

Streamflow and Groundwater Conditions in Massachusetts

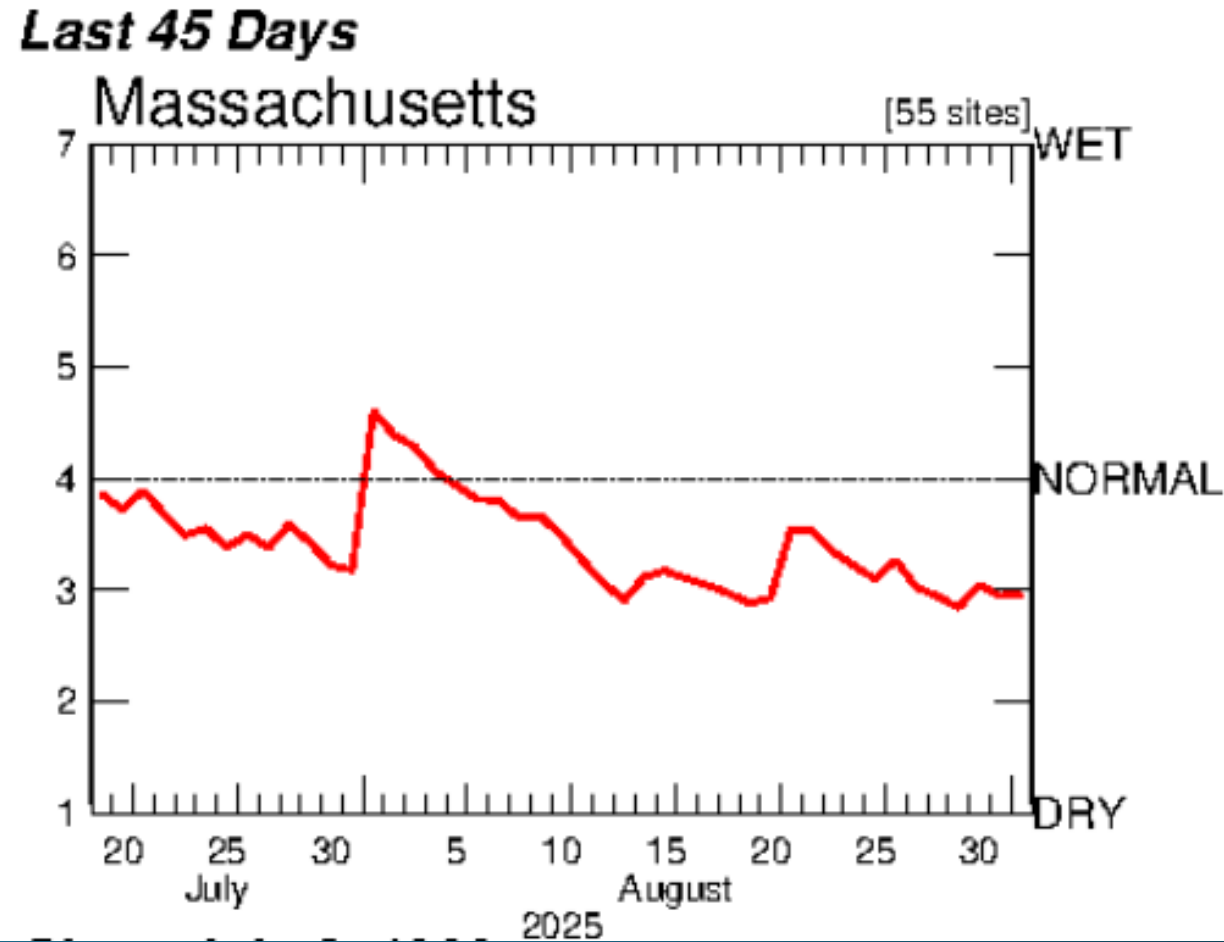
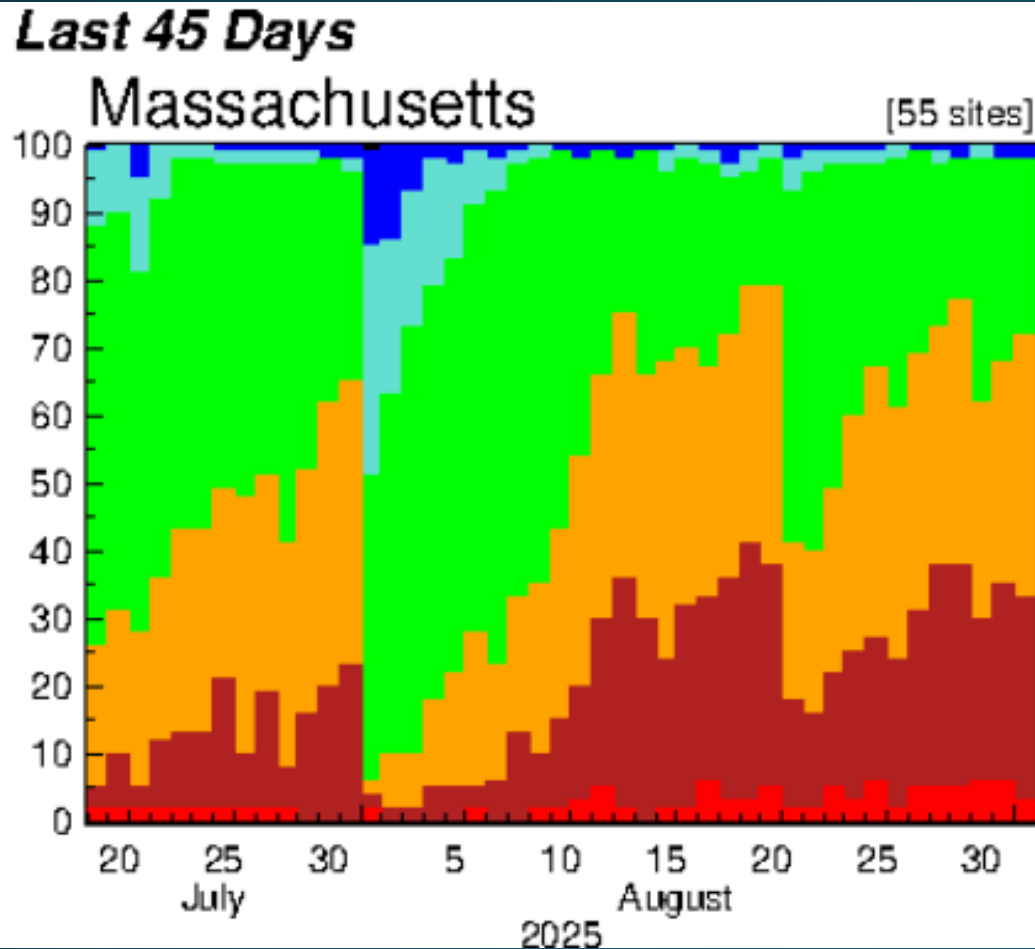
Massachusetts Drought Task Force Meeting

