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MONTANA STREAMFLOW CONDITIONS

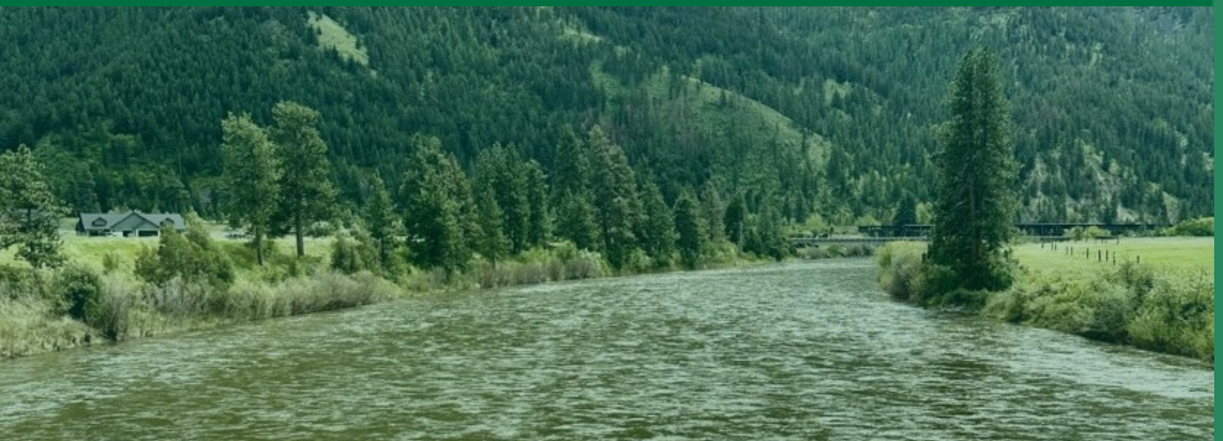
Montana Governor's Drought and Water Supply Advisory Committee Meeting
June 27, 2024

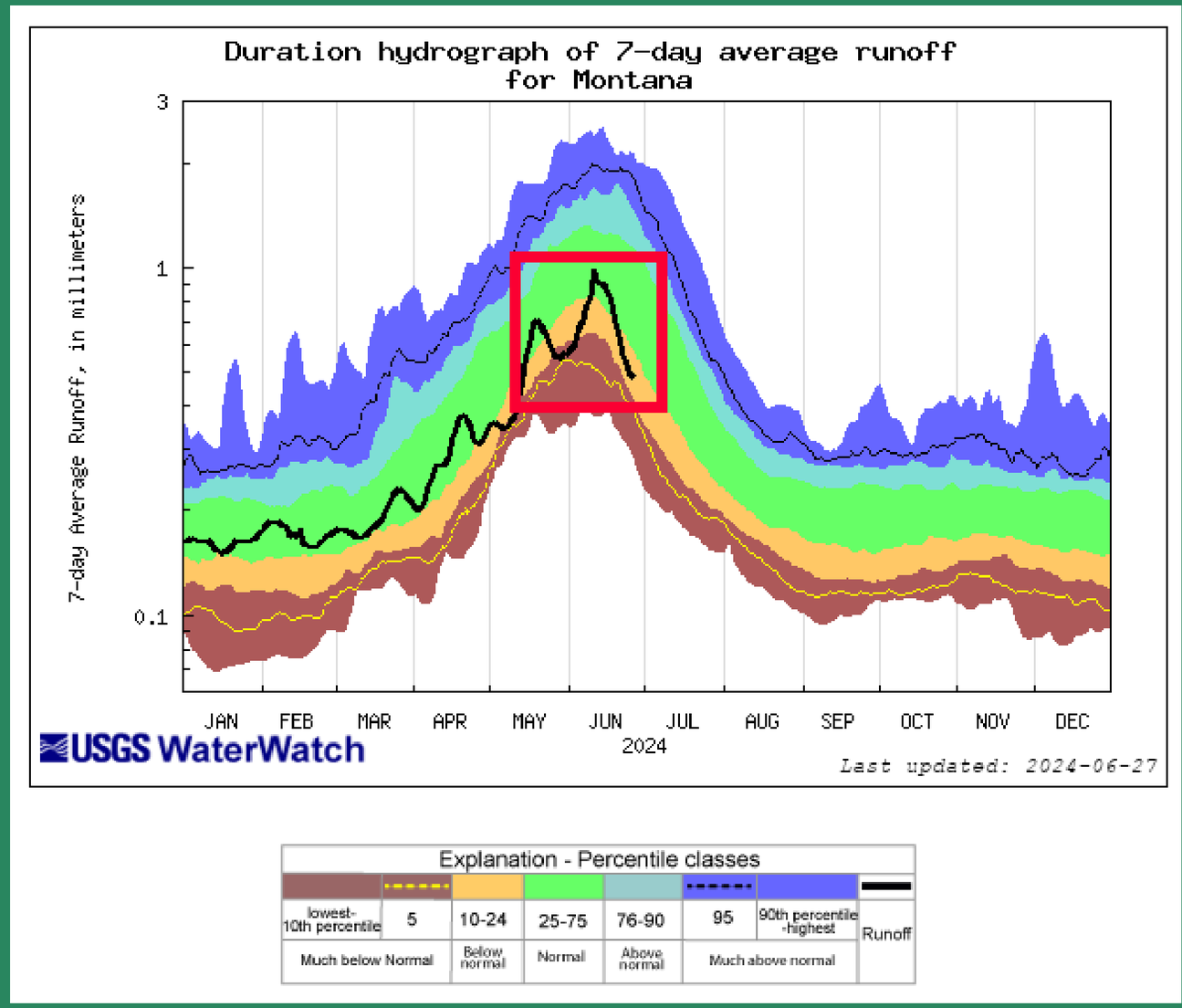
U.S. Department of Interior
U.S. Geological Survey

