

# Streamflow and Groundwater Conditions in Massachusetts

## Massachusetts Drought Task Force Meeting

August 6, 2024

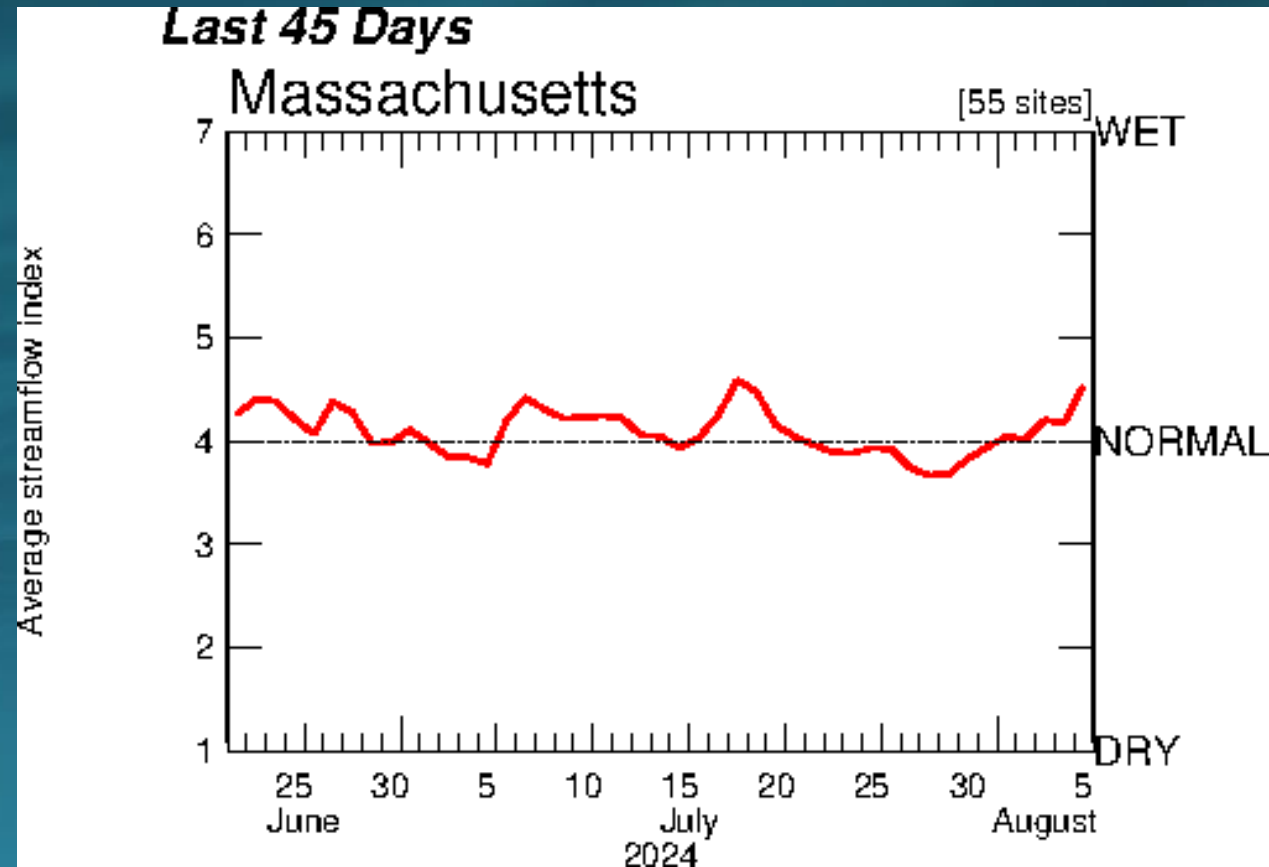
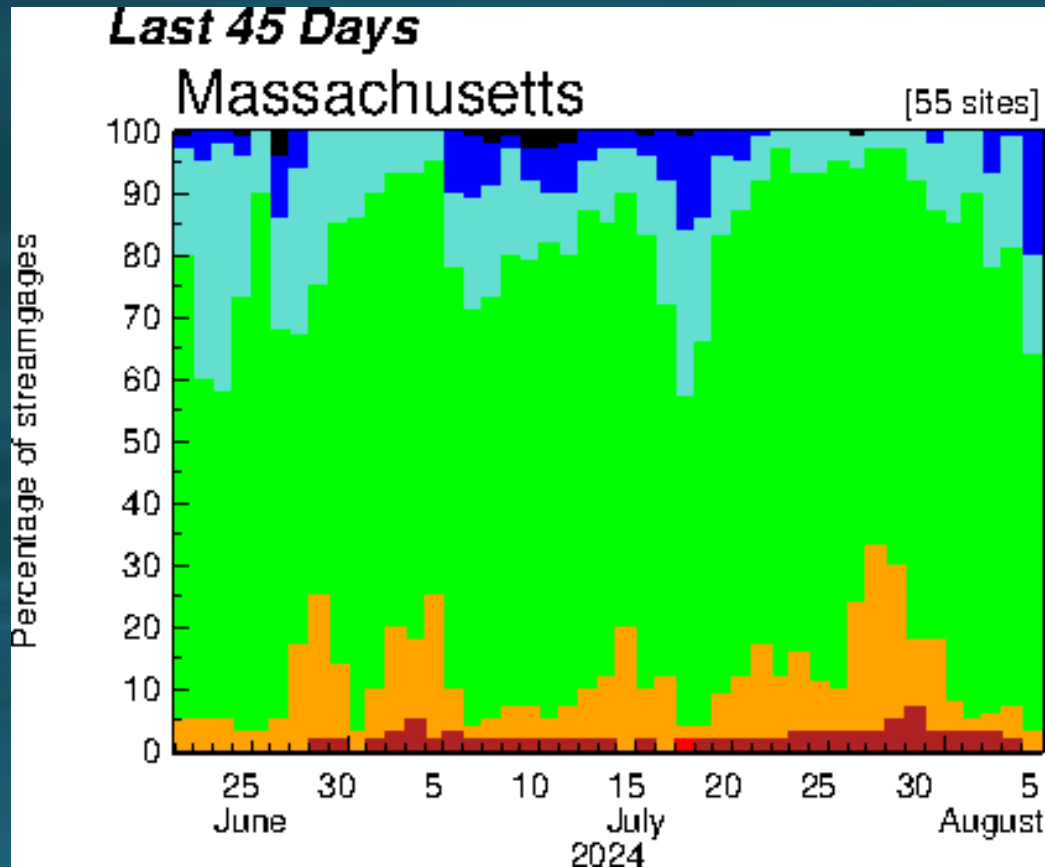
U.S. Geological Survey