September 8, 2025

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

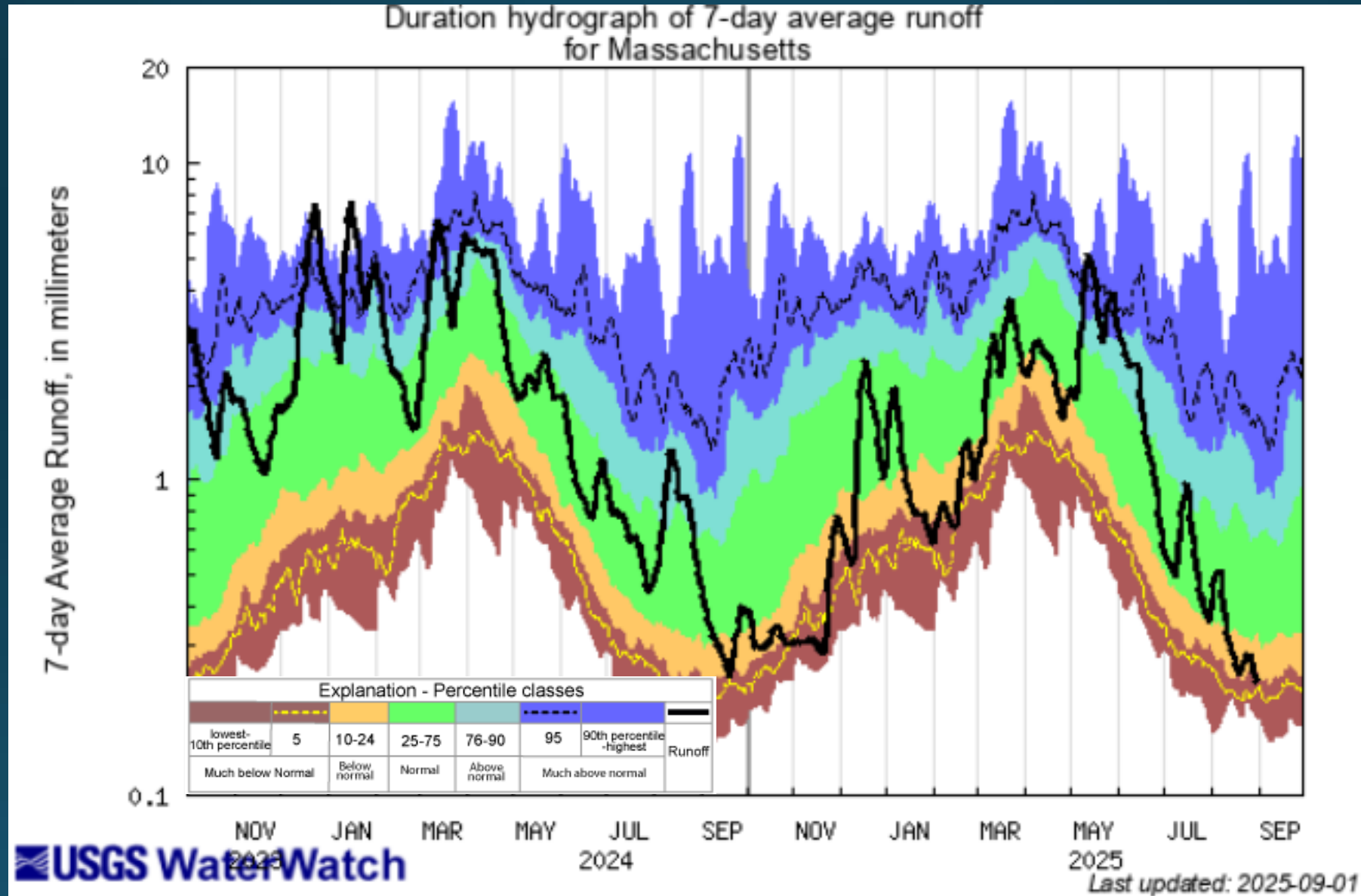


Streamflow Conditions – last 45 days

