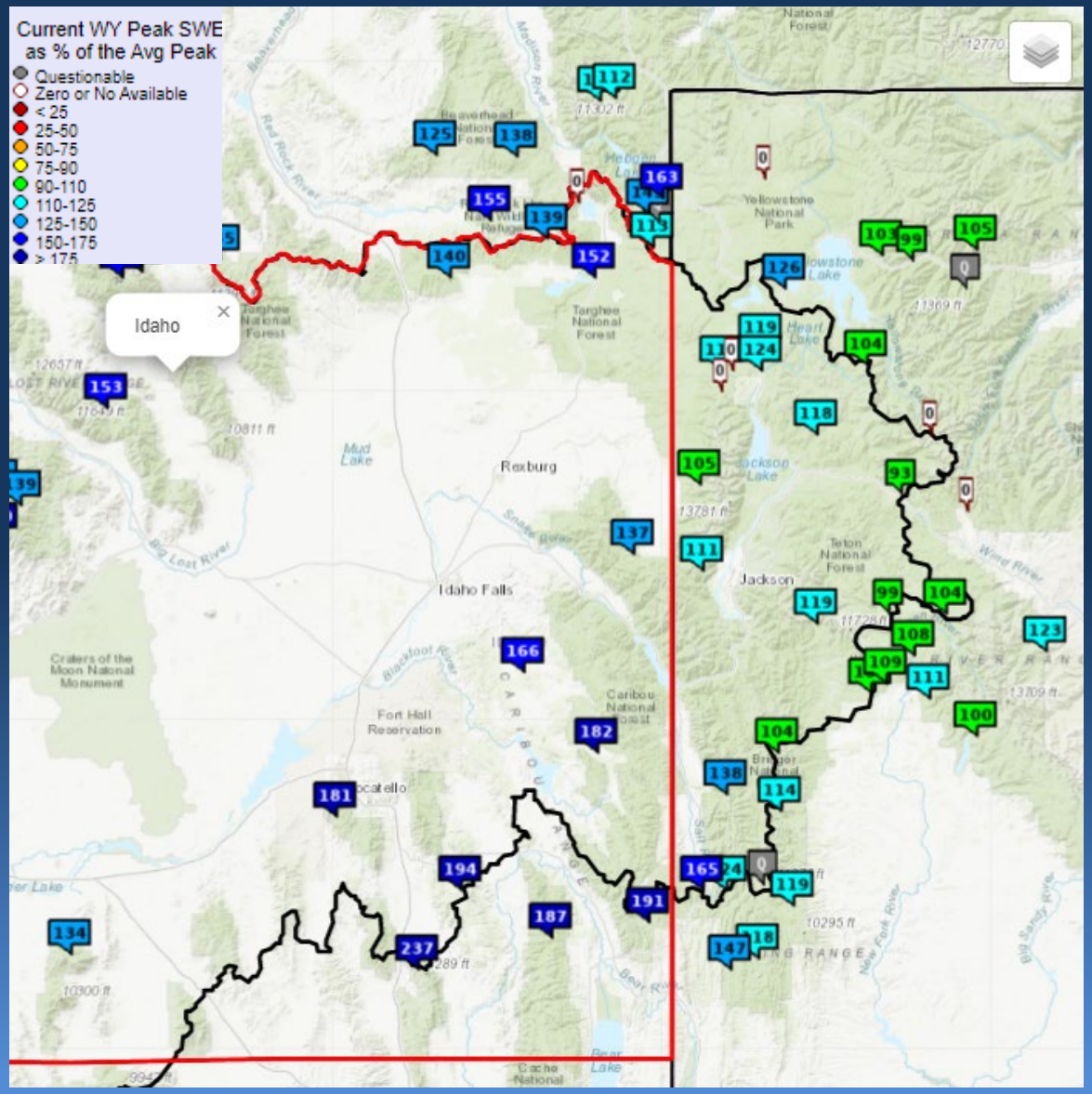
Seasonal Precipitation and Temperature





Accumulated Precipitation and Peak SWE





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