

Streamflow and Groundwater Conditions in Massachusetts

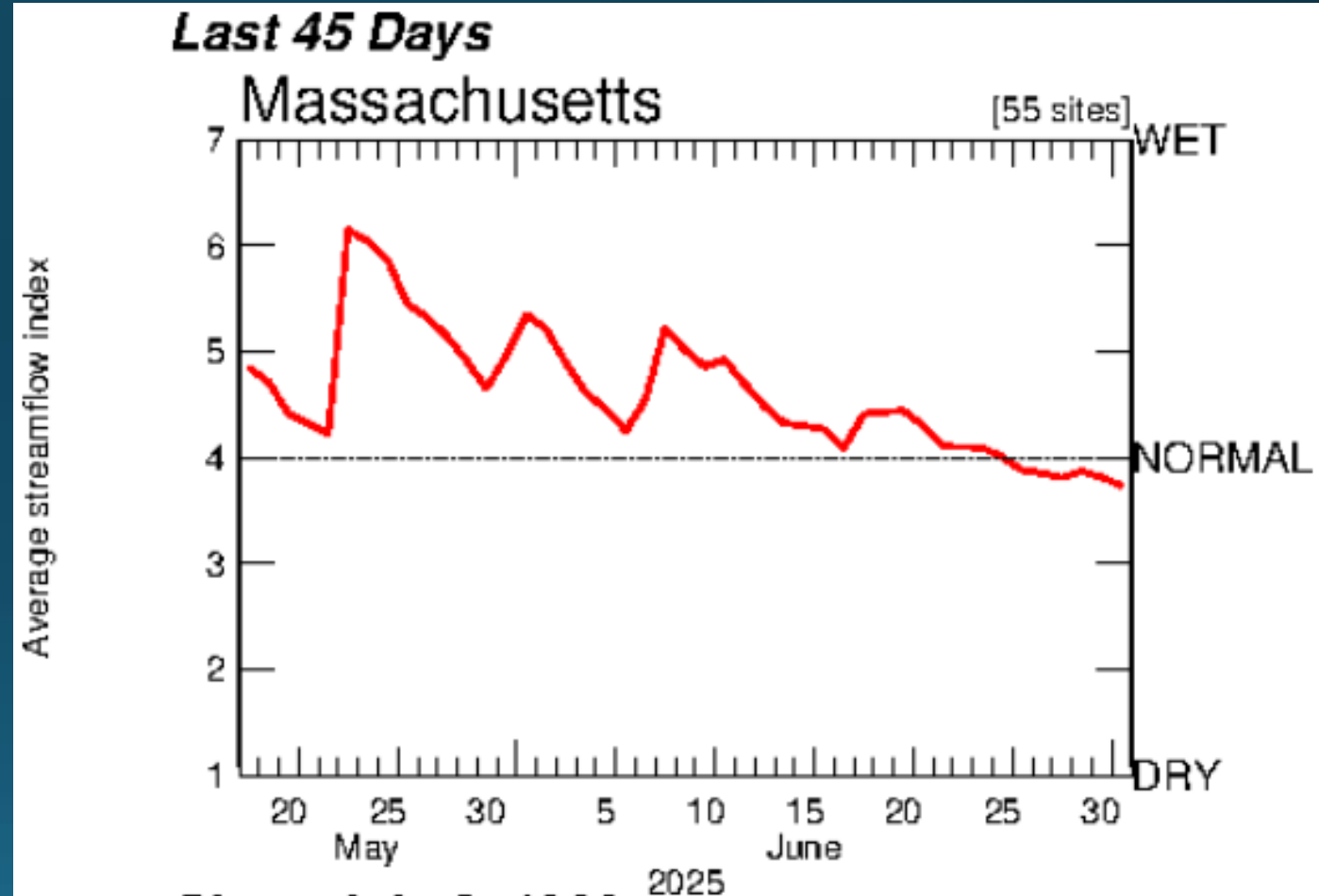
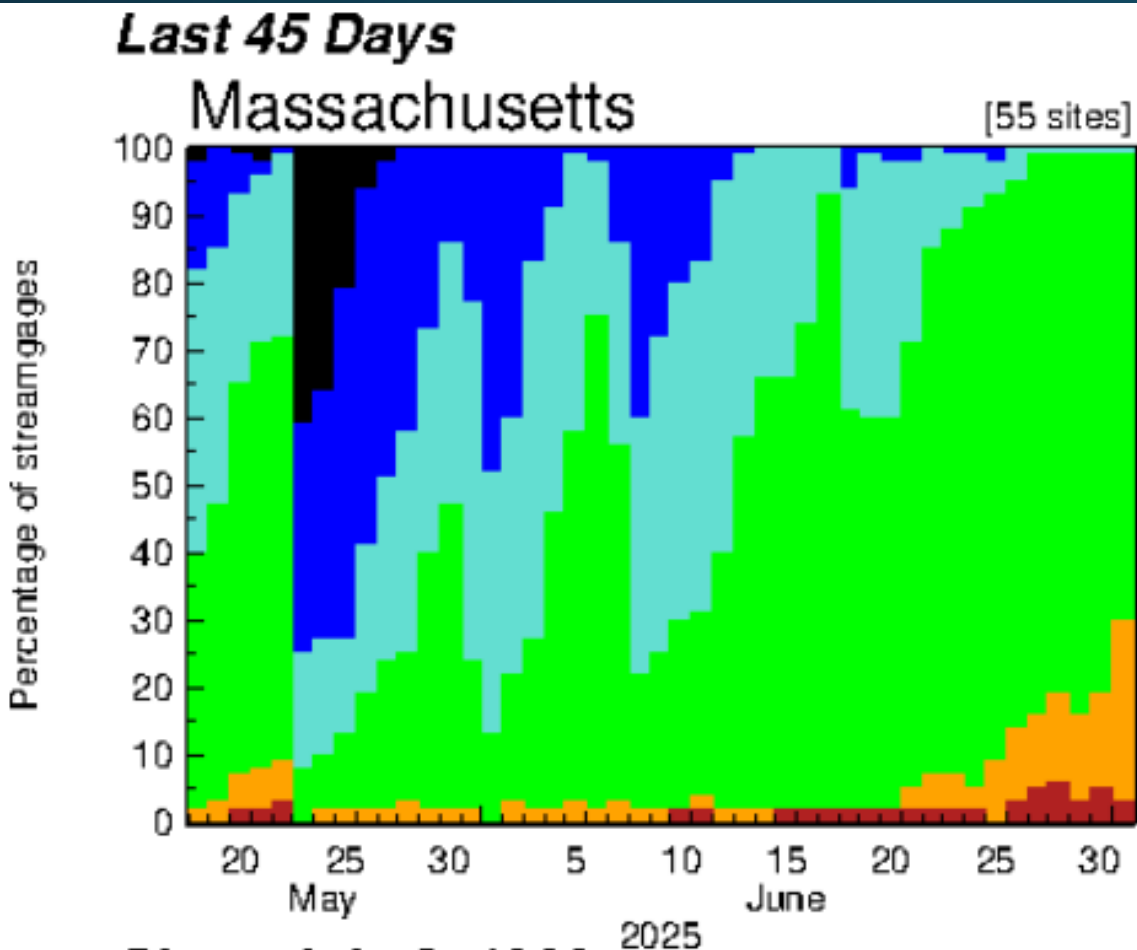
Massachusetts Drought Task Force Meeting