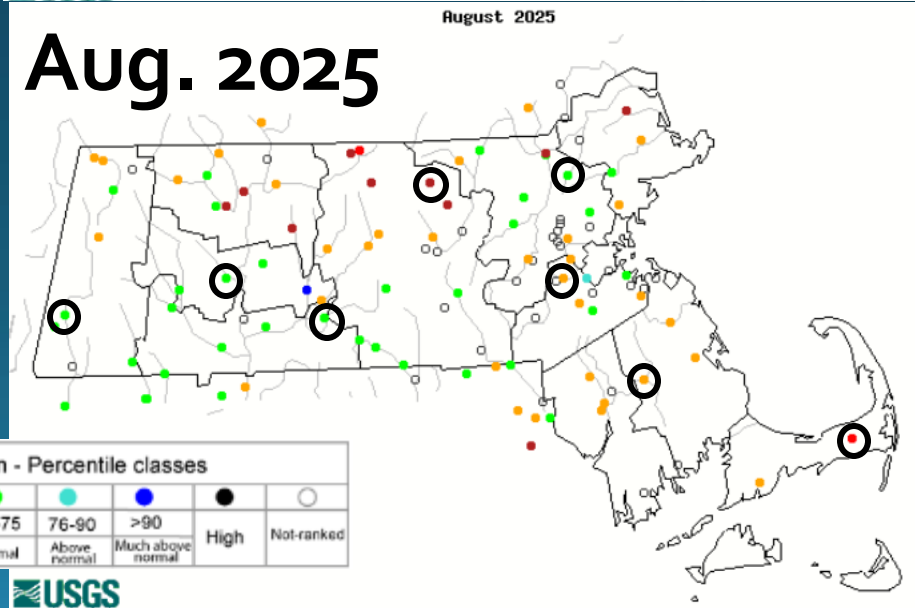
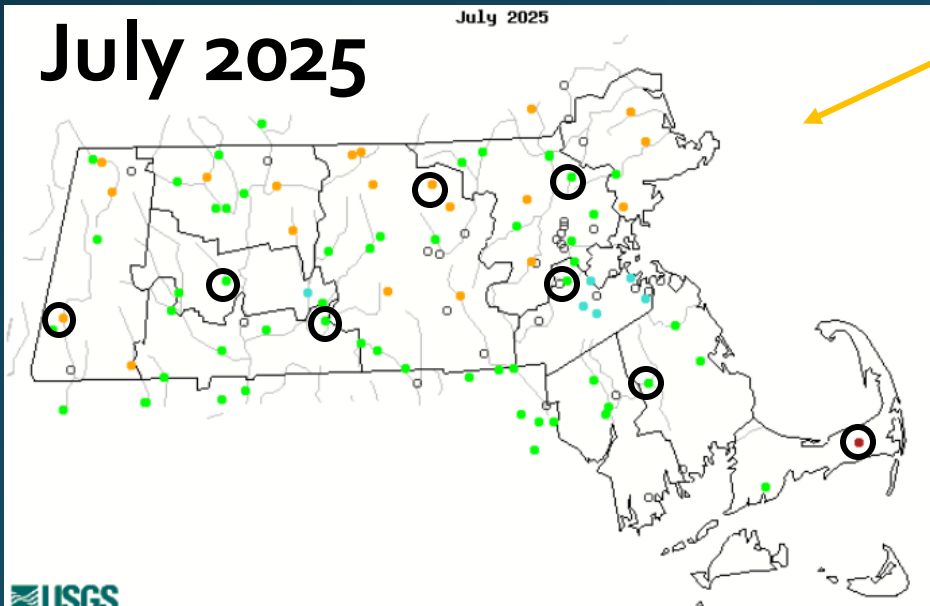
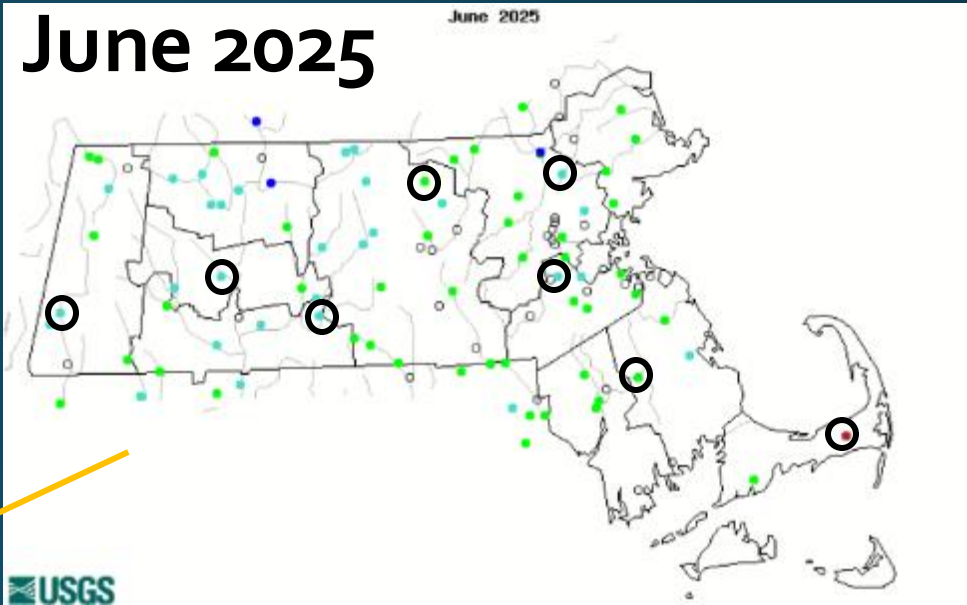
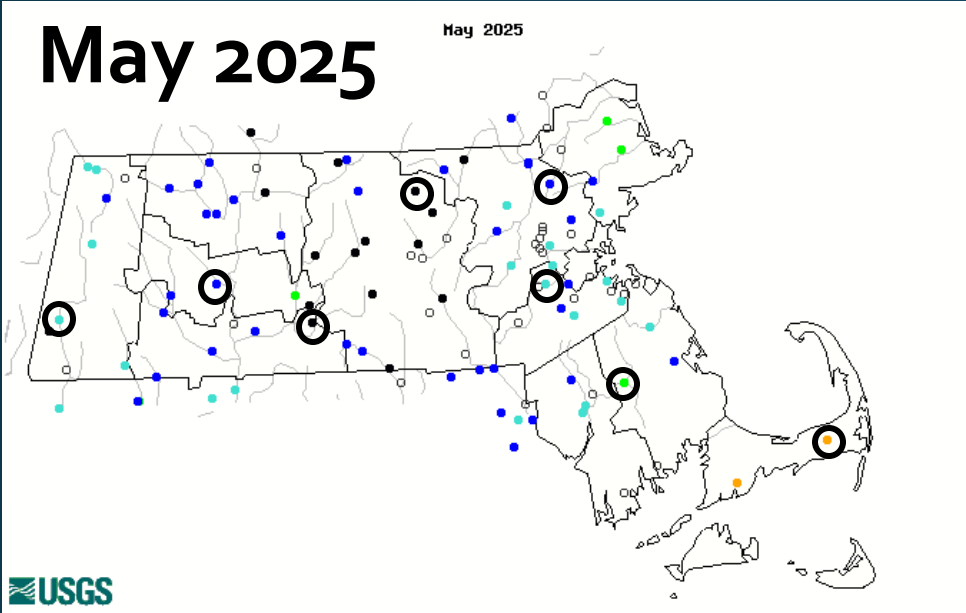


Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Streamflow Conditions 7-Day Moving Average



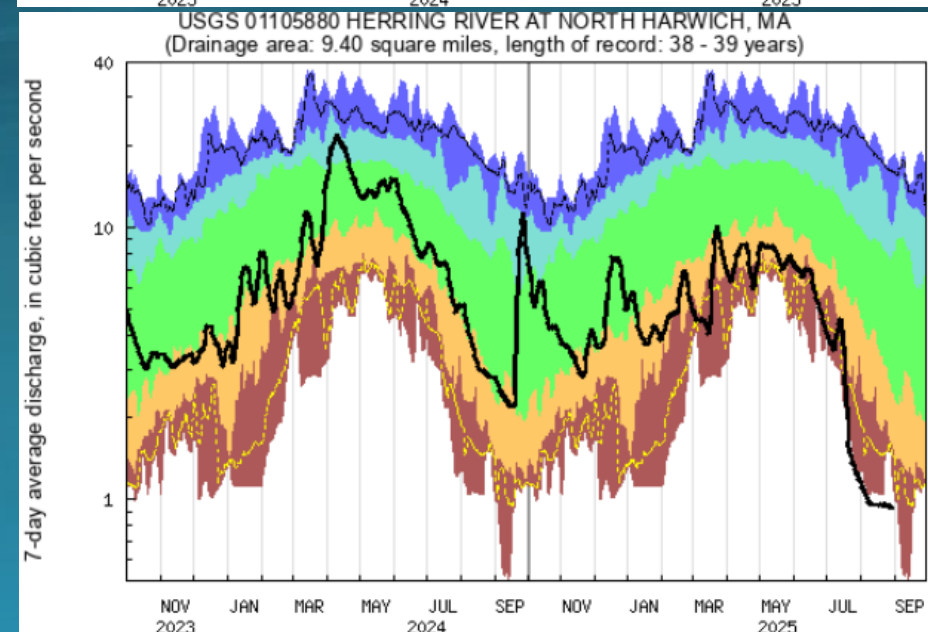
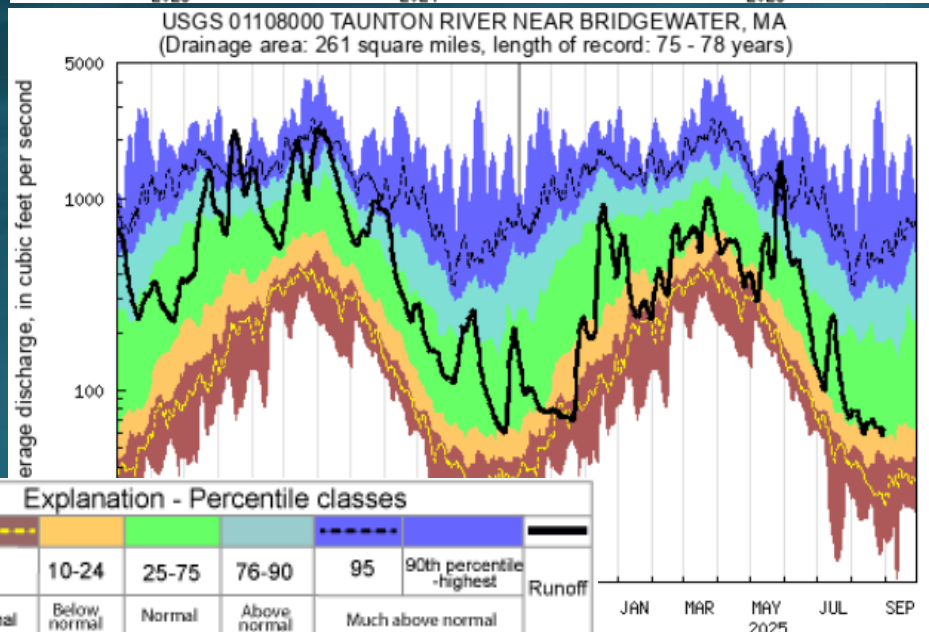
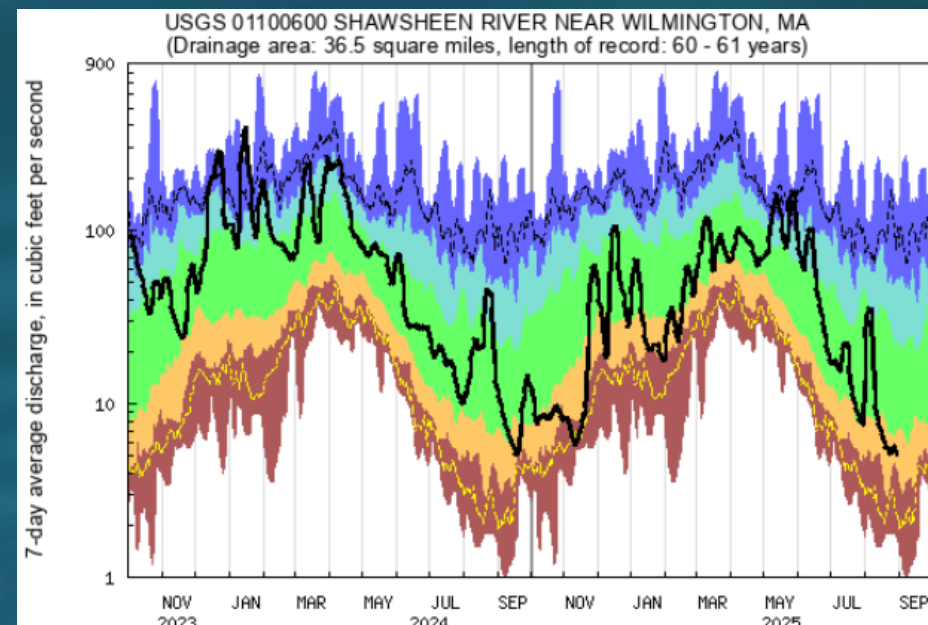
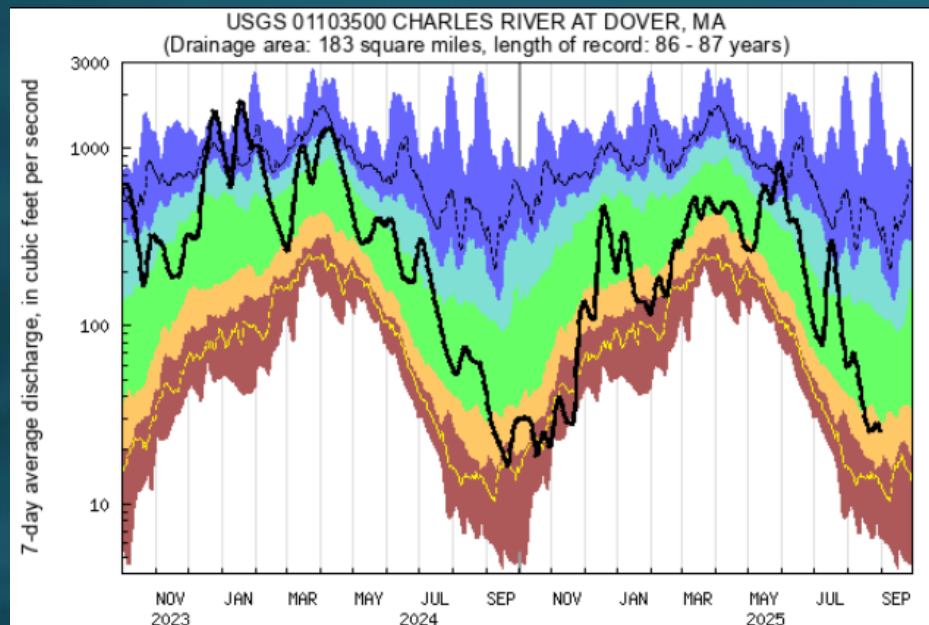
Streamflow Conditions – Monthly Average