New England Water Science Center

Brian Loving, Jason Pollender, and Chris Bruet



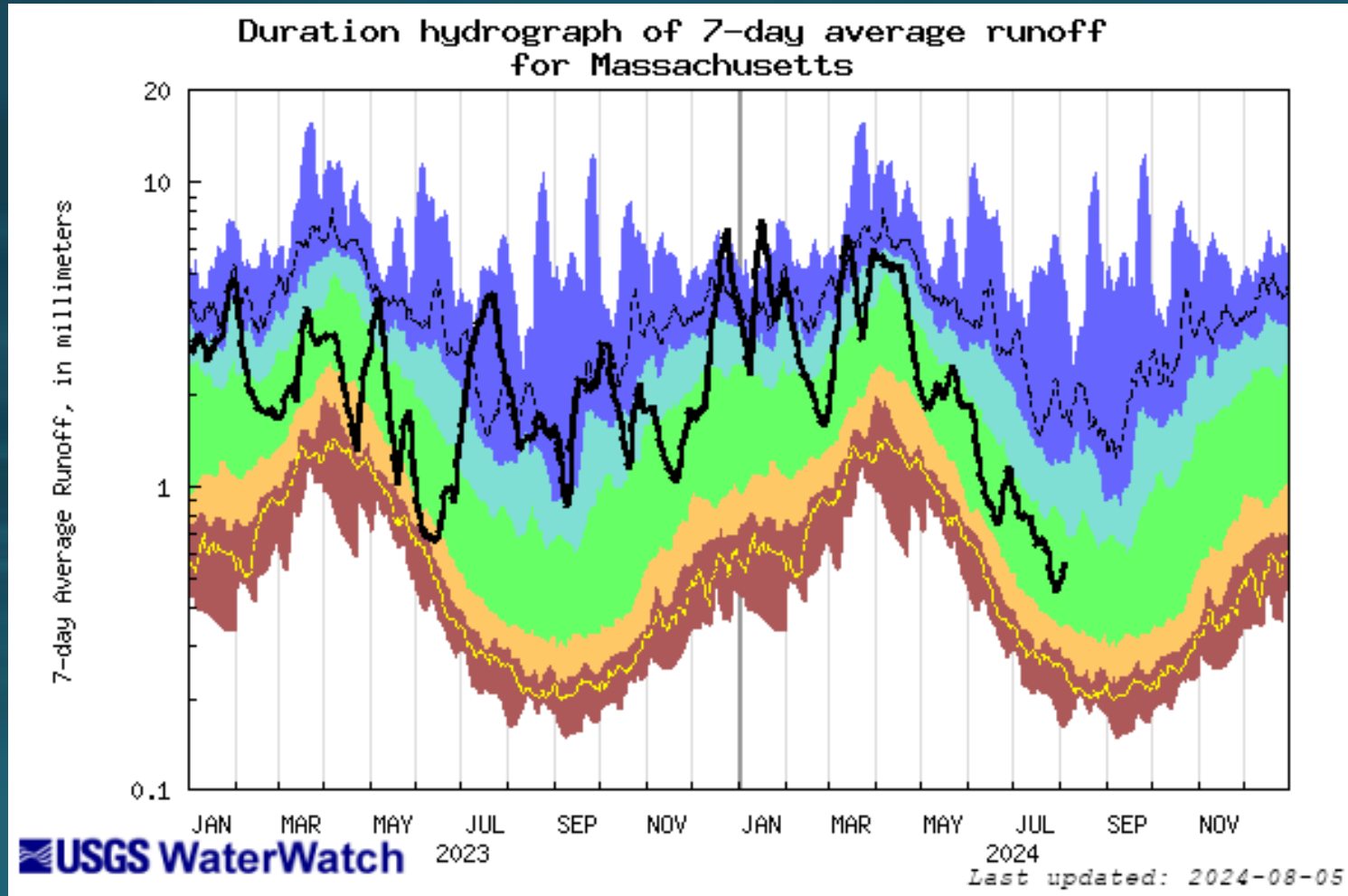
# Streamflow Conditions – last 