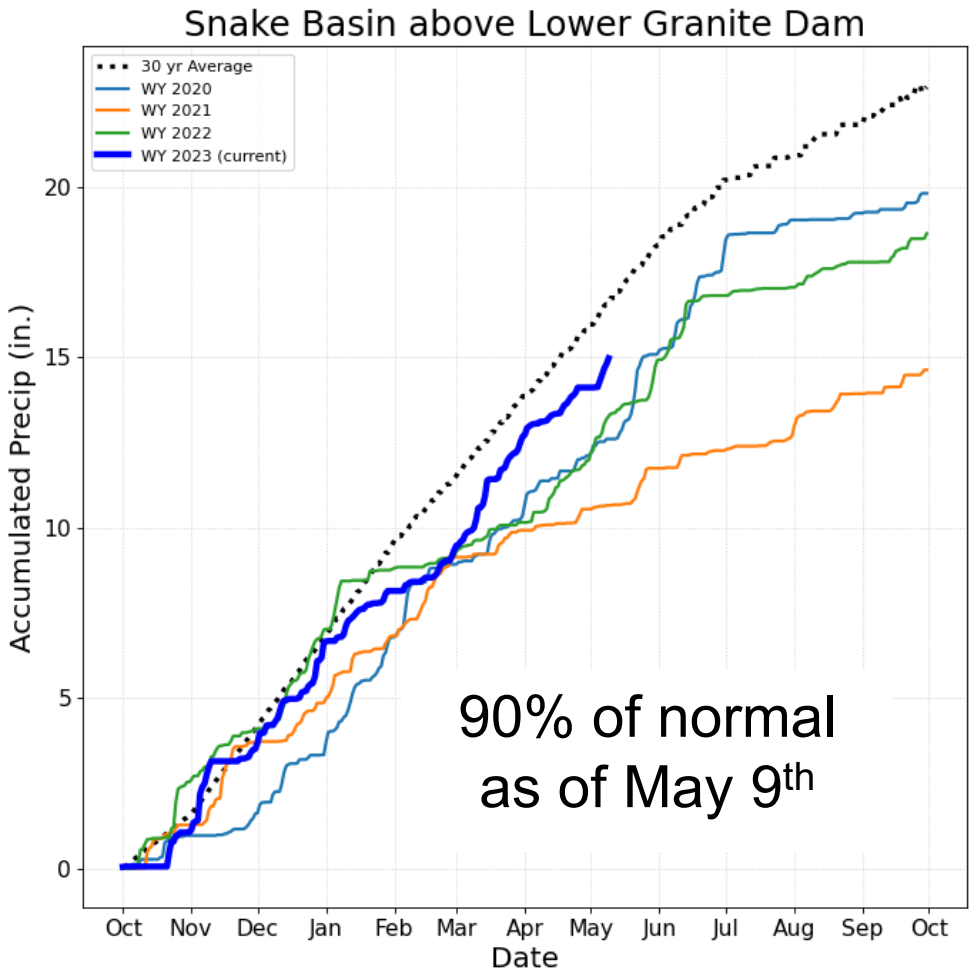
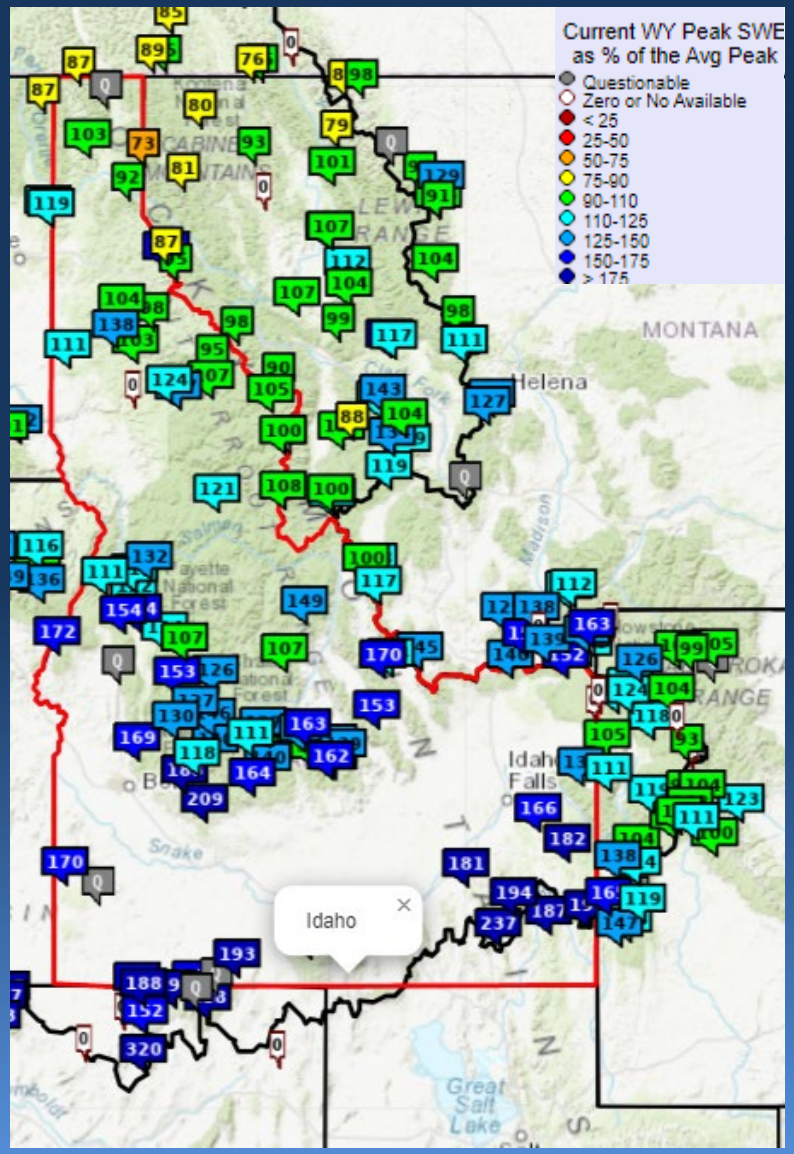
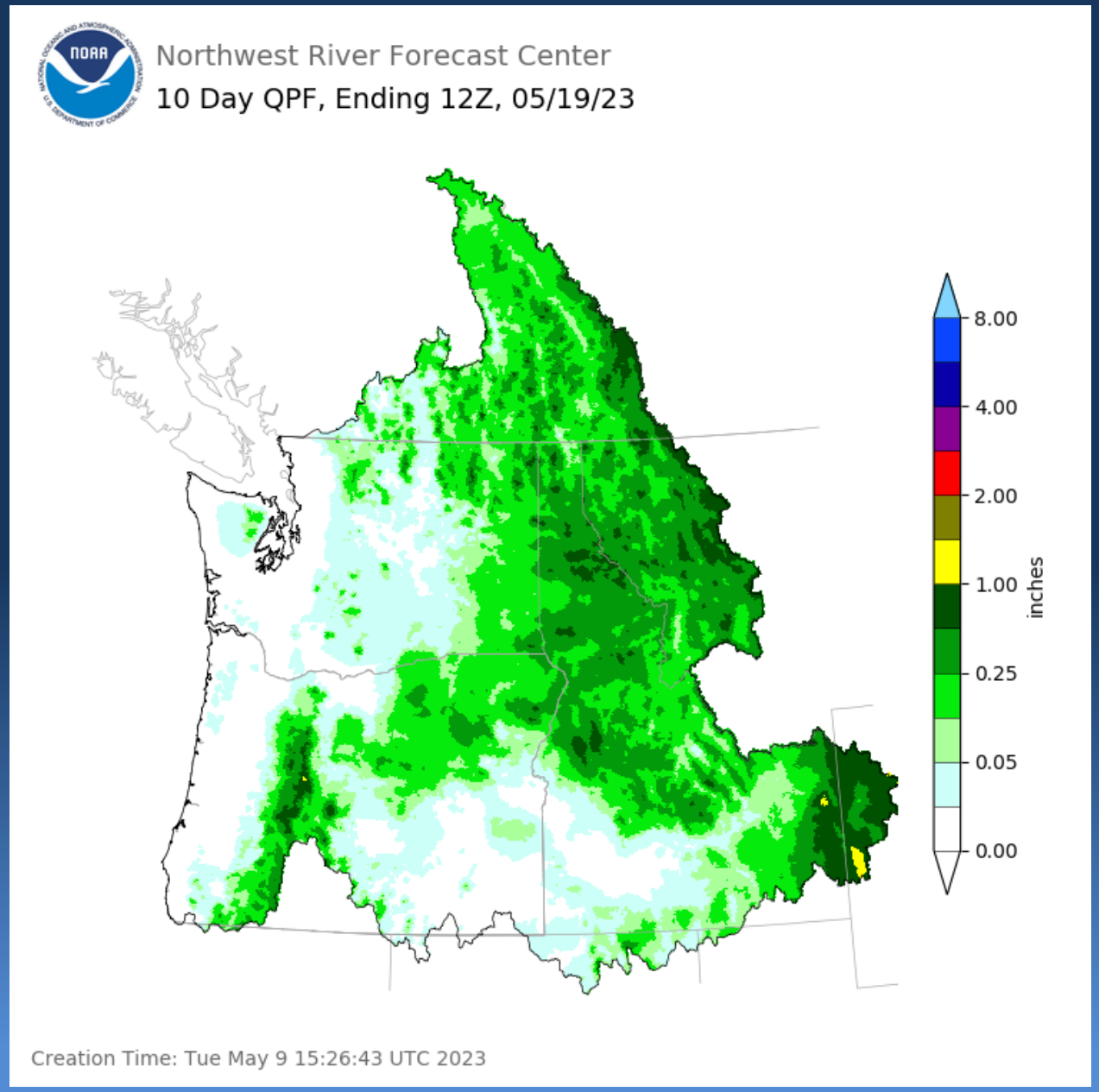
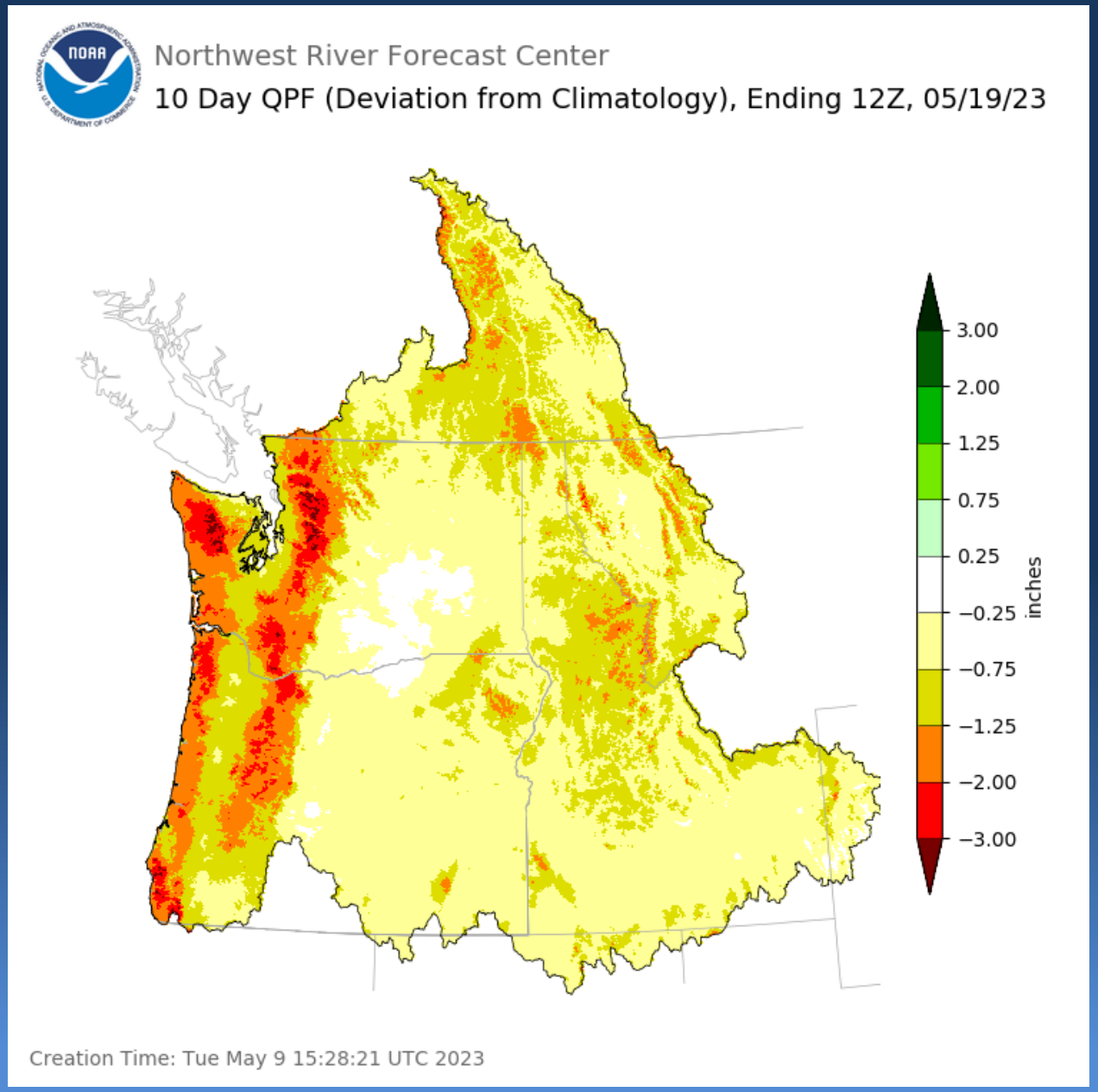