Aaron Fiaschetti
U. S. Geological Survey
Data Management Section Chief

WHERE WE ARE IN THE WATER YEAR

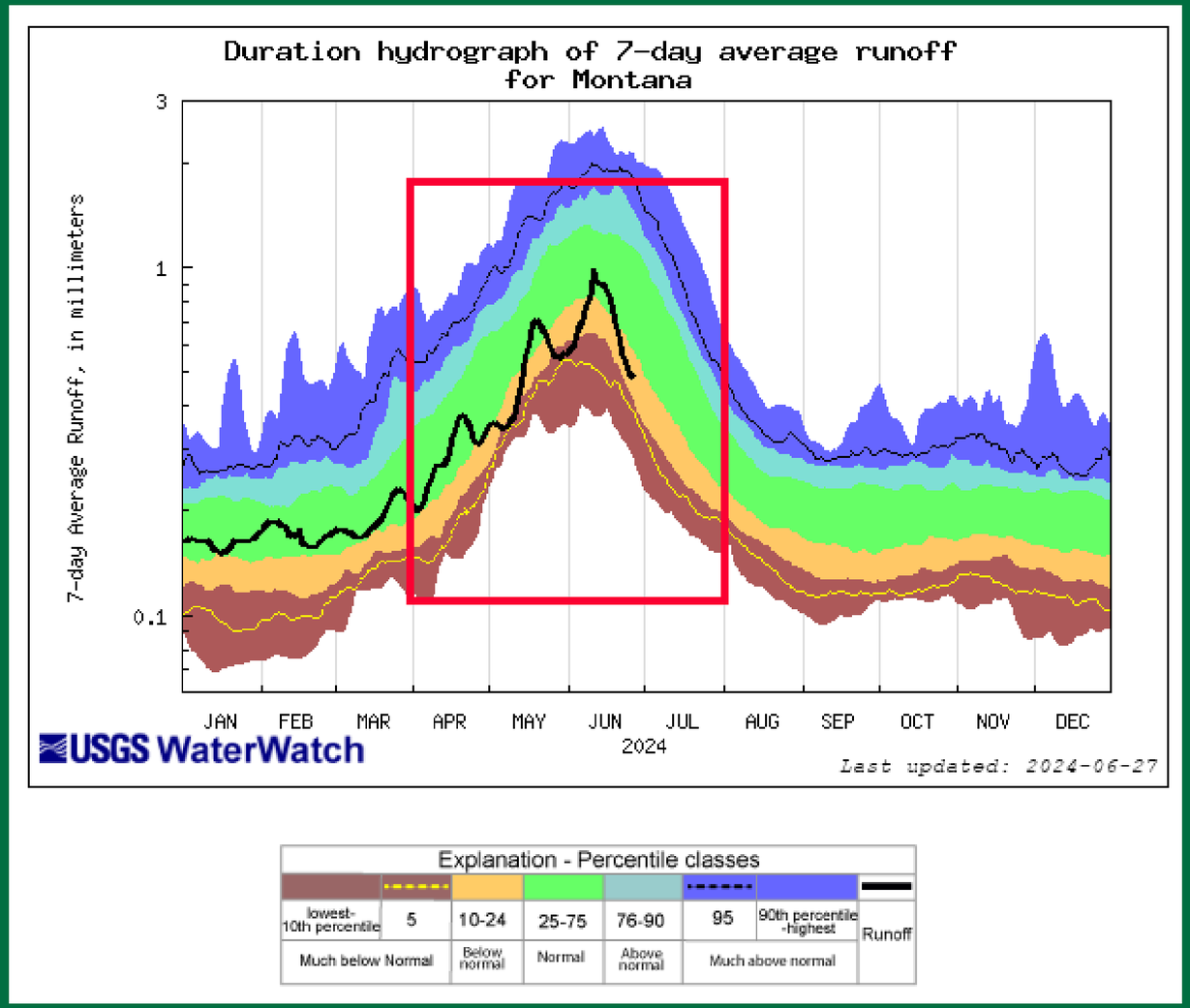
- Past the Peak
- On the downslope of runoff
- Still adequate water supply





SIGNIFICANCE OF THE PEAK

- Significant portion of the year's water accumulation
- Cumulative April 1- July 31 flow as a % of the year (POR Avg)
  - Blackfoot at Bonner - 72 %
  - MF Flathead nr W. Glacier- 77%
  - Yellowstone at Corwin- 70%
  - Gallatin at Gateway- 67%