45 days



**Explanation - Percentile classes**

Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

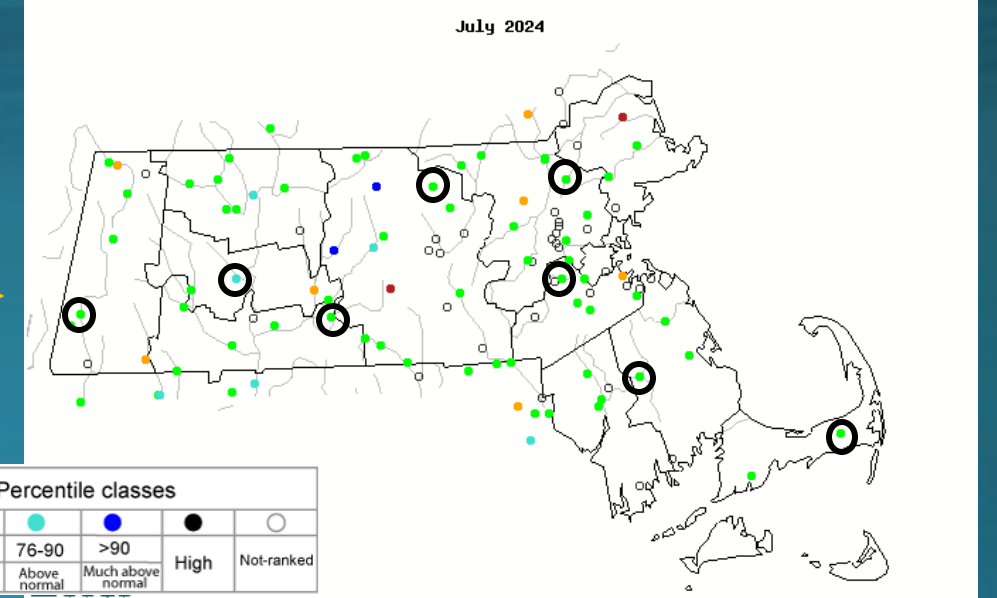