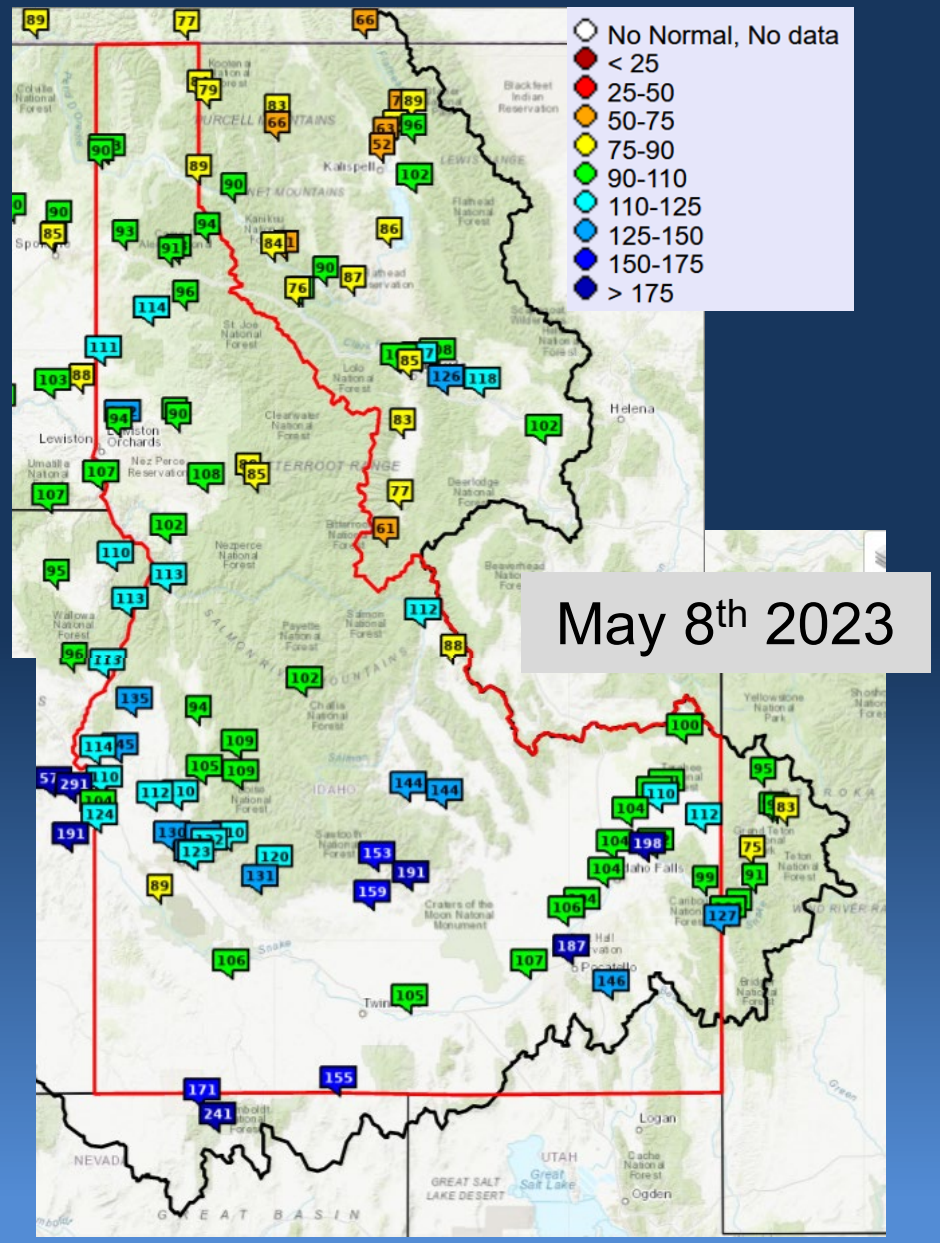


Precipitation Forecast (May 9-19)