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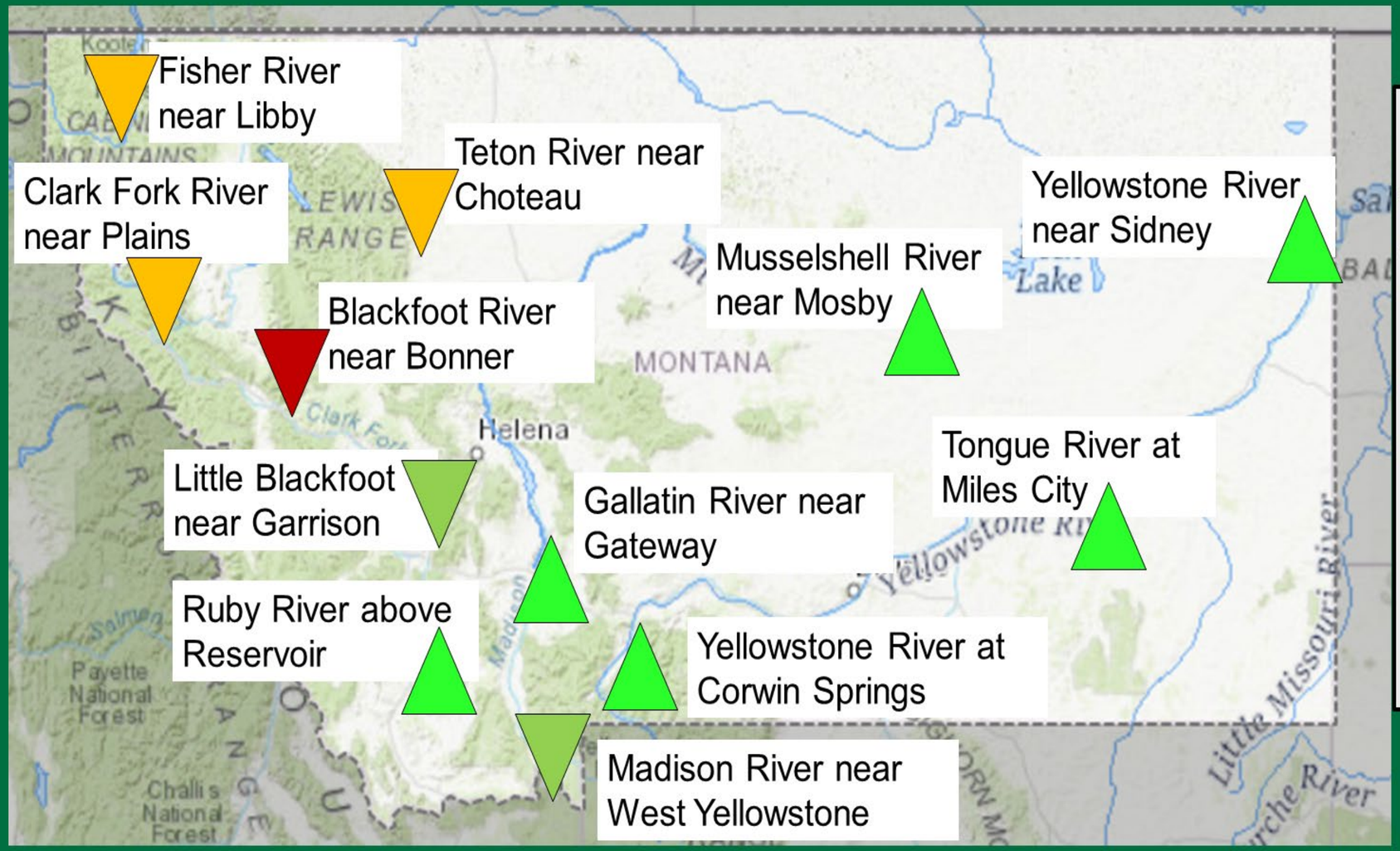
APRIL 1- JUNE 20, 2024: RUNOFF STATISTICS