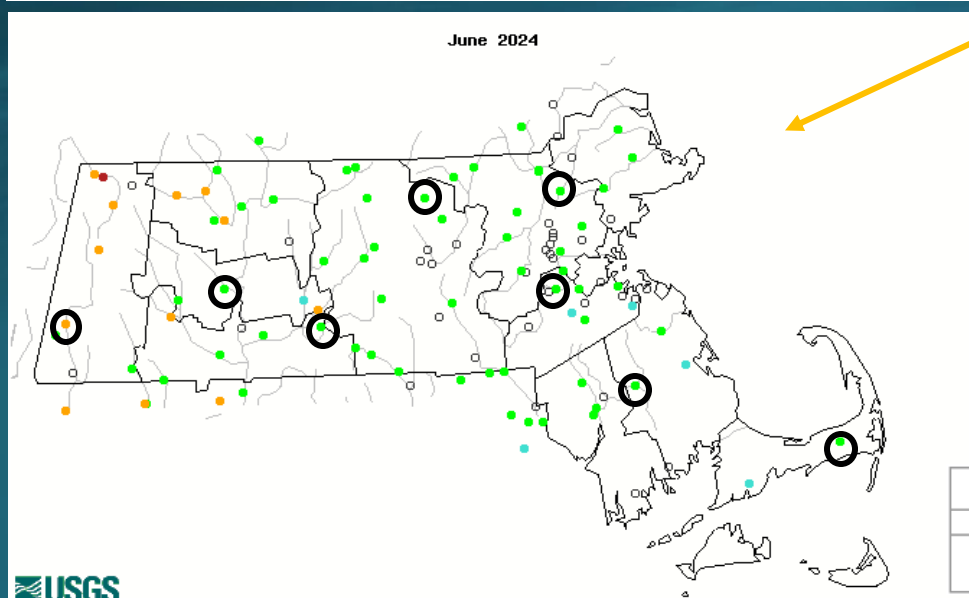
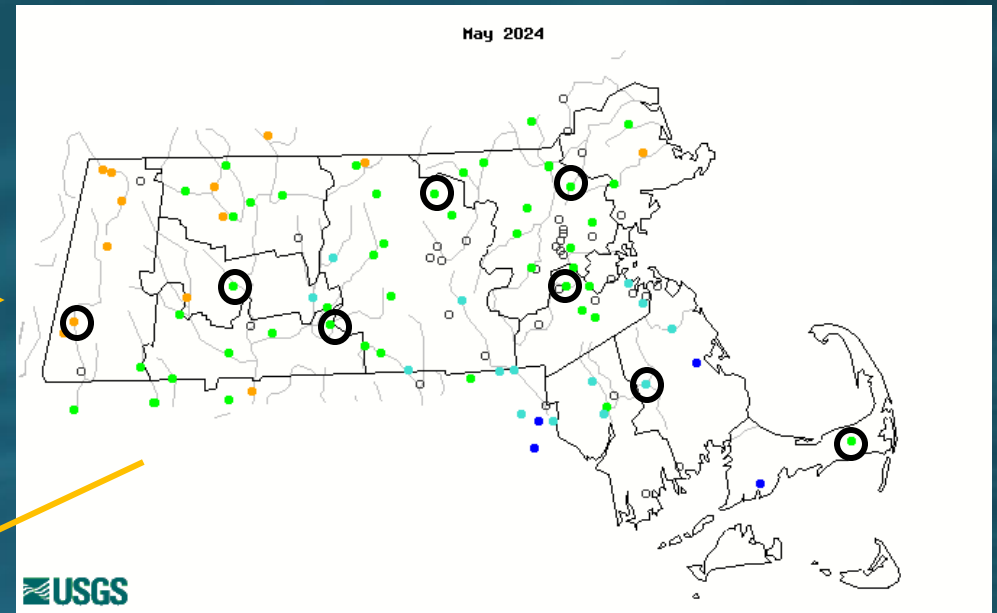
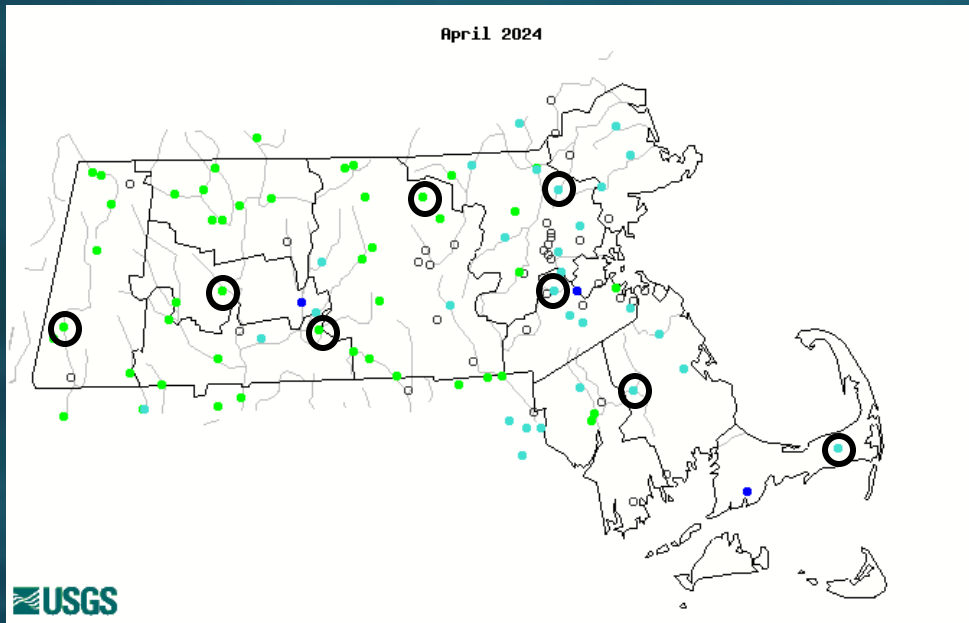
# Streamflow Conditions 7-Day Moving Average