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		

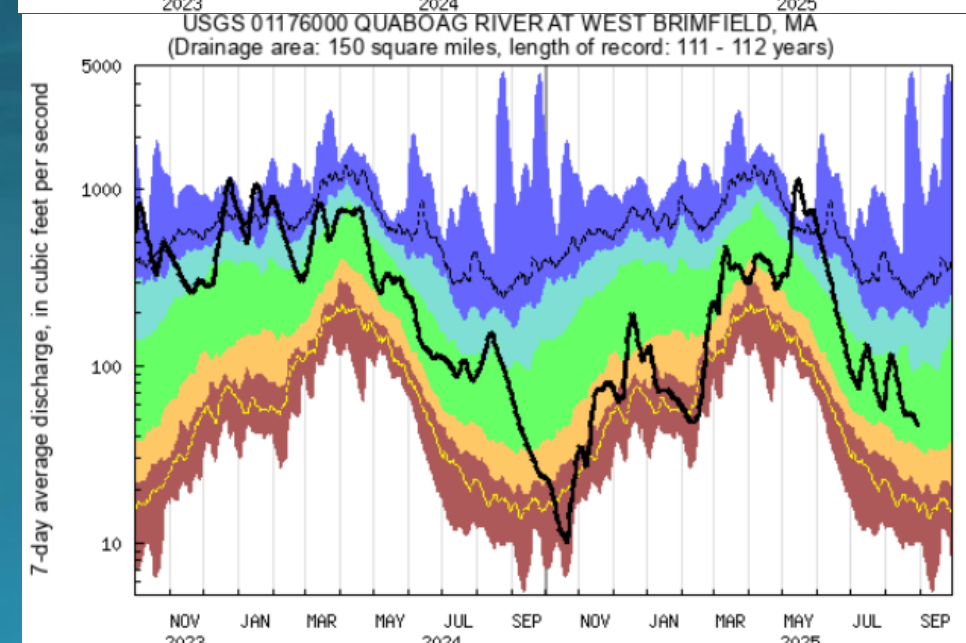
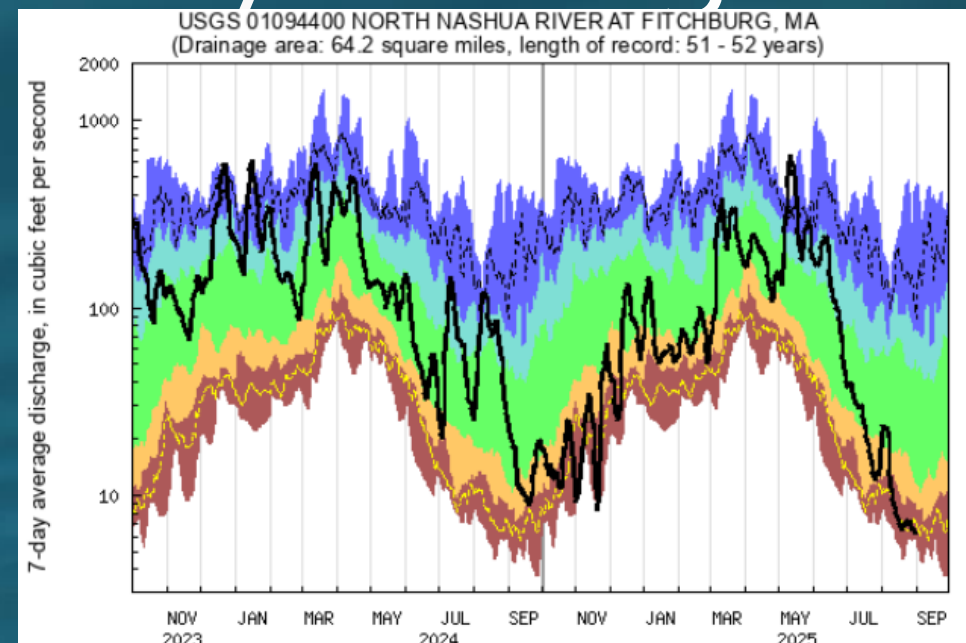