ESP10 Natural Seasonal Forecasts

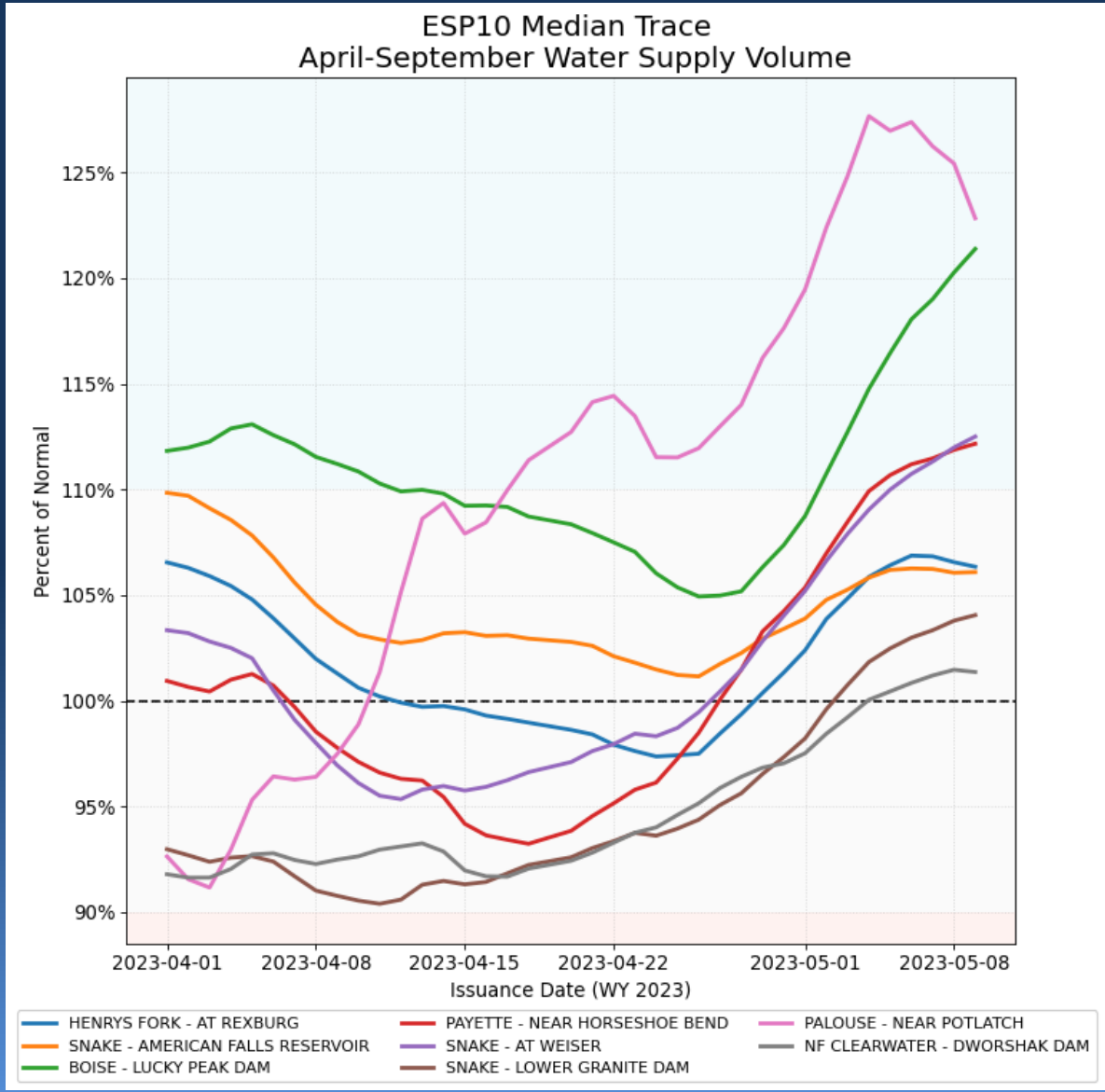


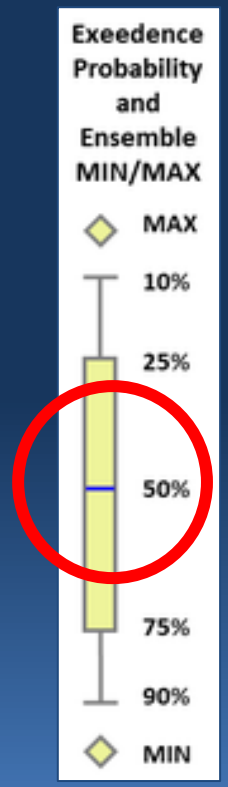
% Normal Apr-Sep Median Forecasts

Snake River Basin

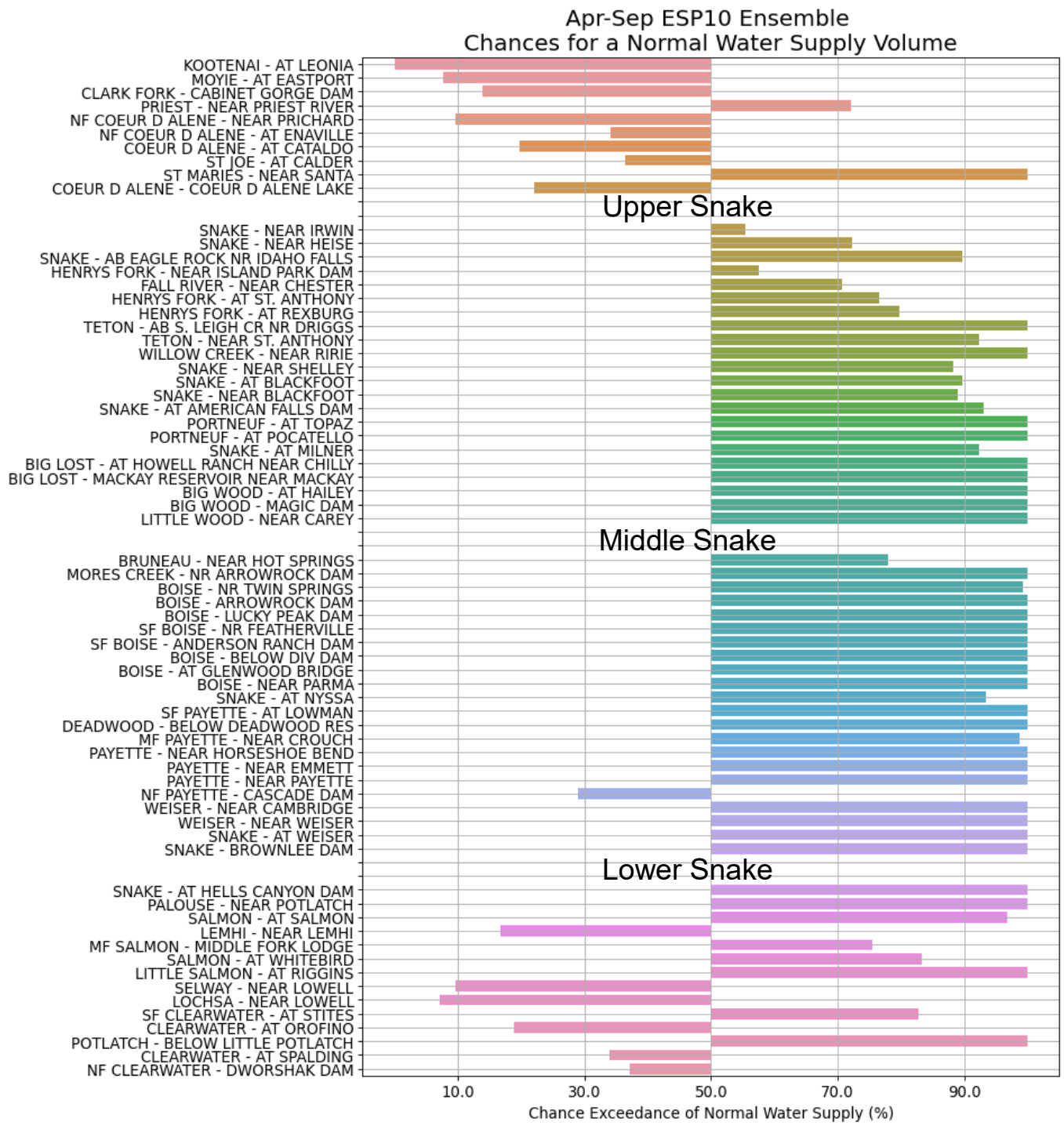
Henry's Fork at Rexburg	104
Snake R near Heise	104
Snake R at American Falls	107
Boise R at Lucky Peak	125
Payette R at Horseshoe Bend	112
Snake R at Weiser	114
NFk Clearwater at Dworshak Dam	97
Palouse R near Potlach	106
Snake R at Lower Granite	104