July 9, 2025

U.S. Geological Survey
New England Water Science Center
Gardner Bent

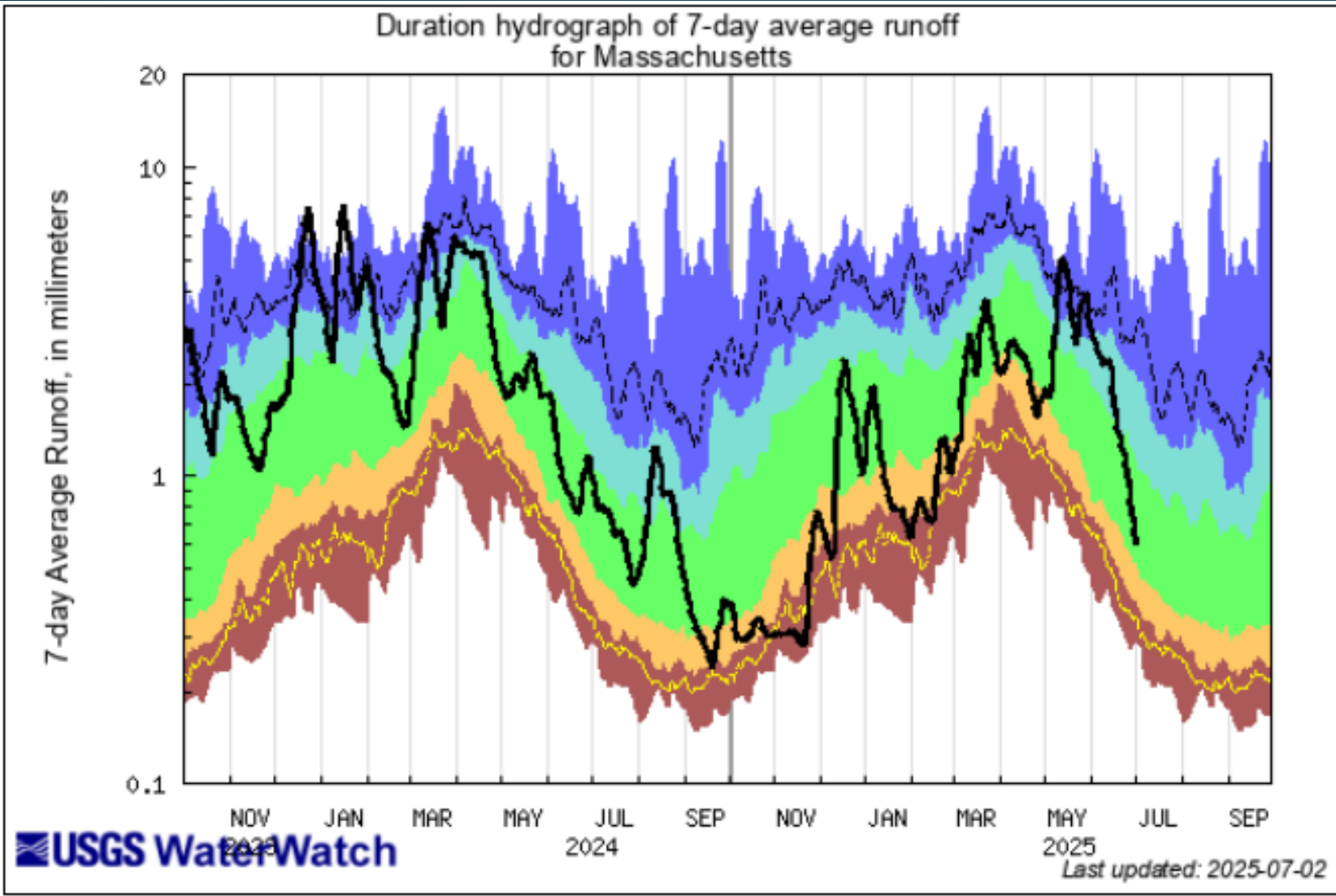






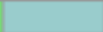



Streamflow Conditions – last 45 days



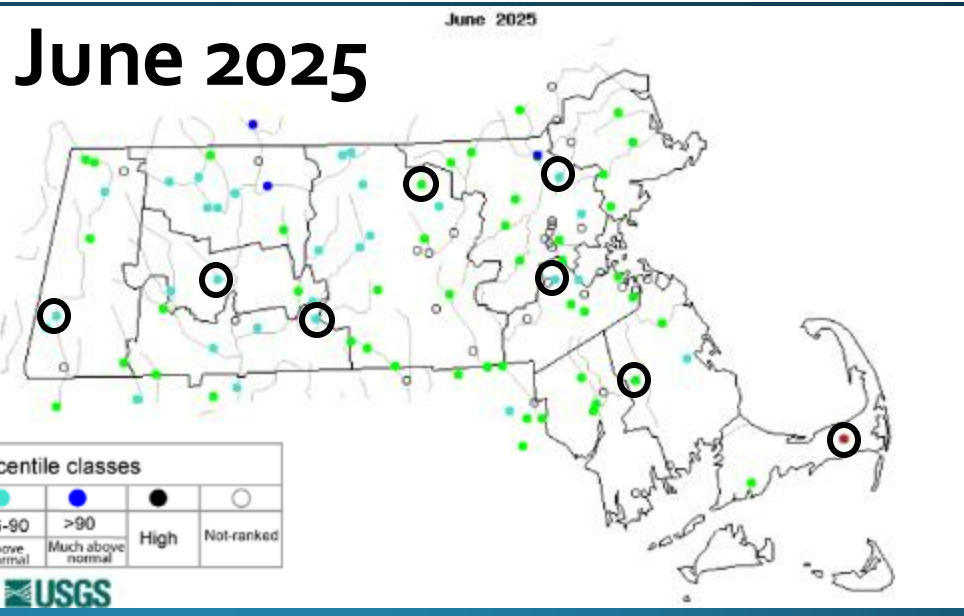