Explanation - Percentile classes

lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest	Runoff
Much below Normal	Below normal	Normal	Above normal	Much above normal			

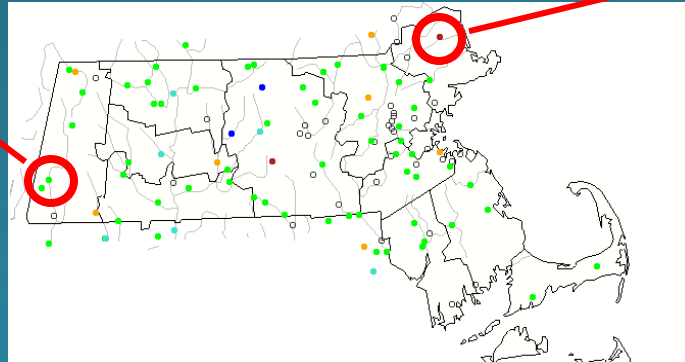
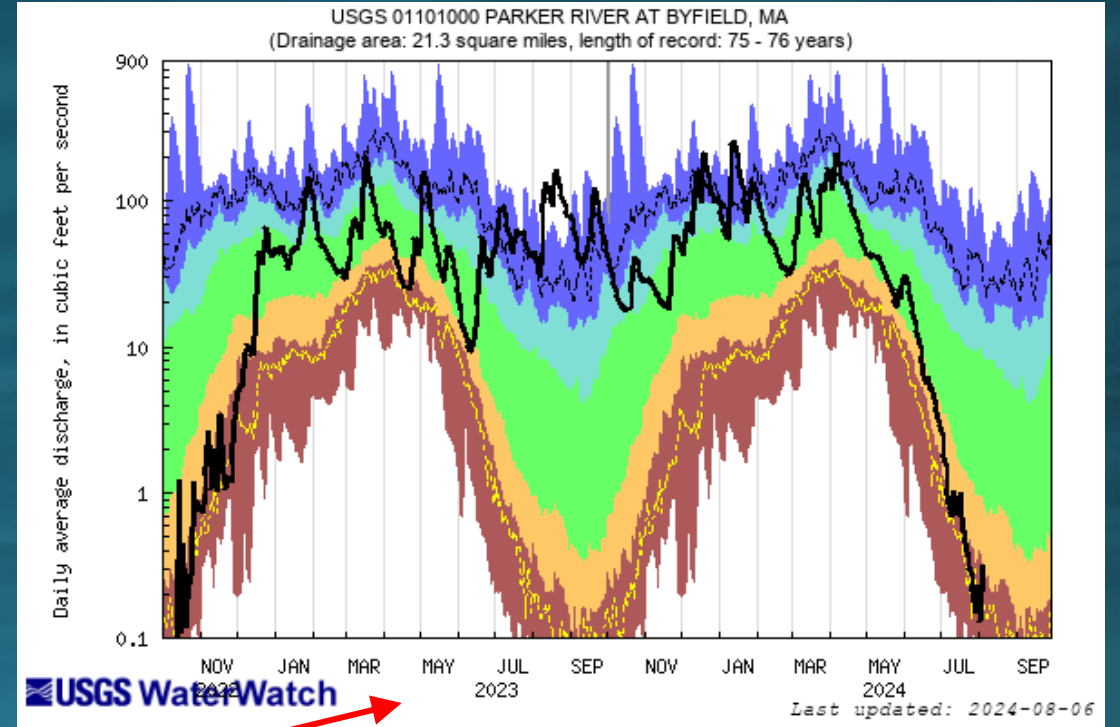
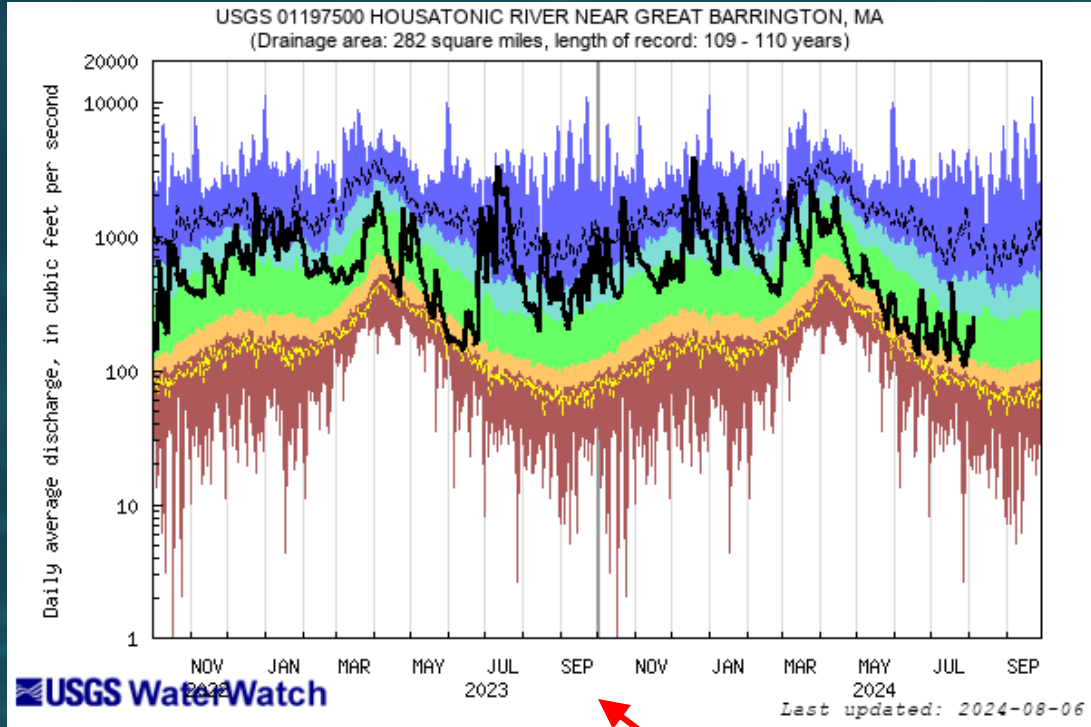
# Streamflow Conditions – Monthly Average