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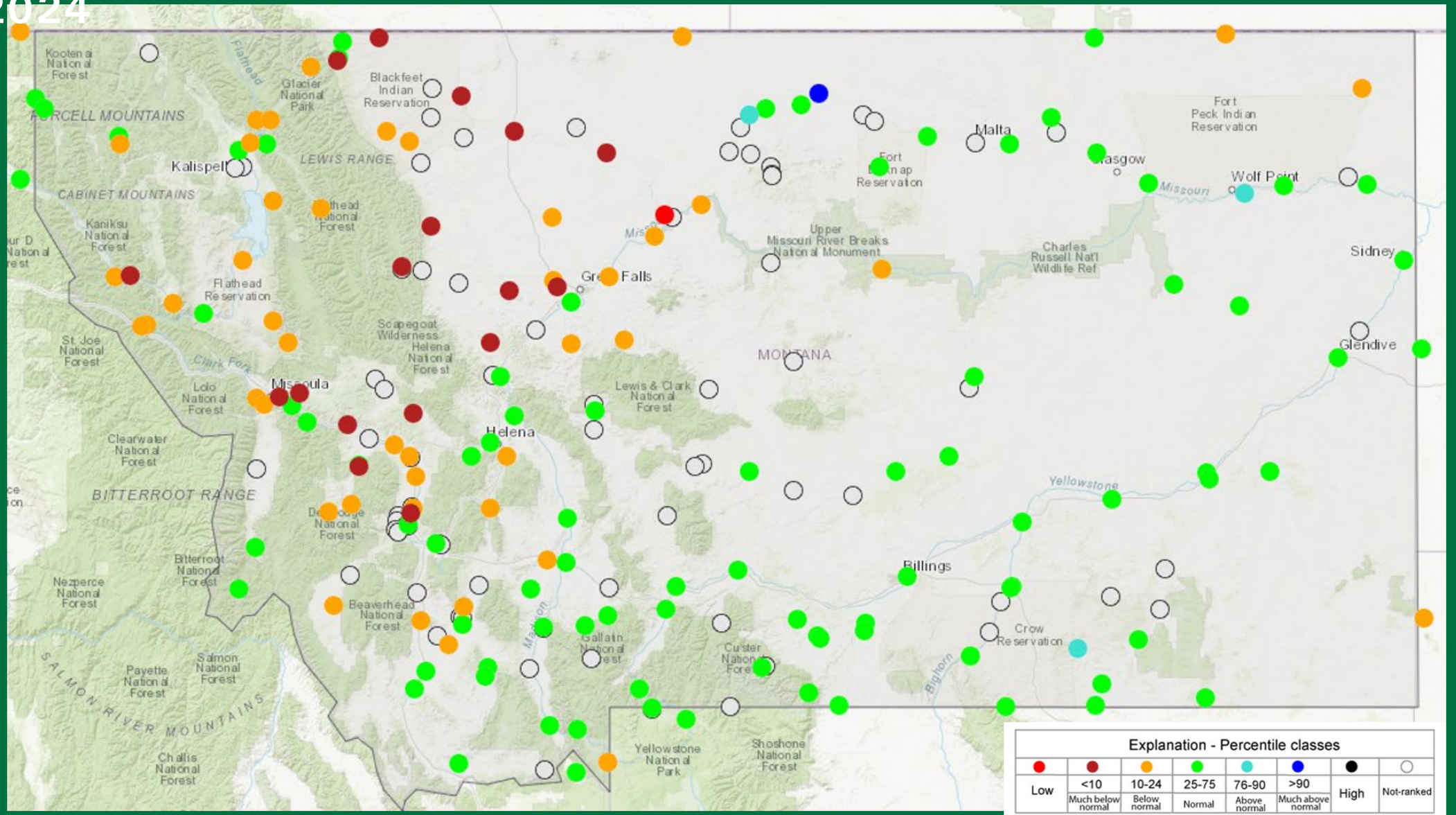
28 DAY AVERAGE COMPARED WITH STATISTICS FOR JUNE 25,