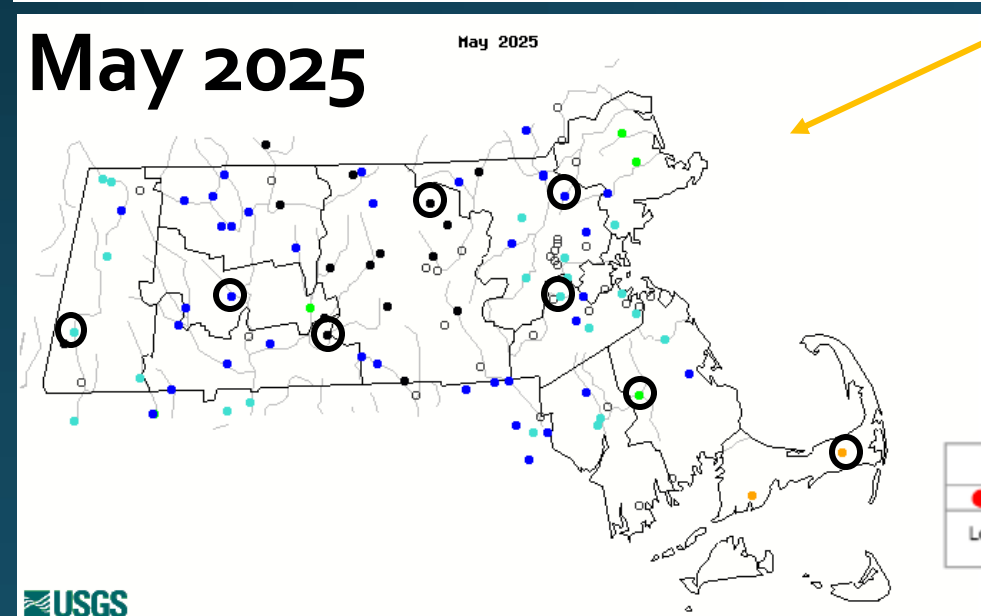
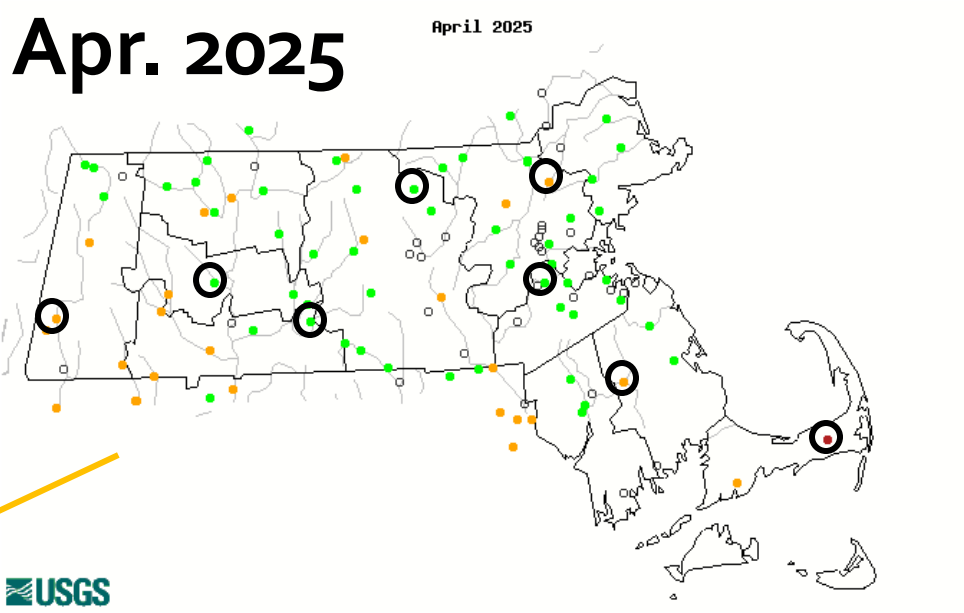
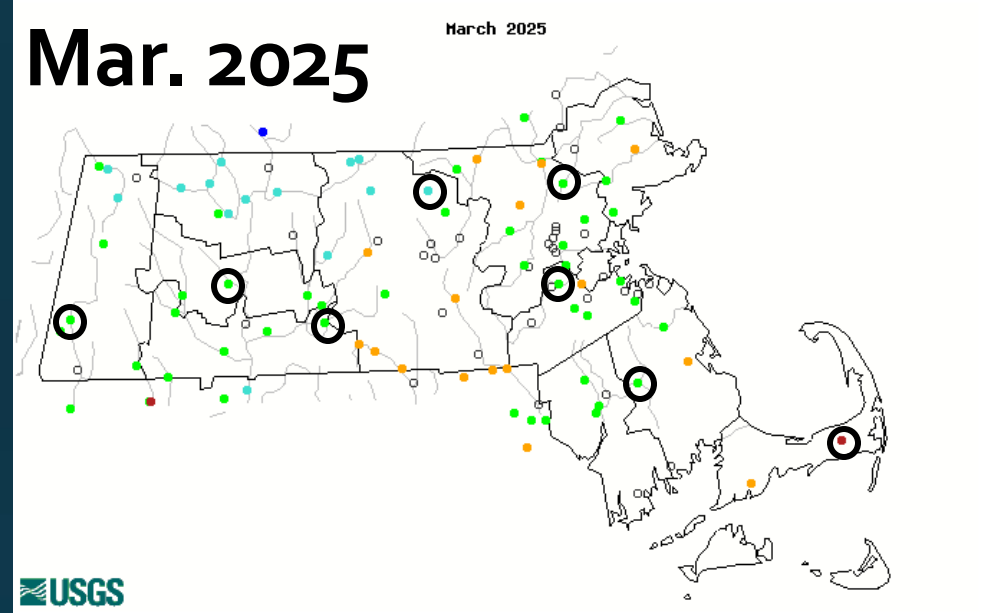
Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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		