Explanation - Percentile classes

Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

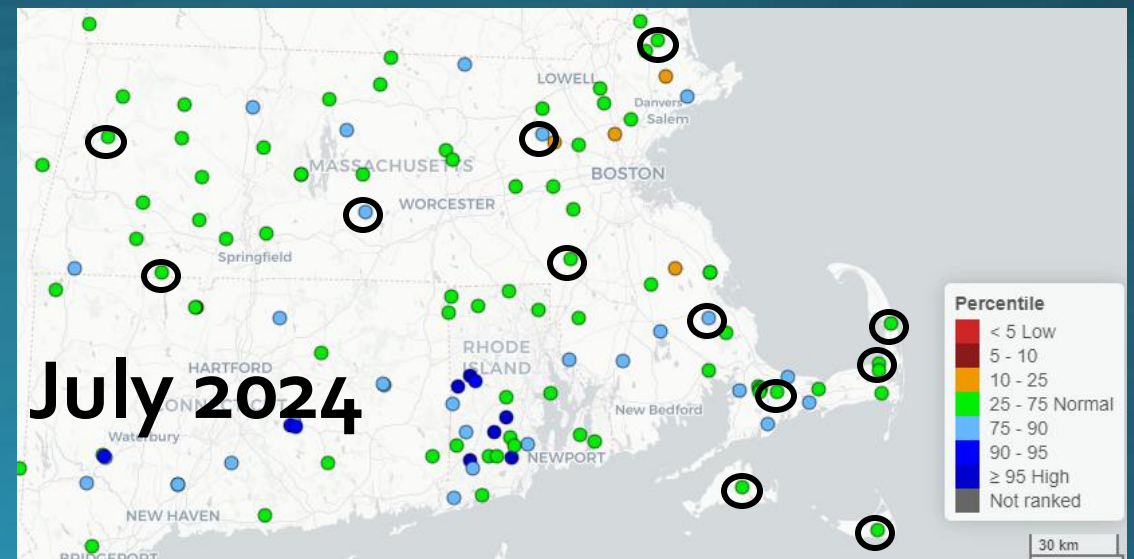
# SW Conditions 7-Day Average



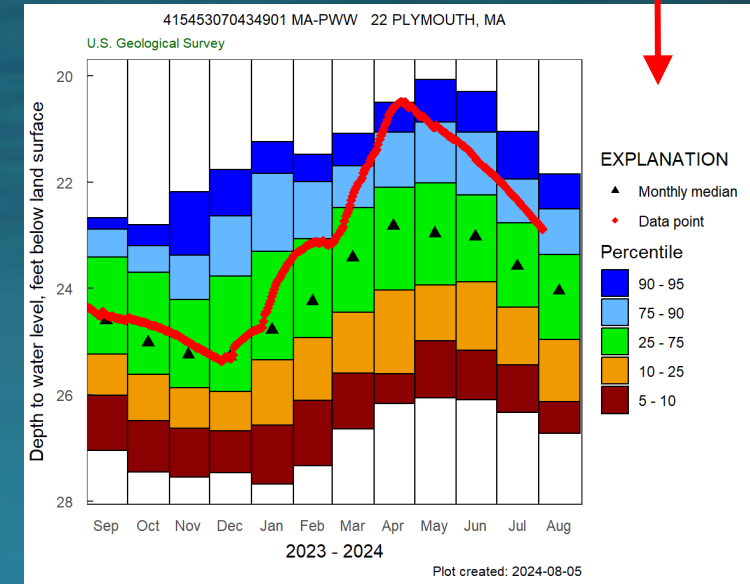
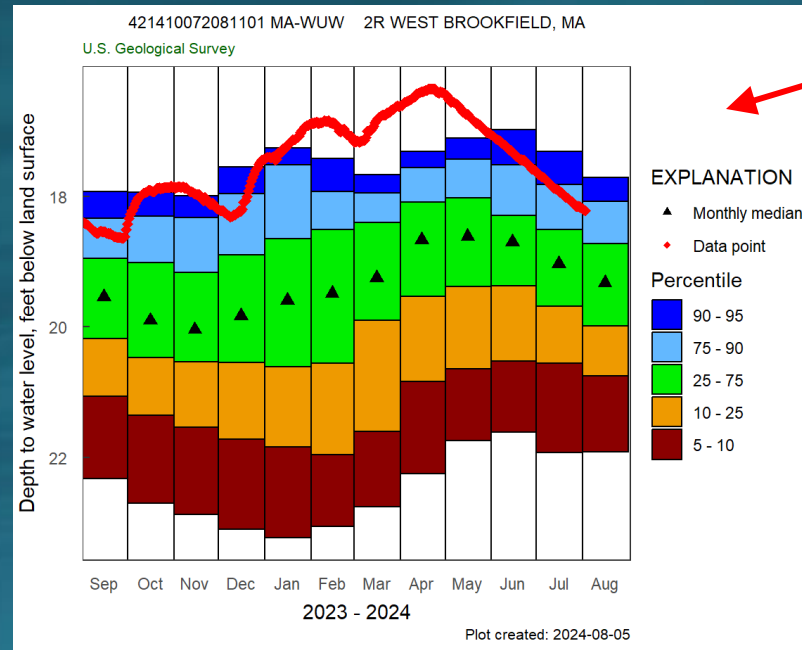
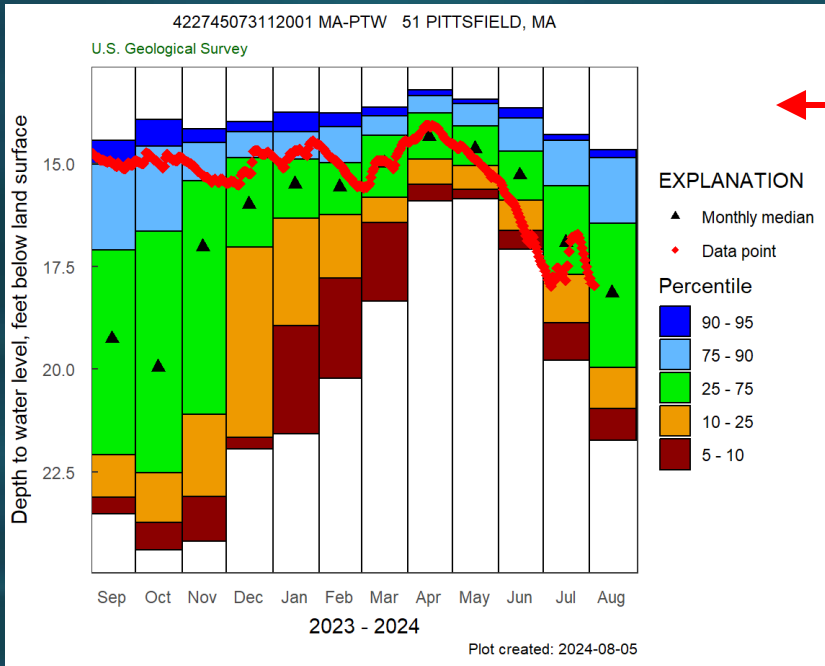
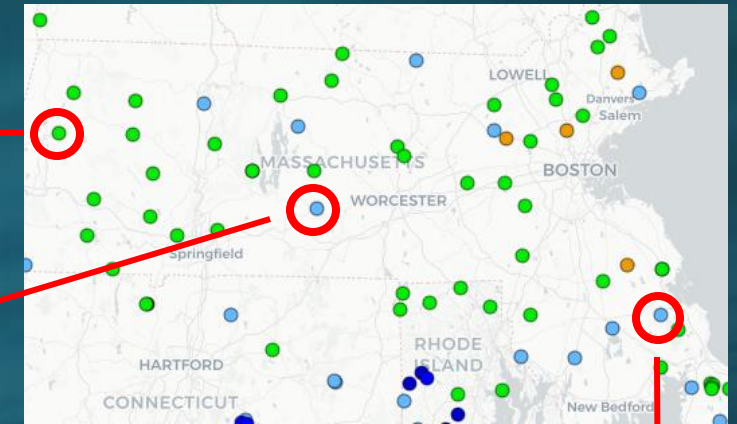
Explanation - Percentile classes

lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	Runoff
Much below Normal	Below normal	Normal	Above normal	Much above normal			

# Groundwater Conditions – End of Month



# GW - Western, Central, and Southeast Regions



Period of Record: 60 yrs; Cont. 39 yrs

Period of Record: 64 yrs; Cont. 6 yrs

Period of Record: 64 yrs; Cont. 10 yrs

# Summary of Conditions

- Streamflow conditions generally moved into the normal flow range across Massachusetts during July after having below normal flows in the 3 westernmost regions in June.
- Groundwater levels generally moved into the normal to above normal range across Massachusetts during July after having below normal levels at several climate response wells in the northern part of the state in June.