Average of peak flow for the year

2024



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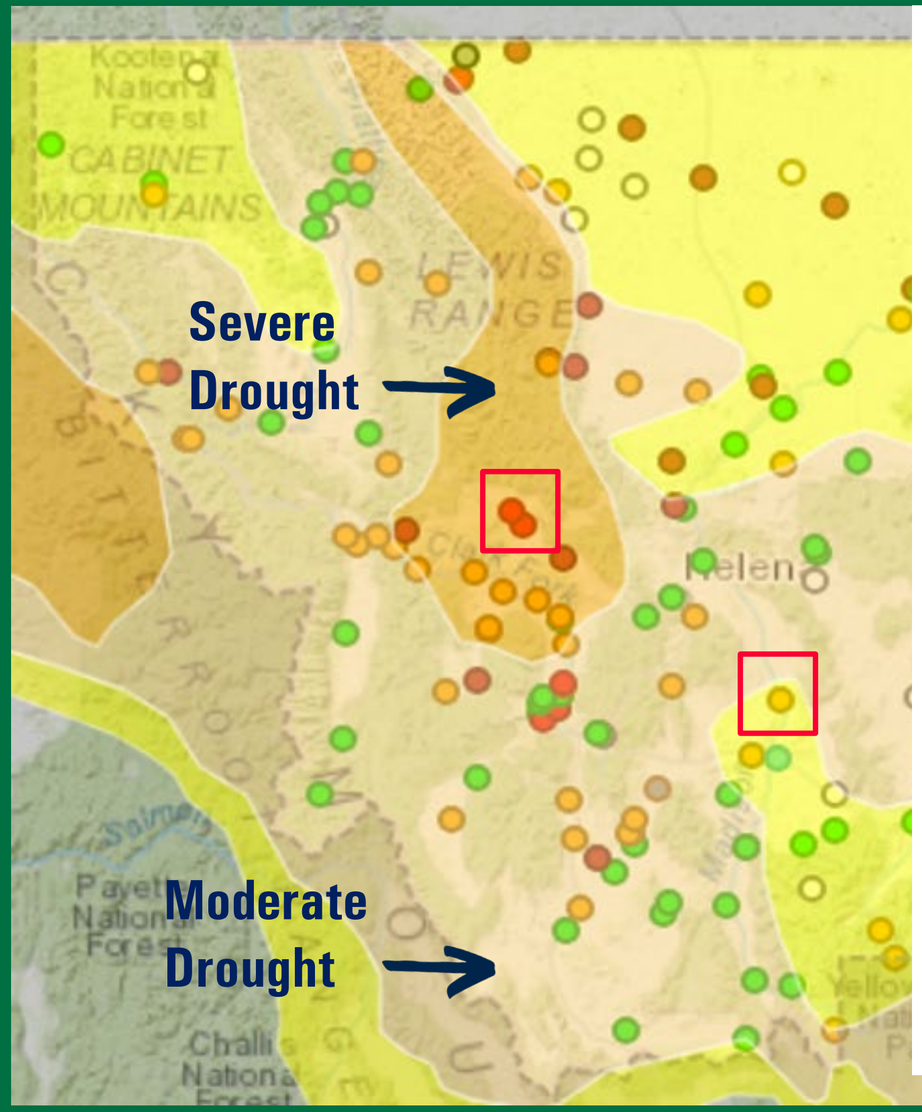
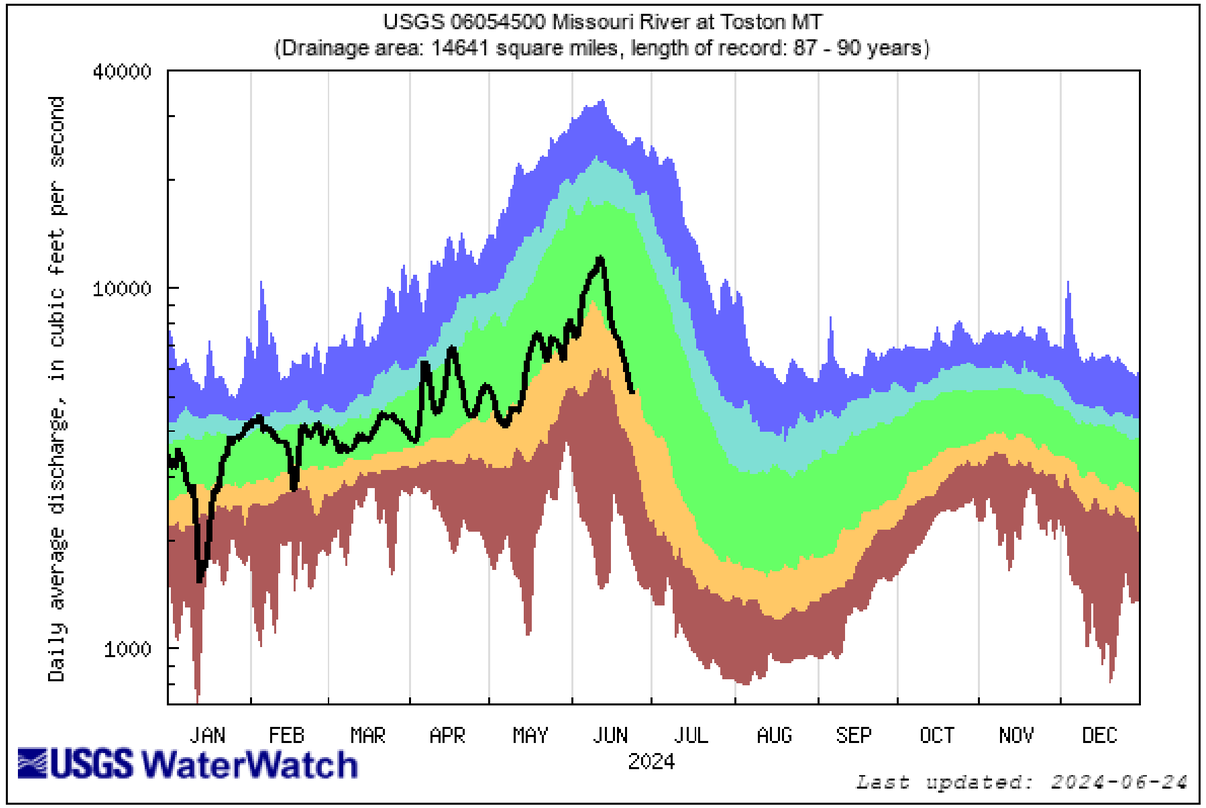
SELECT GAGES WITHIN DROUGHT AREAS

Drought Classification as of June 20, 2024





Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile -highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	