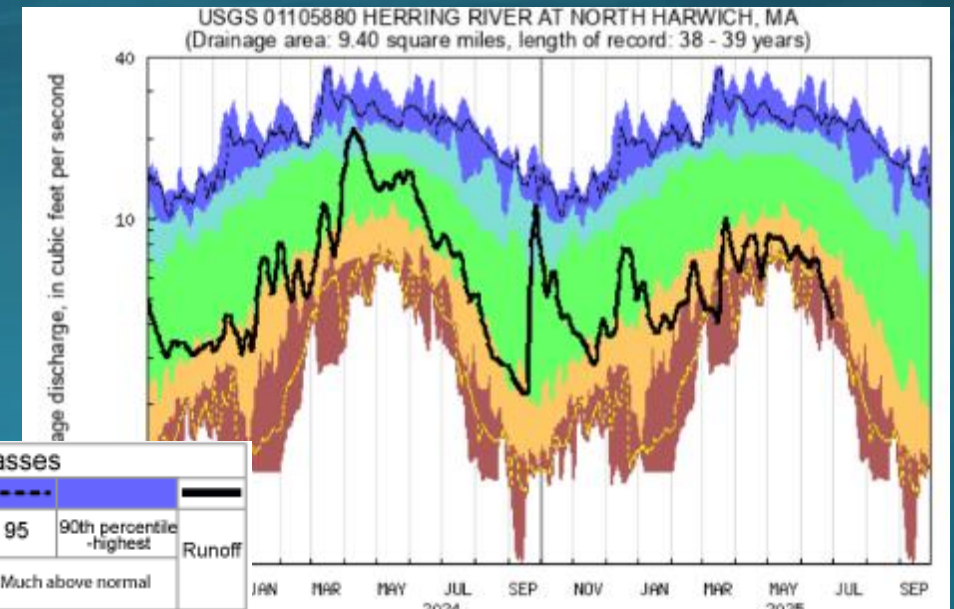
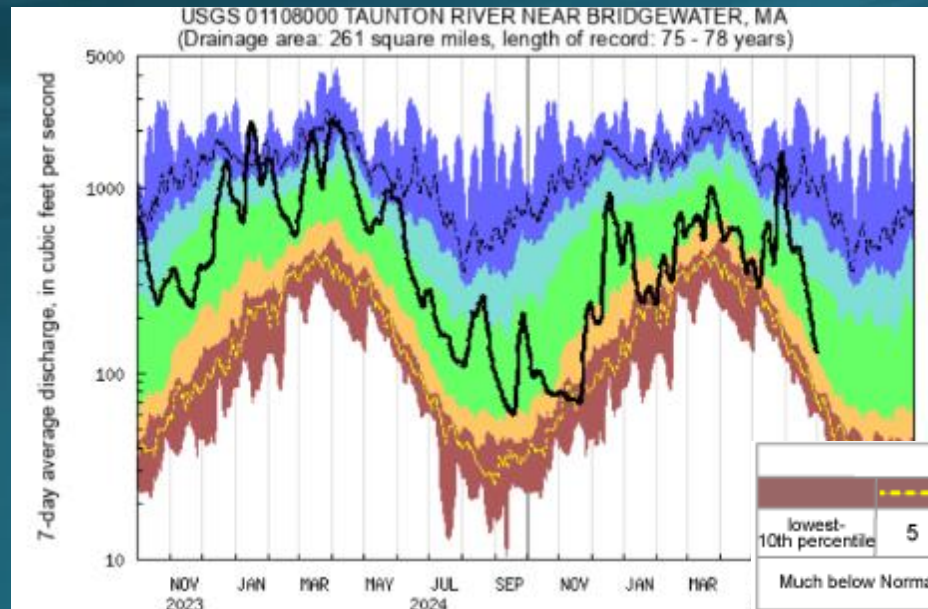
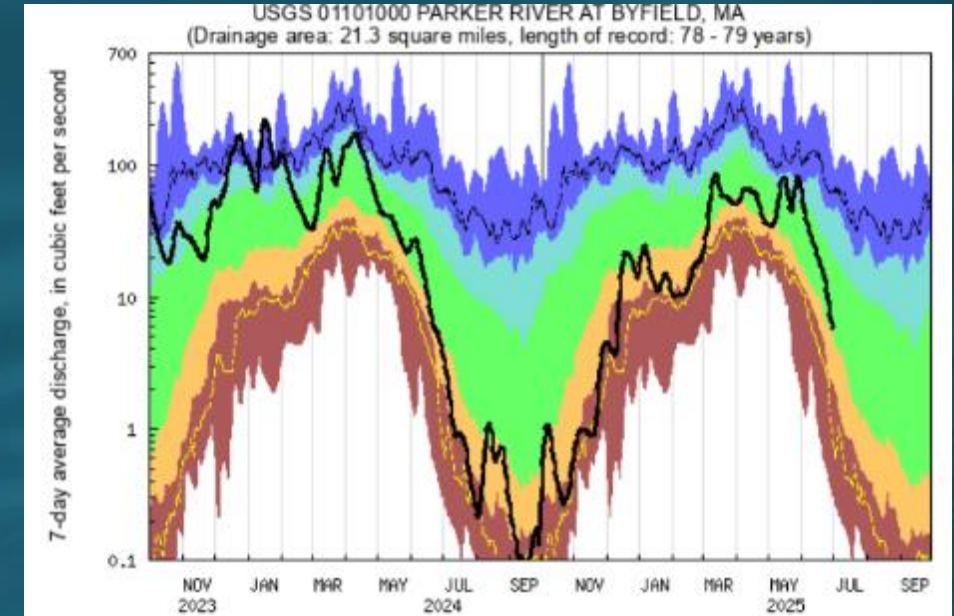
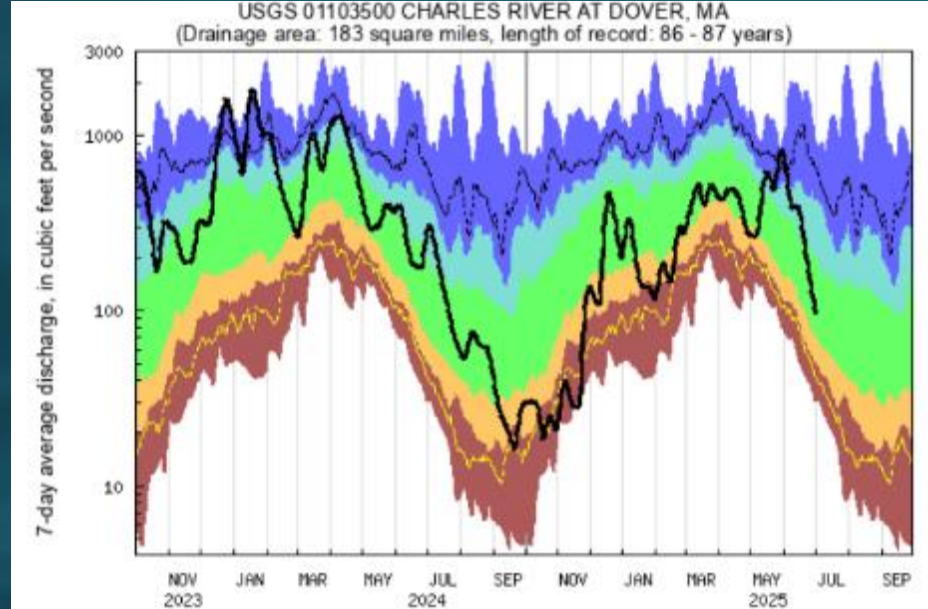
Streamflow Conditions – Monthly Average