ESP10 Apr-Sep Natural Seasonal Forecasts

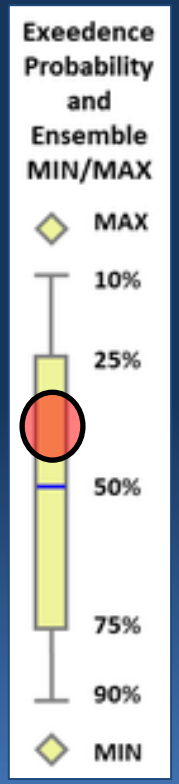




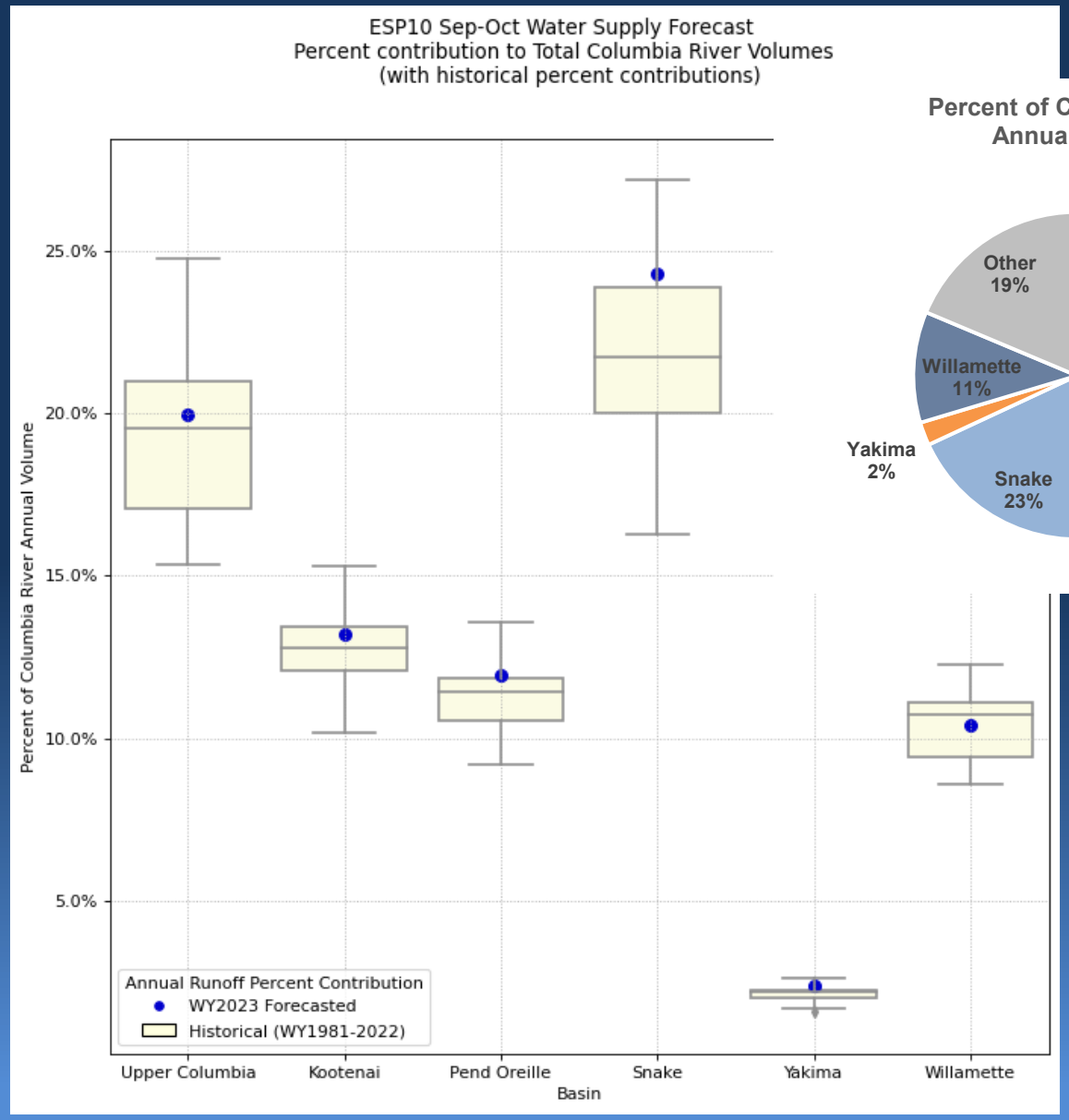
*Data has been smoothed using the past 10 days