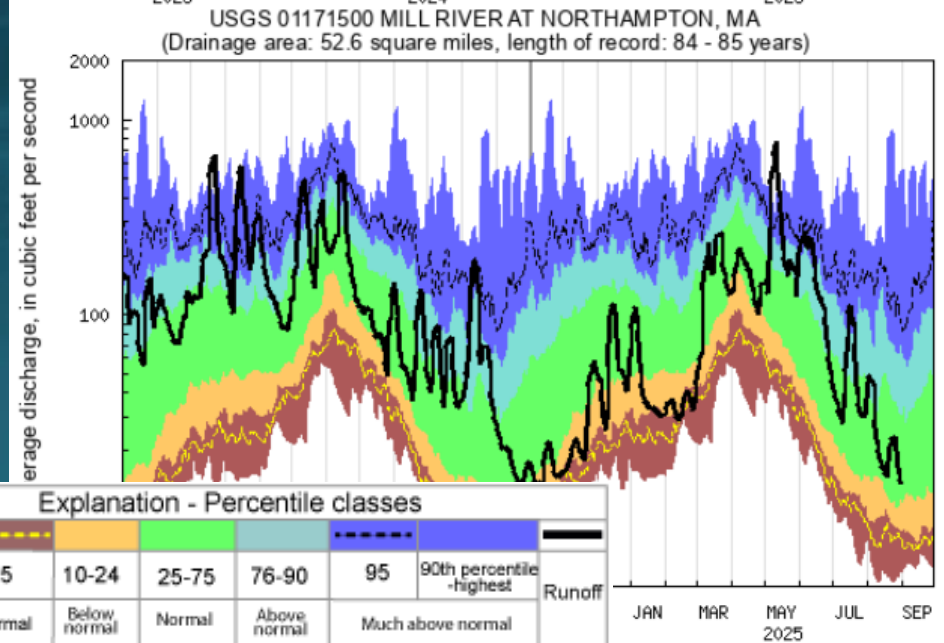
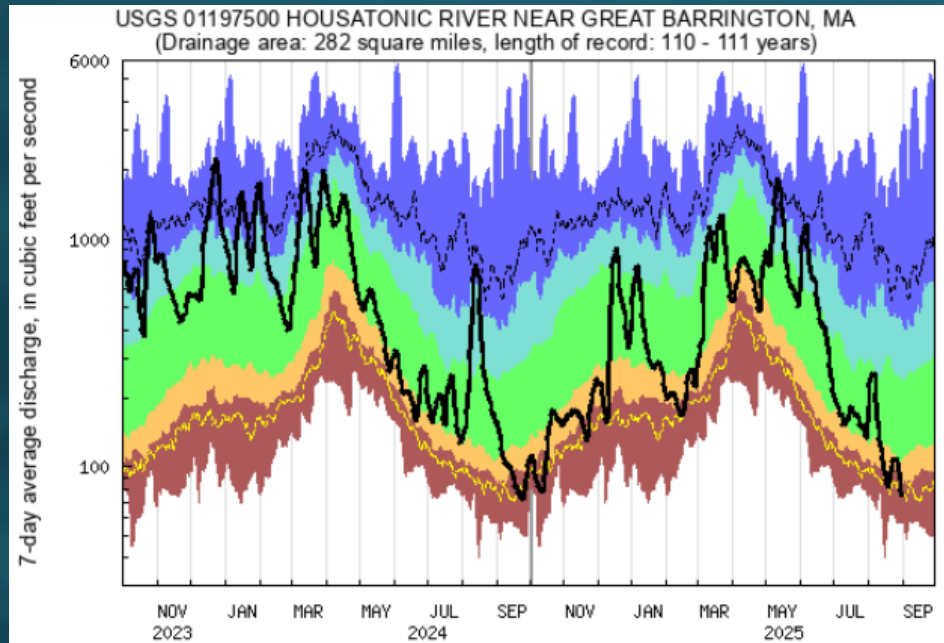
SW Conditions – 7-Day Moving Average