Explanation - Percentile classes

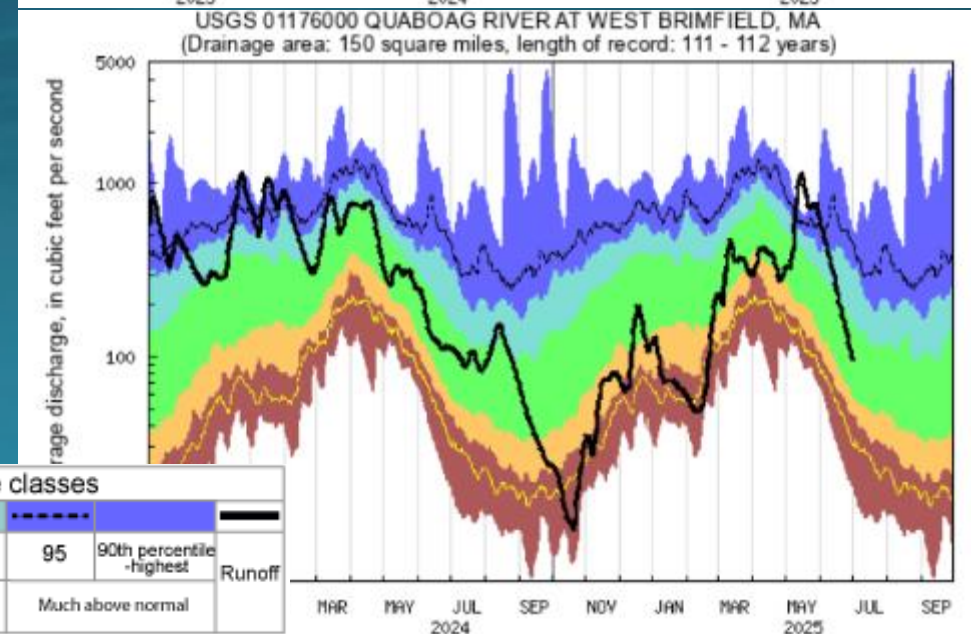
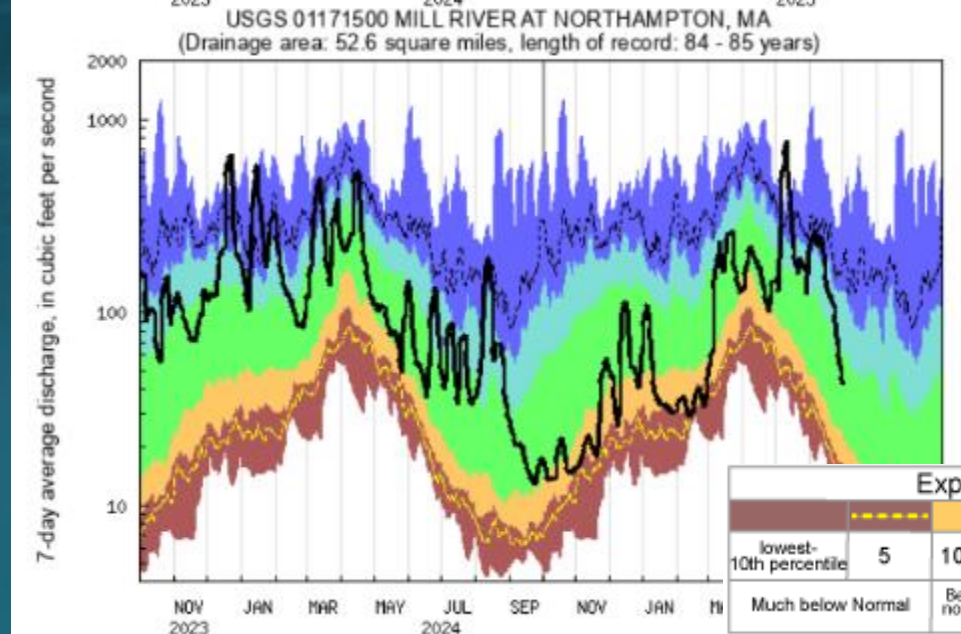
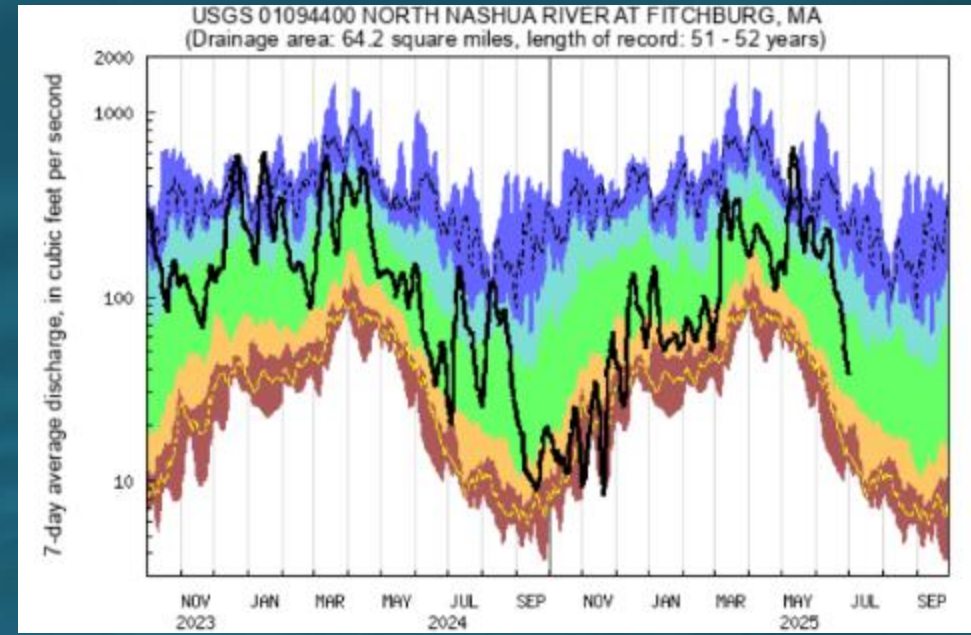
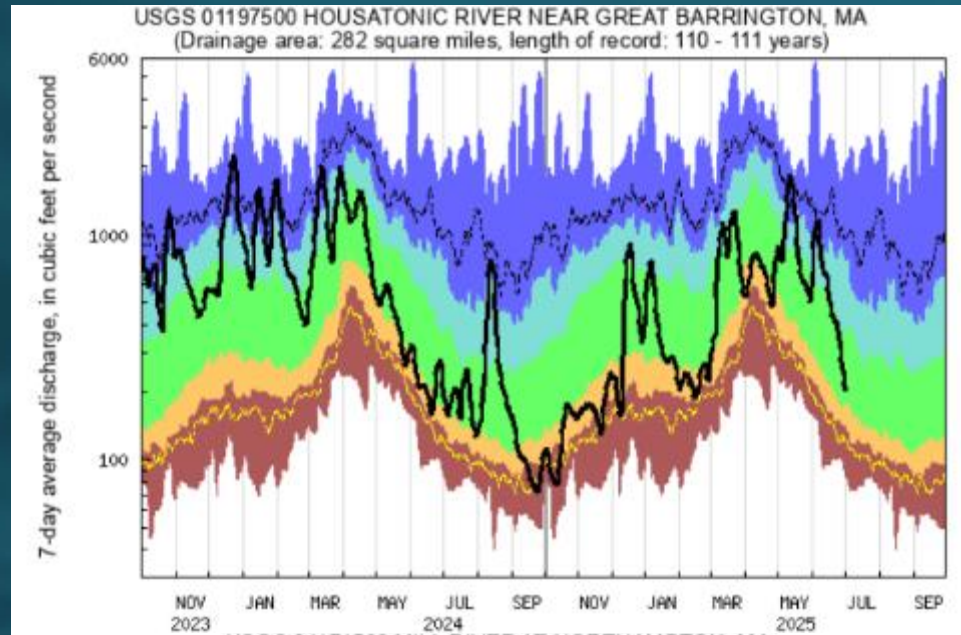
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