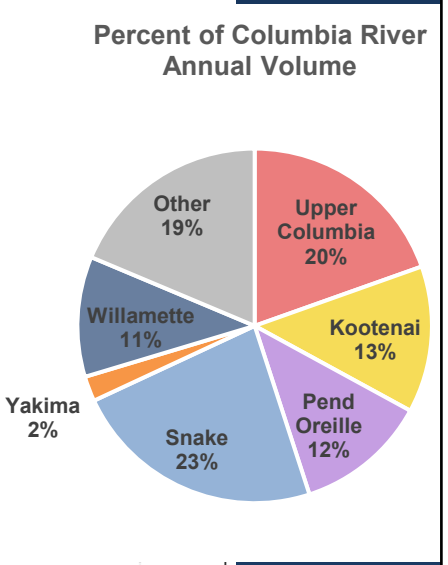


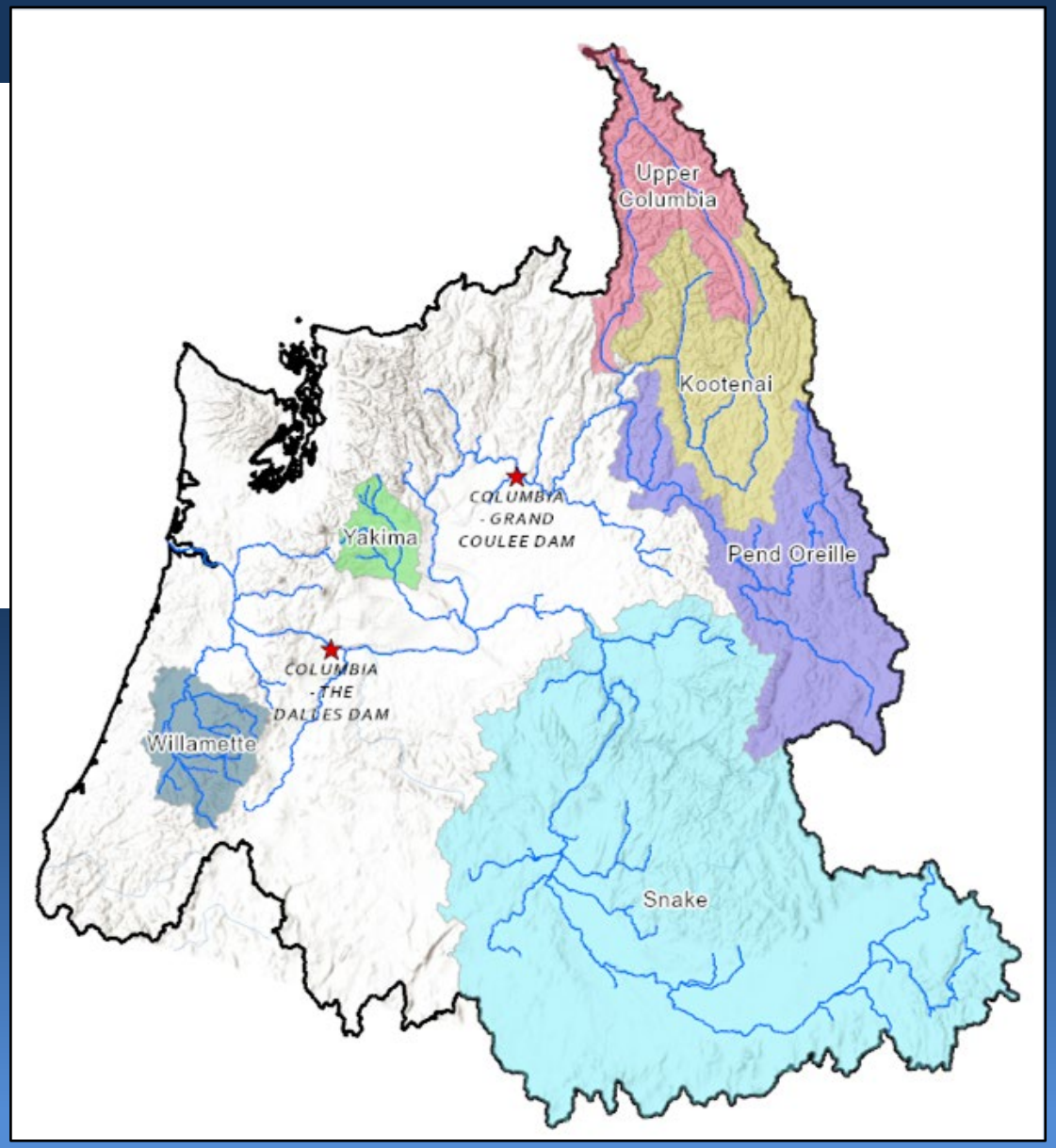
Normal Apr-Sep Volume



ESP10 Sep-Oct Percent Contributions



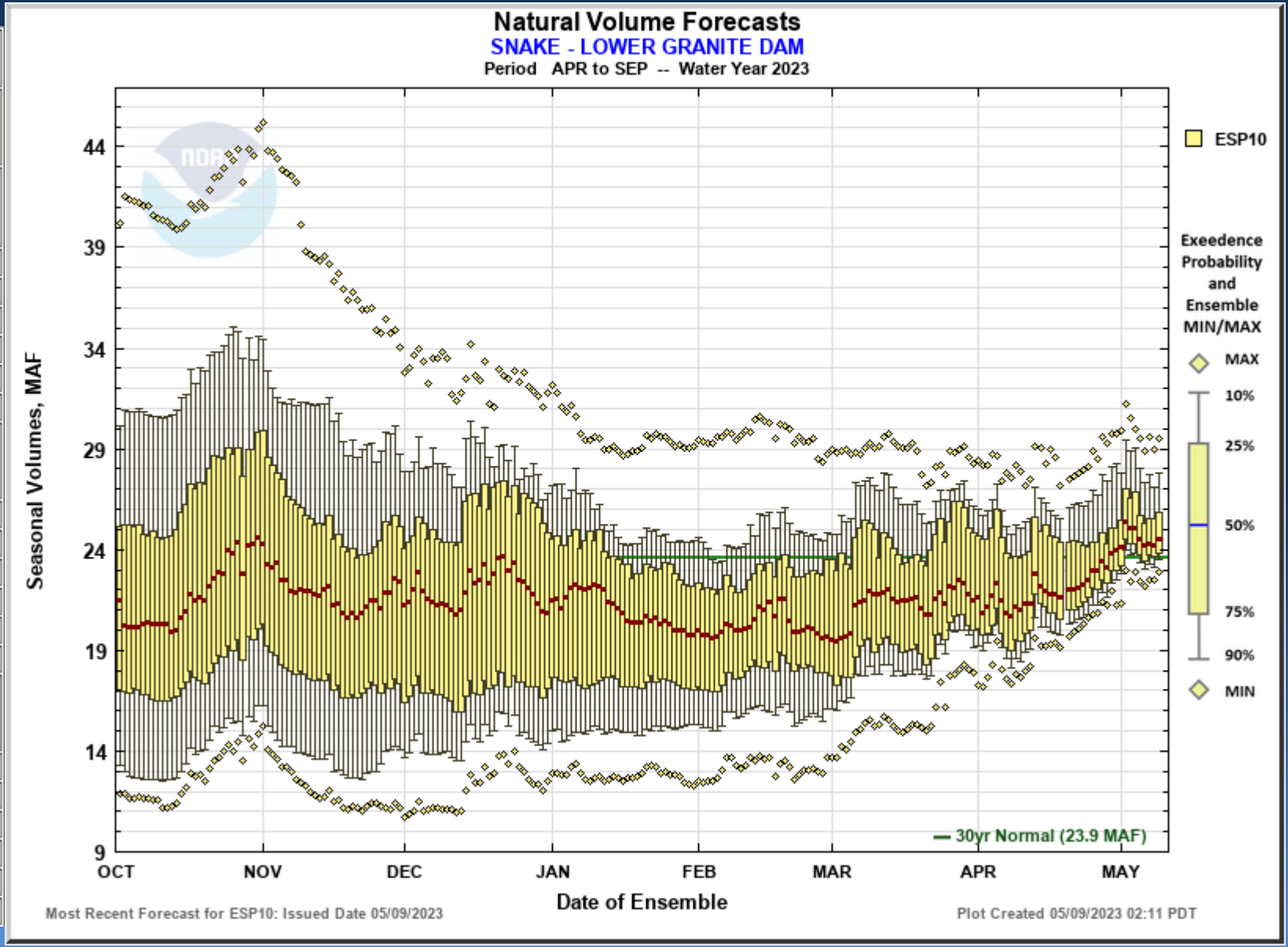




ESP10 Apr-Sep Natural Seasonal Forecasts

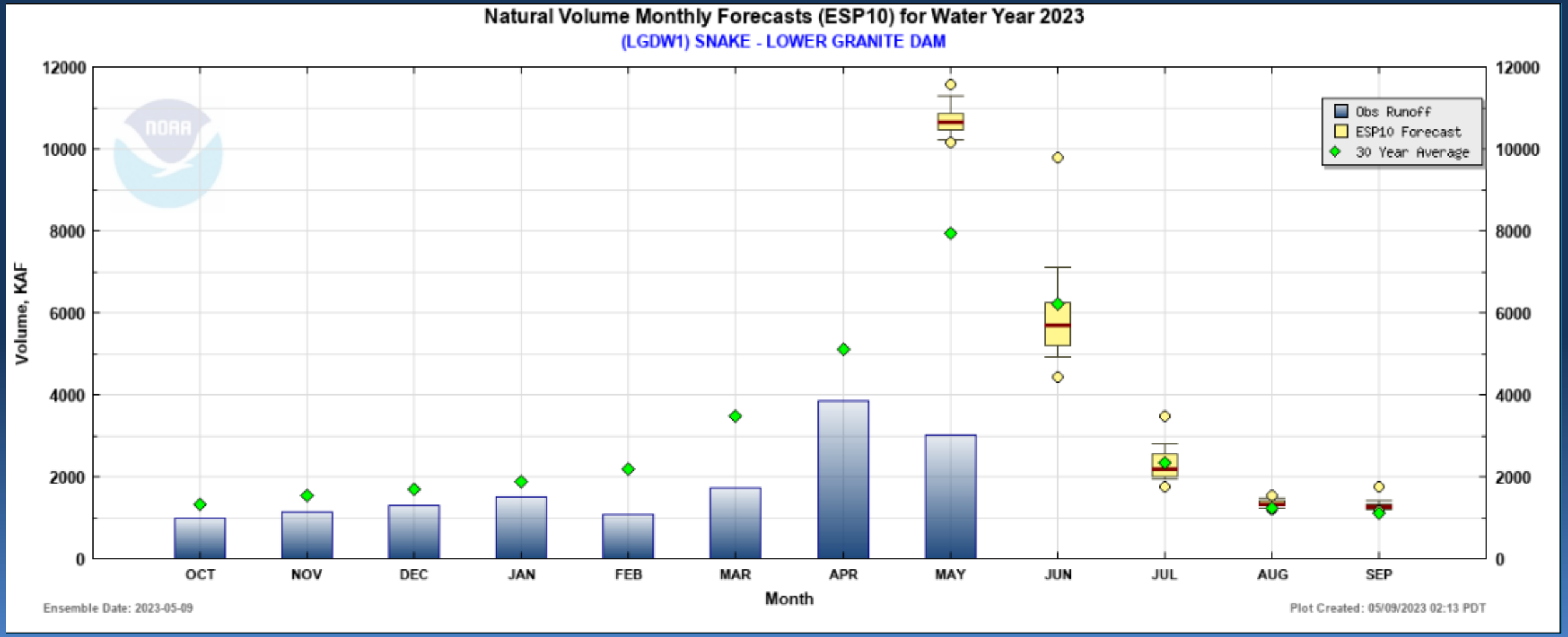
SNAKE - LOWER GRANITE DAM (LGDW1)
Forecasts for Water Year 2023

Forecast Period	Forecasts Are in KAF 90 %	50 %	% Average	10 %	30 Year Average (1991-2020)
Natural Forecast — *ESP with 10 Days QPF* *Ensemble:* 2023-05-09 *Issued:* 2023-05-09					
APR-SEP	23884	24856	104	28153	23929
APR-JUL	21340	22312	103	25453	21589
APR-AUG	22638	23599	103	26907	22827
JAN-SEP	28208	29180	93	32477	31446
JAN-JUL	25664	26636	92	29777	29106
OCT-SEP	31629	32602	91	35899	35973
Experimental — *HEFS with 15 days EQPF* *Ensemble:* 2023-05-08 *Issued:* 2023-05-08					