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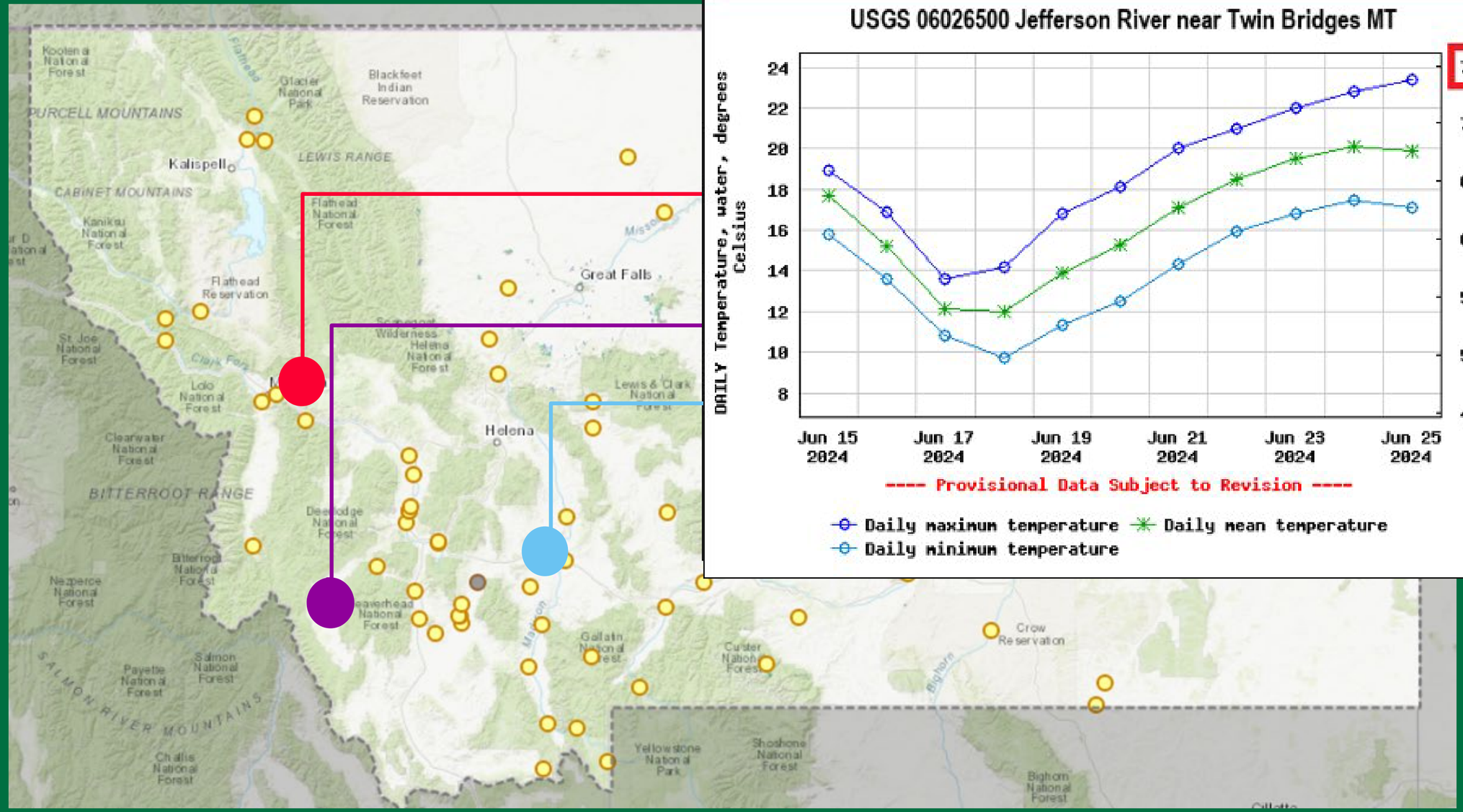
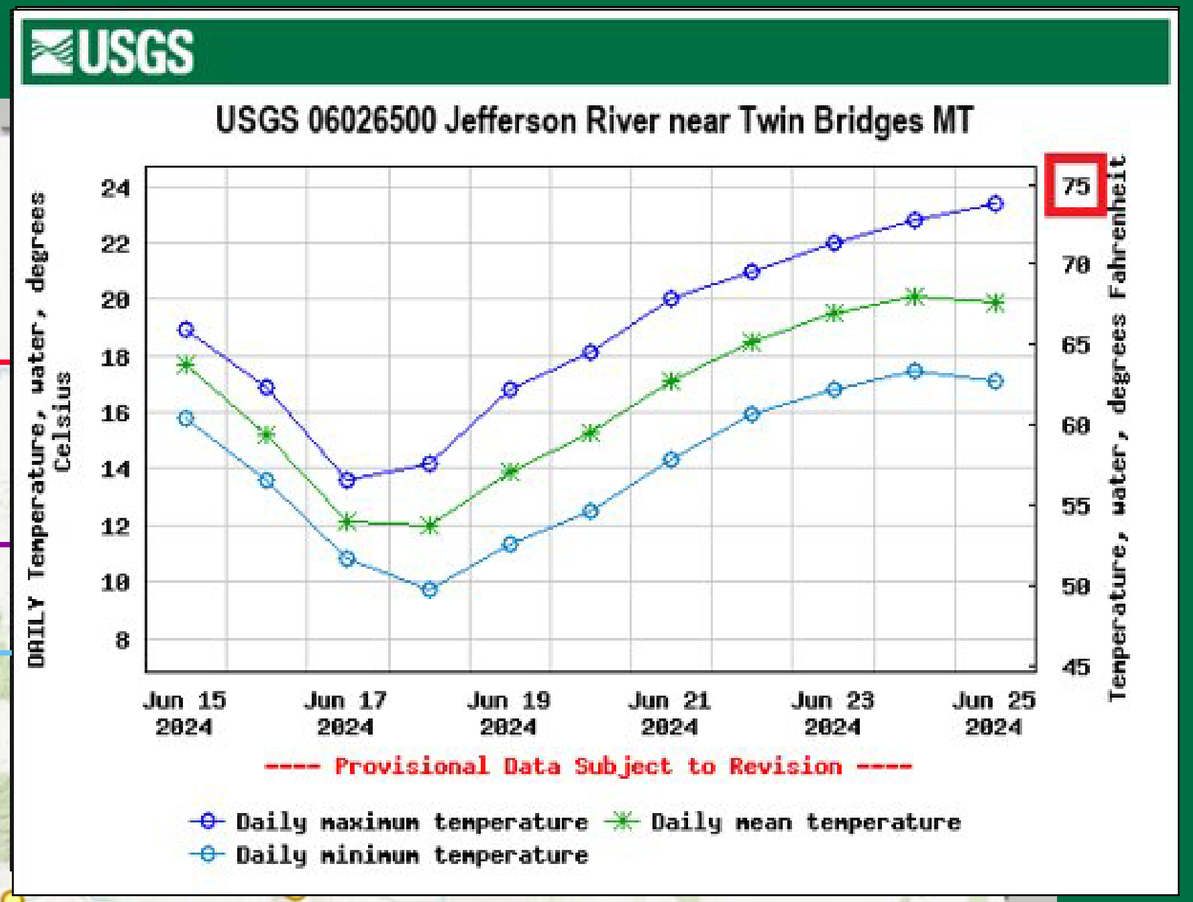
USGS WATER TEMPERATURE