SW Conditions – 7-Day Moving Average



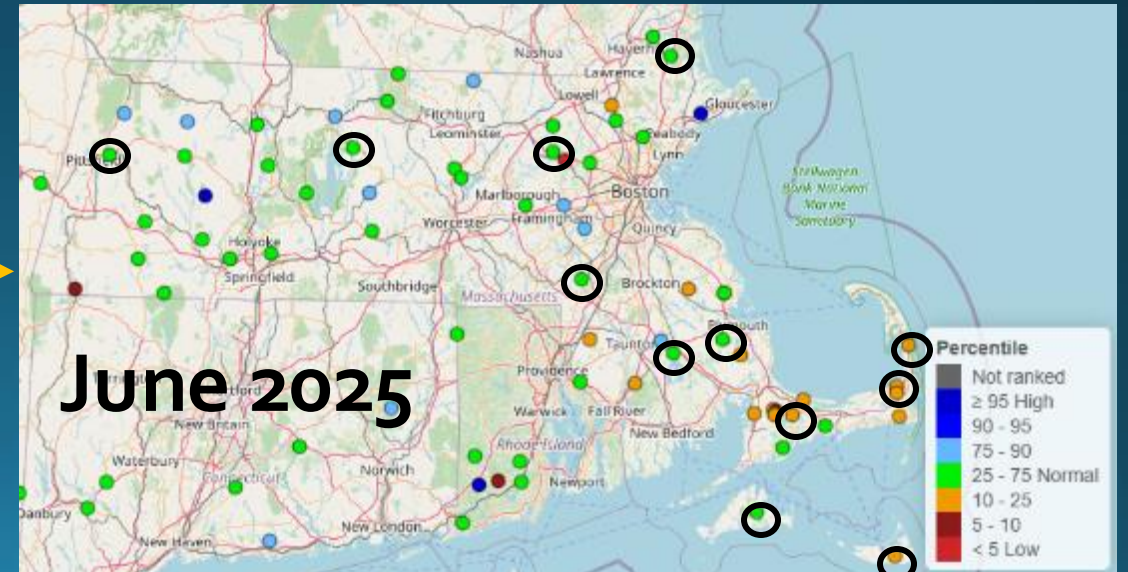
Explanation - Percentile classes						Runoff
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		

SW Conditions 7-Day Average

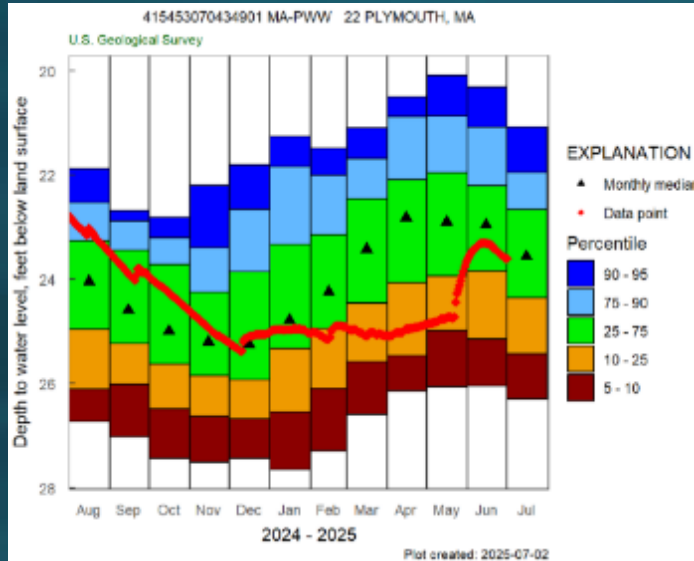


Explanation - Percentile classes						Runoff
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below Normal	Below normal	Normal	Above normal	Much above normal	90th percentile-highest	