APR-SEP	23747	24729	103	28487	23929
APR-JUL	21204	22130	103	25805	21589
APR-AUG	22519	23492	103	27172	22827
JAN-SEP	28071	29053	92	32811	31446
JAN-JUL	25528	26454	91	30129	29106
OCT-SEP	31493	32474	90	36233	35973
Reference — *ESP with 0 Days QPF* *Ensemble:* 2023-05-09 *Issued:* 2023-05-09					
APR-SEP	23992	25688	107	30184	23929
APR-JUL	21441	23031	107	27258	21589
APR-AUG	22765	24439	107	28758	22827
JAN-SEP	28316	30012	95	34508	31446
JAN-JUL	25765	27355	94	31583	29106
OCT-SEP	31738	33434	93	37929	35973



https://www.nwrfc.noaa.gov/water_supply/nat_forecasts.php?id=LGDW1

ESP10 Natural Volume Monthly Forecasts



https://www.nwrfc.noaa.gov/natural/plot/monthly/monthly_natural_forecasts.php?id=lHDW1

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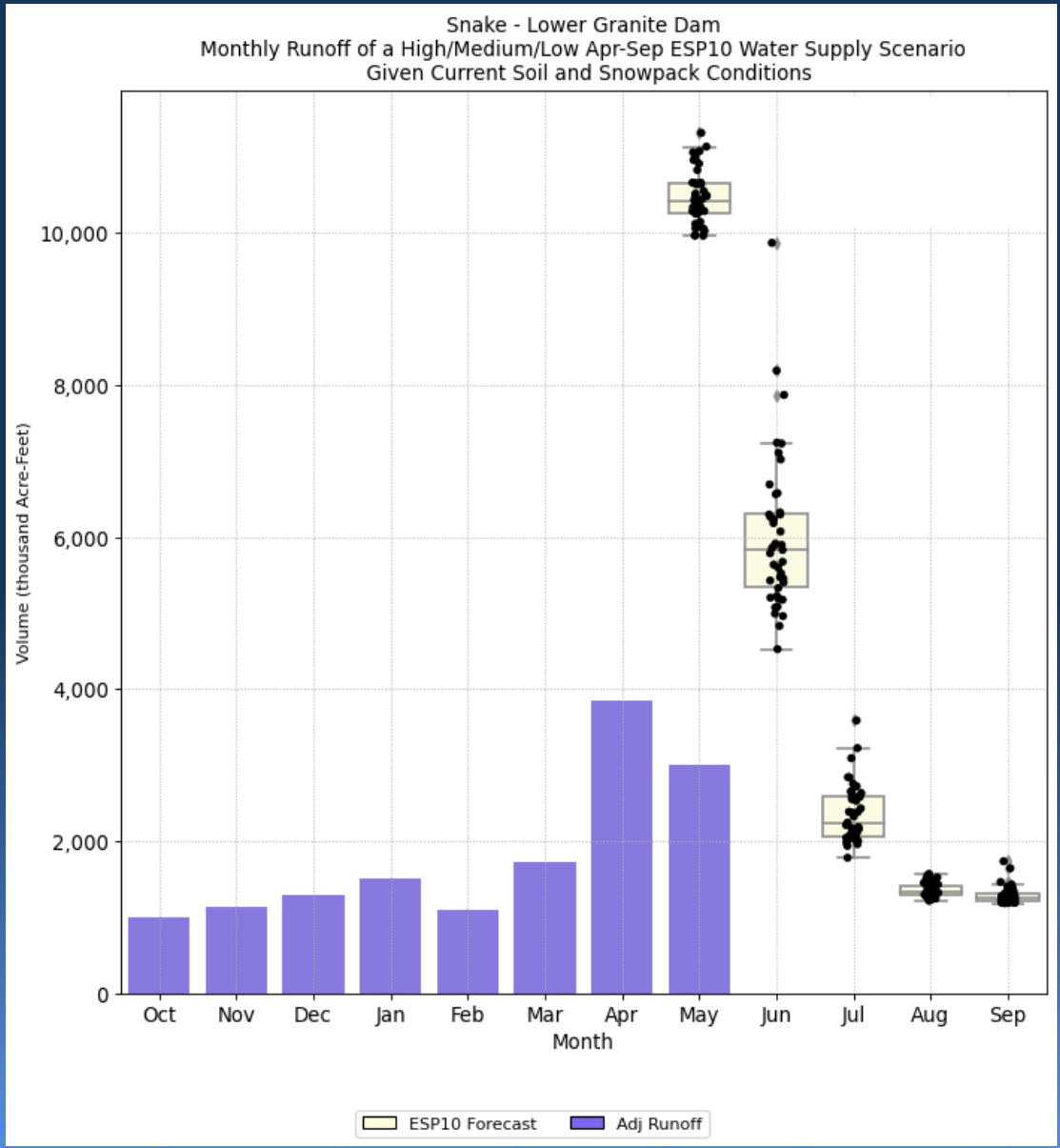