65 sites collecting water temperature data





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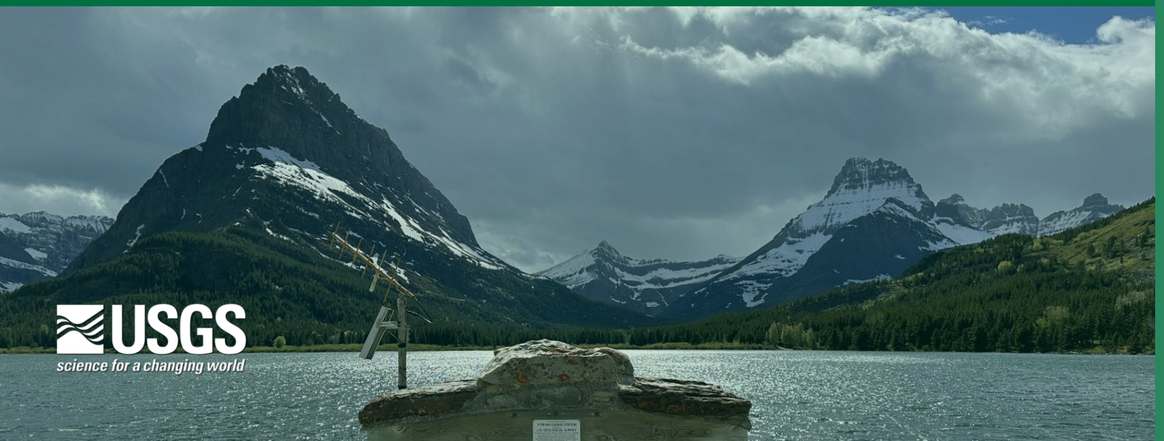
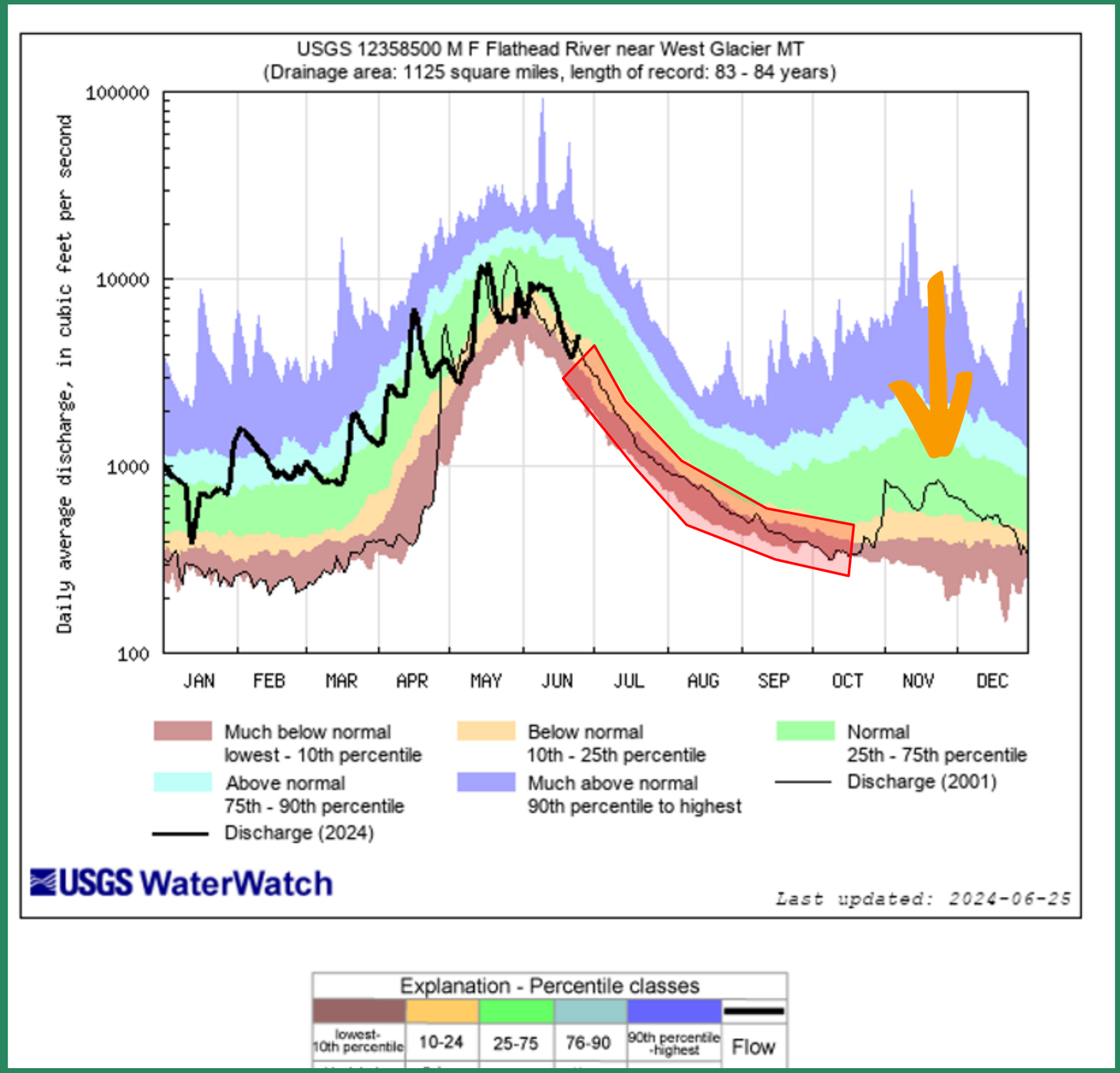
A LOOK AT 2001 AND 2004