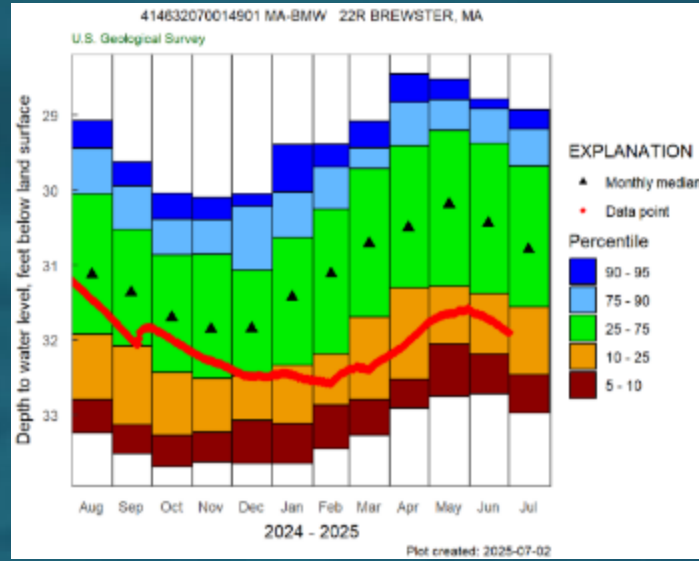
Groundwater Conditions –End of Month



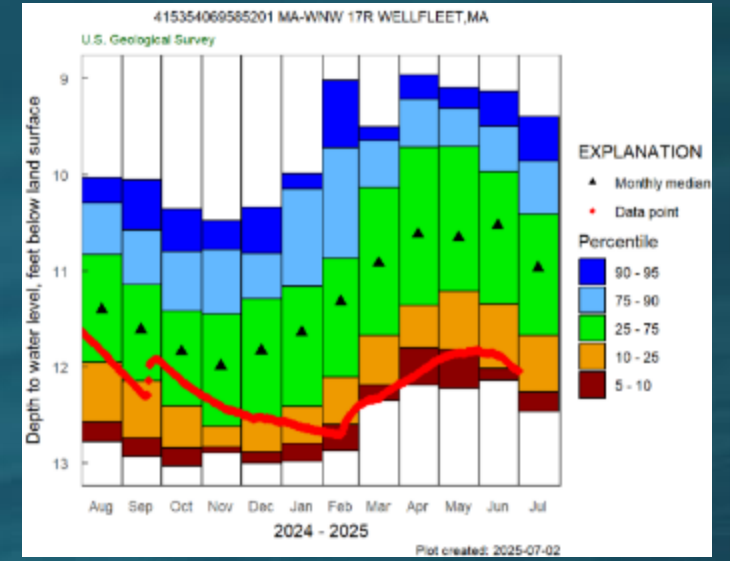
Groundwater Conditions – Selected Wells



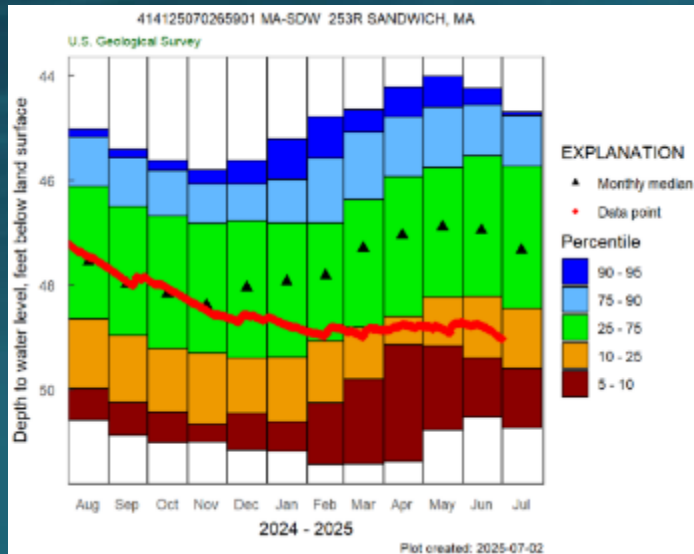
Period of Record: 69 yrs; Cont. 10 yrs



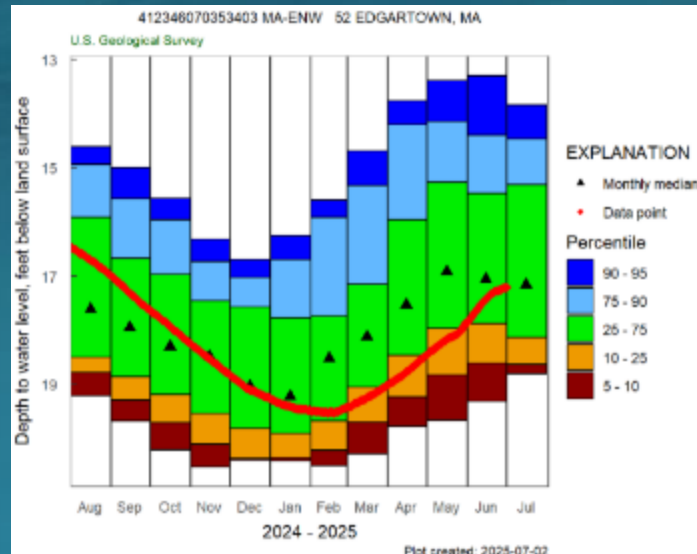
Period of Record: 63 yrs; Cont. 24 yrs



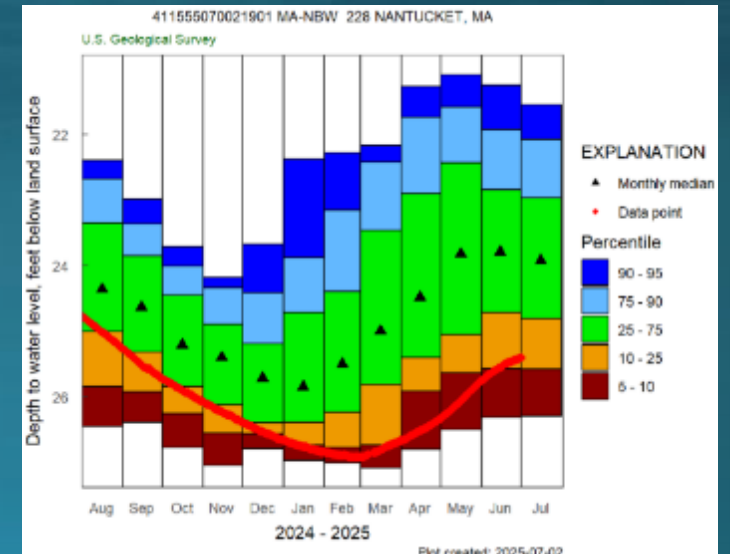
Period of Record: 63 yrs; Cont. 13 yrs



Period of Record: 63 yrs; Cont. 13 yrs

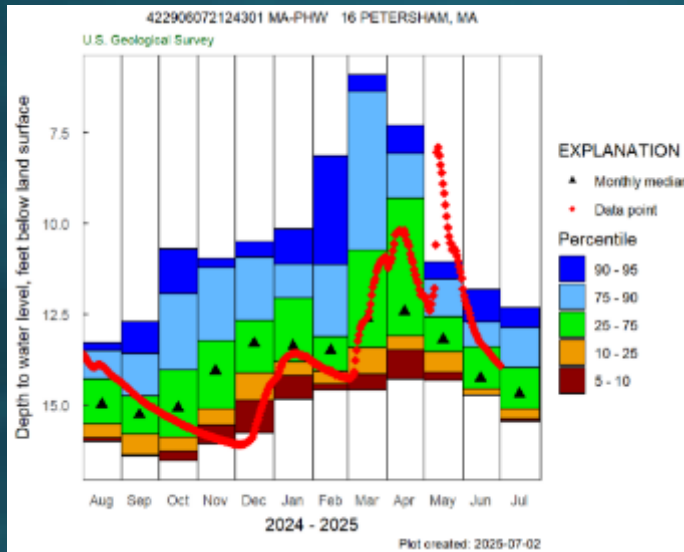


Period of Record: 49 yrs; Cont. 6 yrs

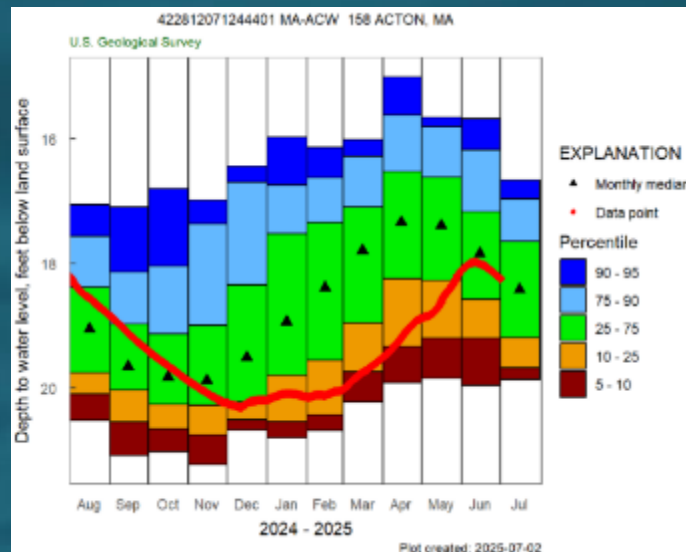


Period of Record: 49 yrs; Cont. 3 yrs

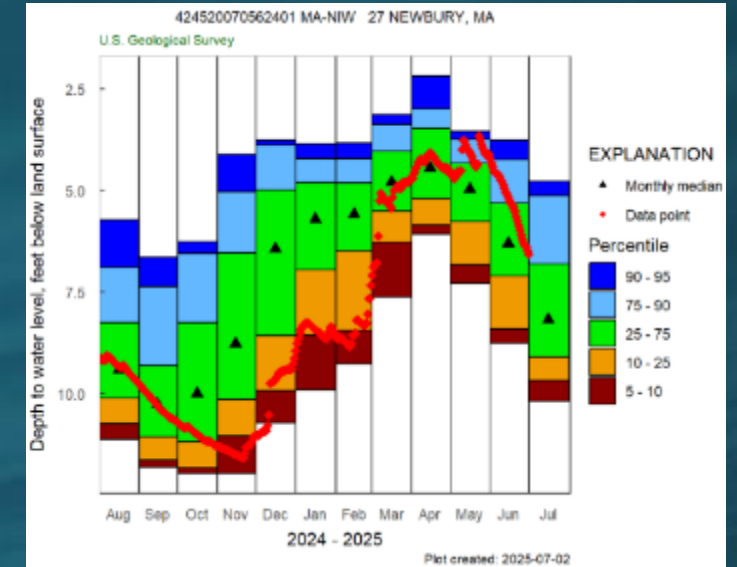
Groundwater Conditions – Selected Wells



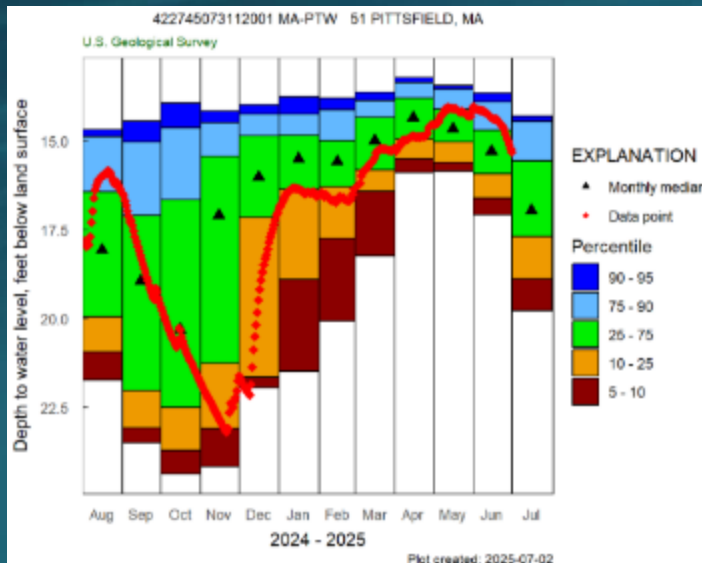
Period of Record: 41 yrs; Cont. 13 yrs



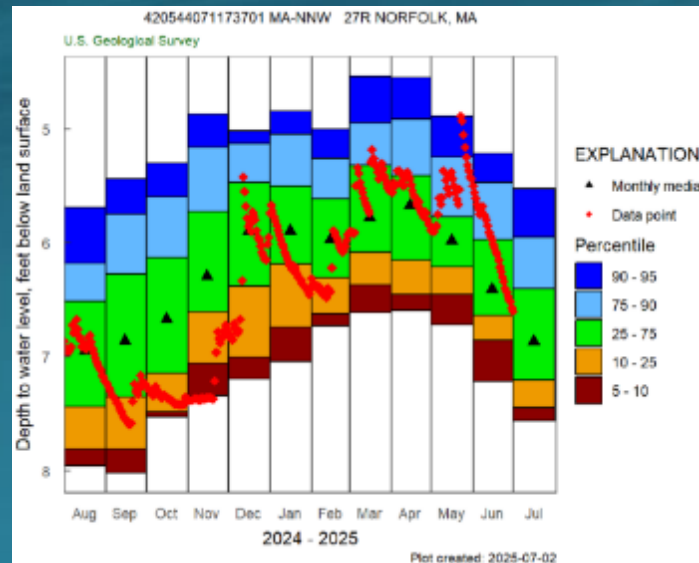
Period of Record: 60 yrs; Cont. 25 yrs



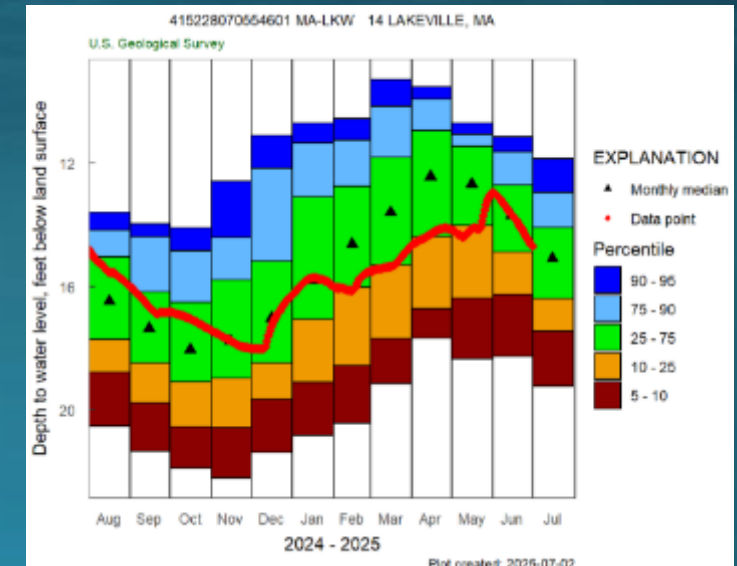
Period of Record: 64 yrs; Cont. 40 yrs



Period of Record: 62 yrs; Cont. 41 yrs



Period of Record: 60 yrs; Cont. 24 yrs



Period of Record: 61 yrs; Cont. 41 yrs

Summary of Conditions

- June streamflow conditions across Massachusetts were normal or above normal, except at Herring River at North Harwich (01105880) on Cape Cod which was much below normal.
- Although, streamflow conditions were mainly normal most gages saw a decrease in their flow percentile during June with below normal precipitation and higher temperatures during the month.
- June groundwater level conditions were mainly normal across much of the State, except for southeastern Massachusetts, Cape Cod, and the Islands where most wells were below normal.
- Groundwater levels in the Plymouth area, Cape Cod, and the Islands have likely reached their highest level for the year, unless there is a significant rain event(s).