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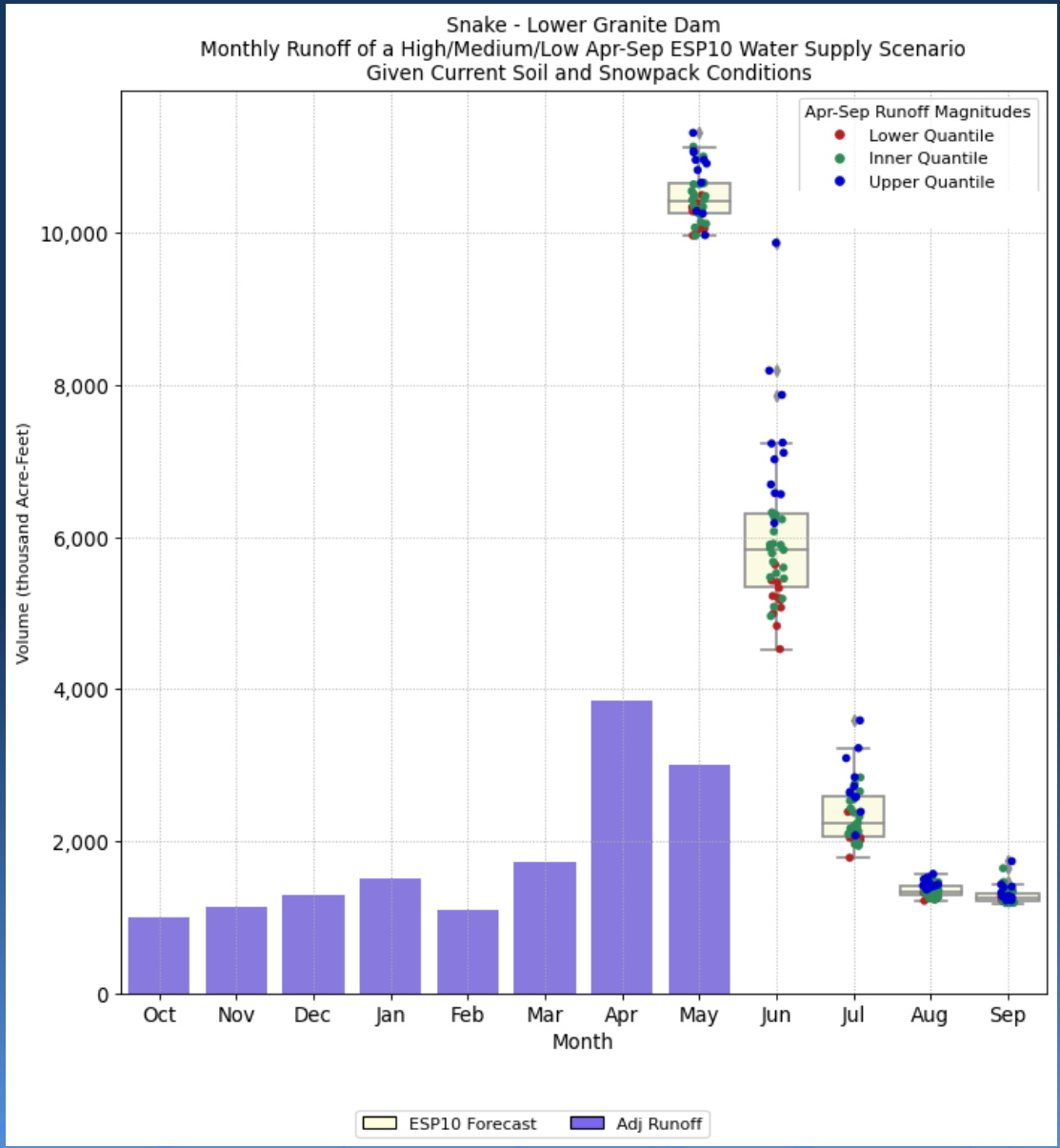

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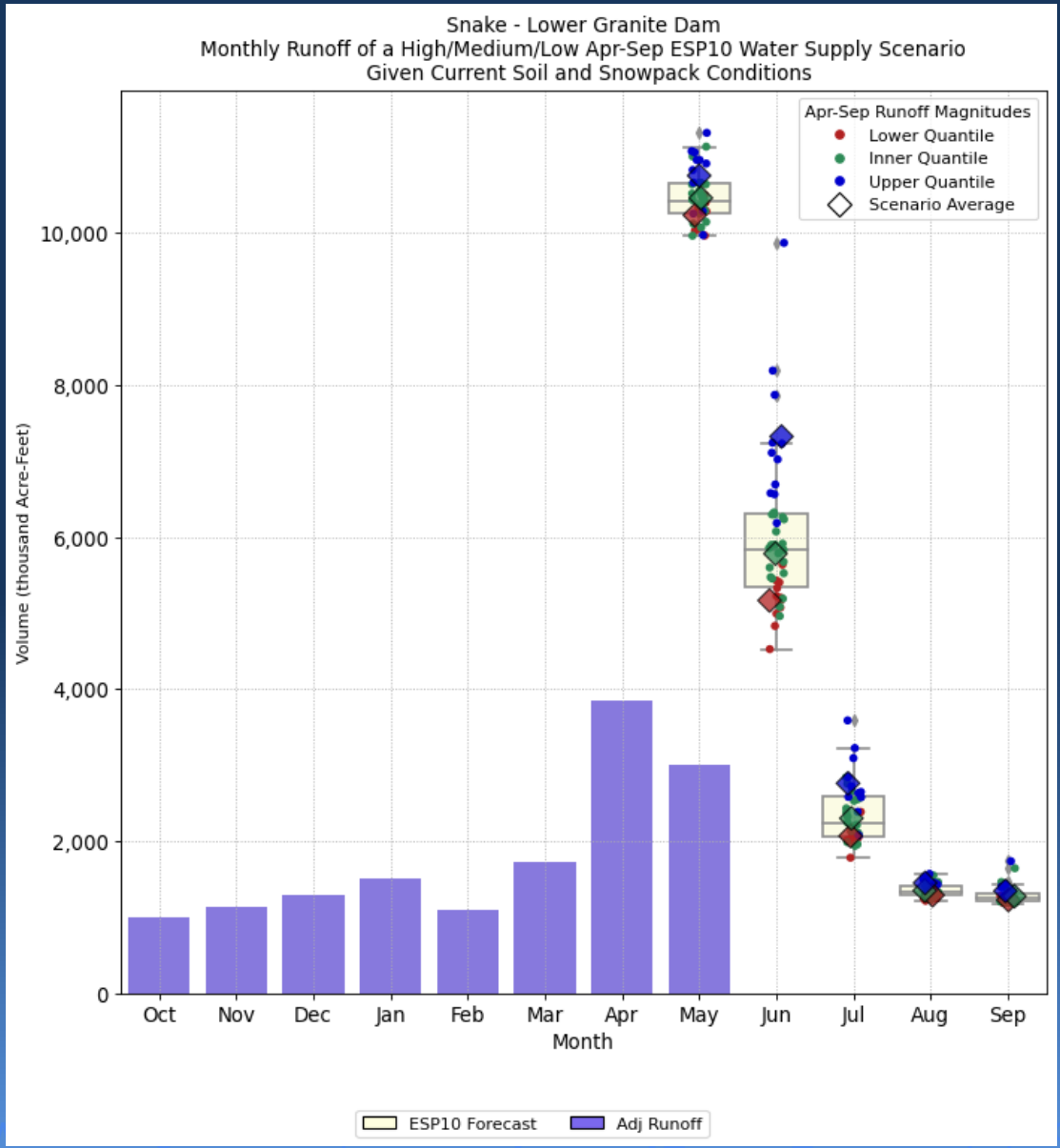

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