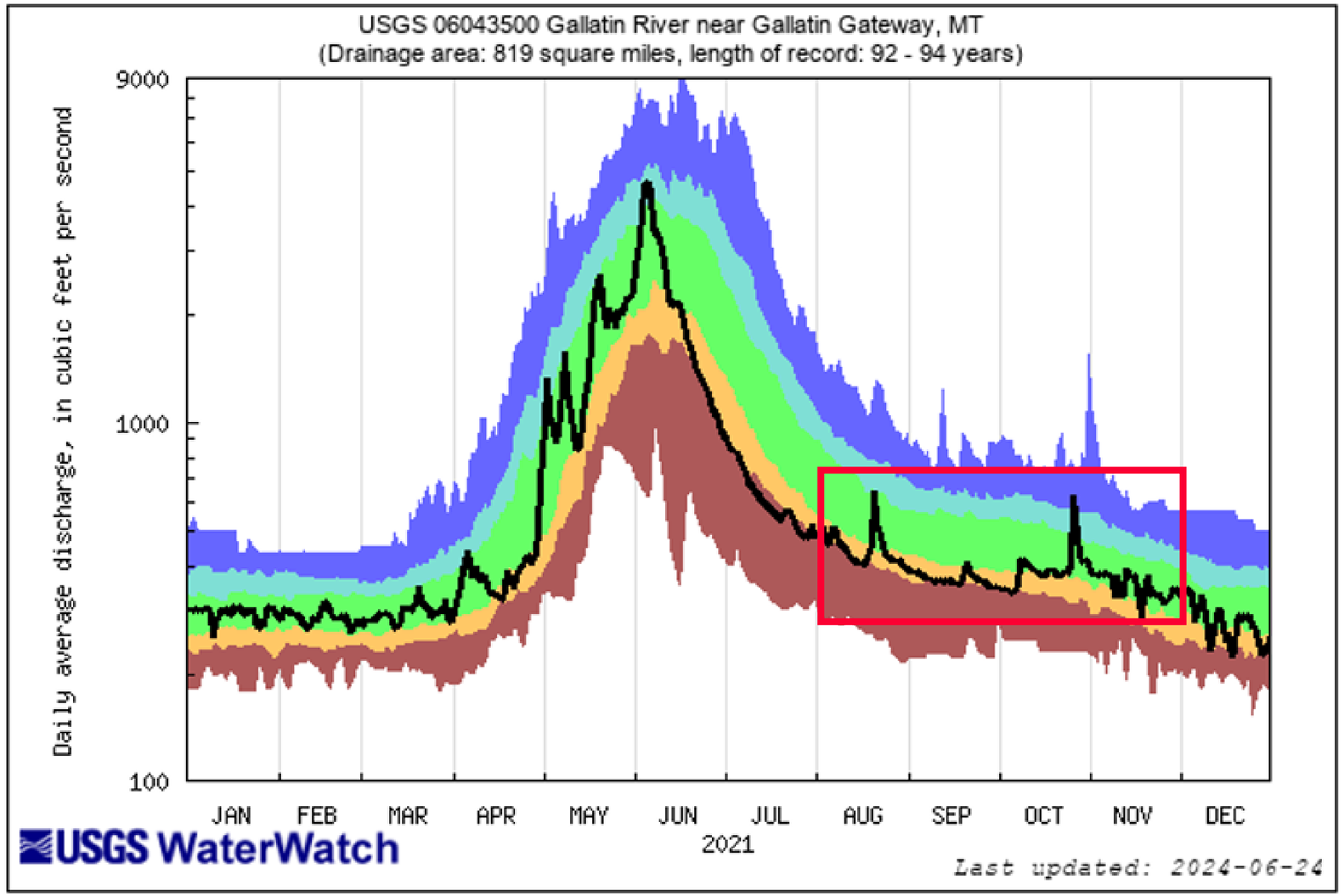
- Volumetric Apr 1- June 20 Runoff
  - 2024 - 74% of avg
  - 2001 - 63% of avg
- Very Low post runoff
- Fall Recovery

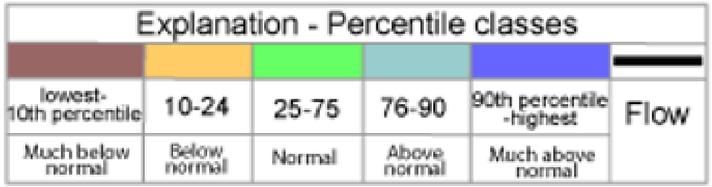




GLASS HALF FULL

- Reservoirs East of the Divide
- Upper Missouri, Yellowstone, Musselshell.
- Streamflow can rapidly react to precipitation events





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https://www.usgs.gov/centers/wy-mt-water

https://dashboard.waterdata.usgs.gov/app/nwd/?aoi=state-mt

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Photos by Brett Price, U.S. Geological Survey
ADCP measurement Clark Fork River bv Missoula Near Peak flow May 16 , 2024.
Swiftcurrent gage house June 2024
Flathead polson cableway May 2024