Explanation - Percentile classes

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			

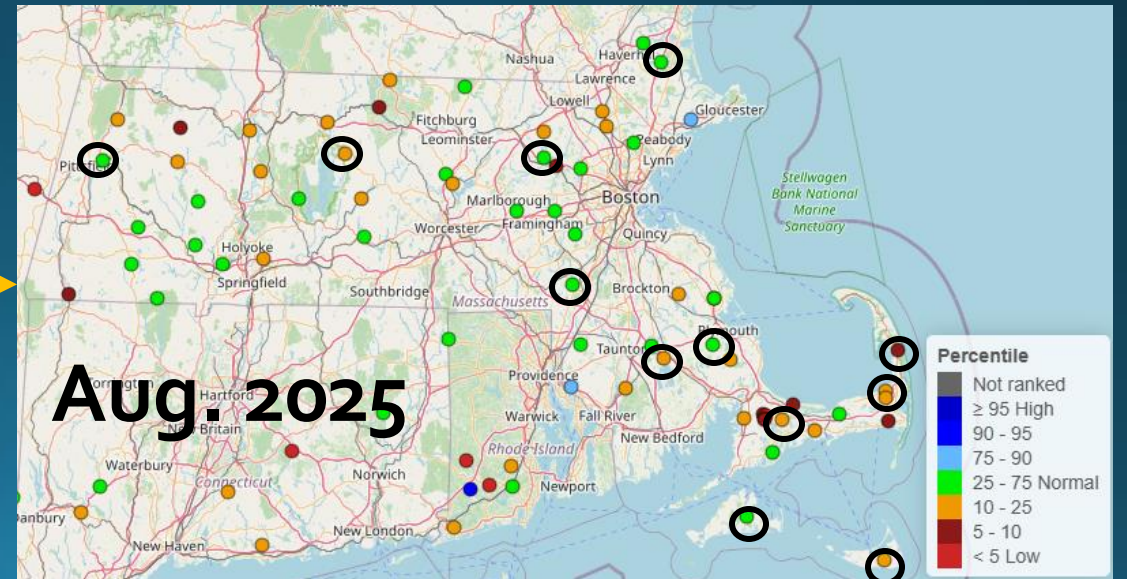
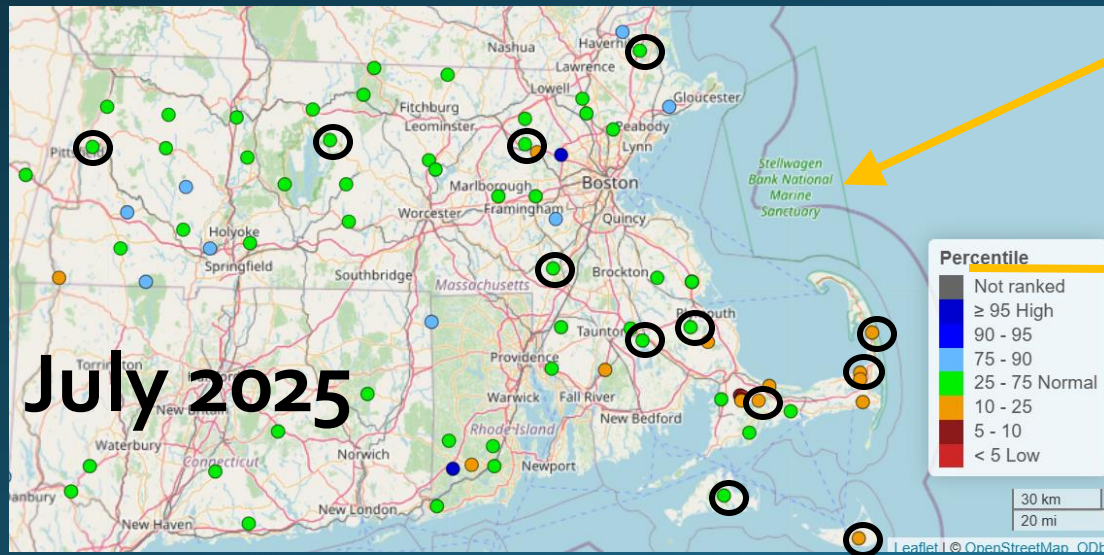
SW Conditions 7-Day Average



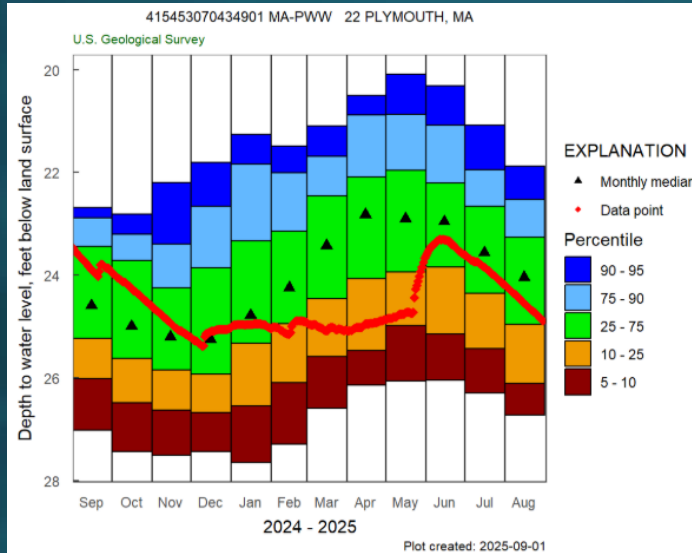
Explanation - Percentile classes

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		

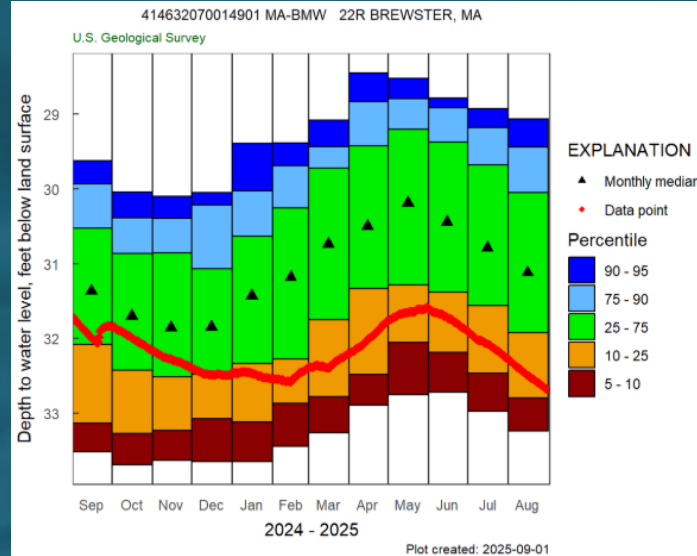
Groundwater Conditions –End of Month



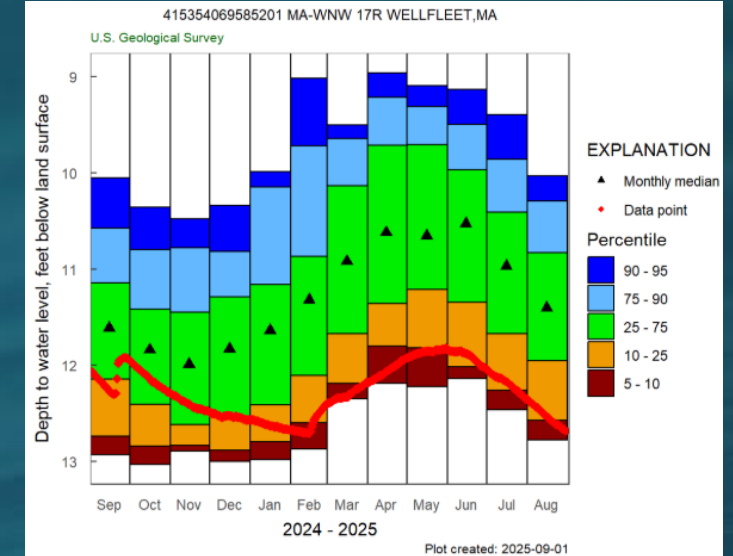
Groundwater Conditions – Selected Wells



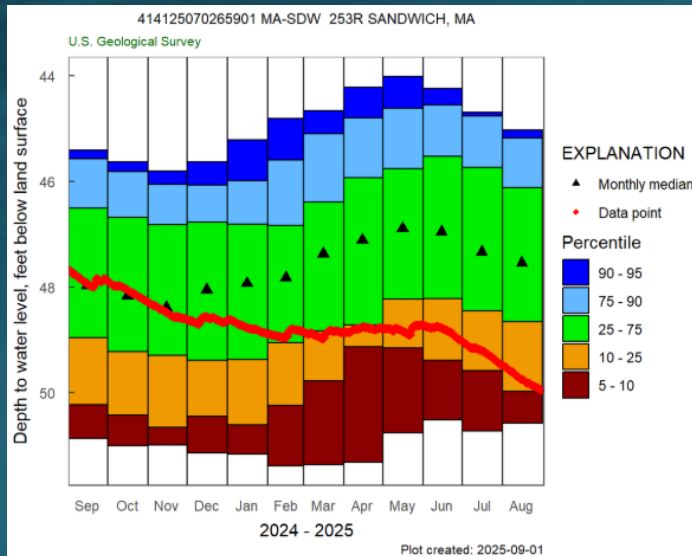
Period of Record: 69 yrs; Cont. 10 yrs



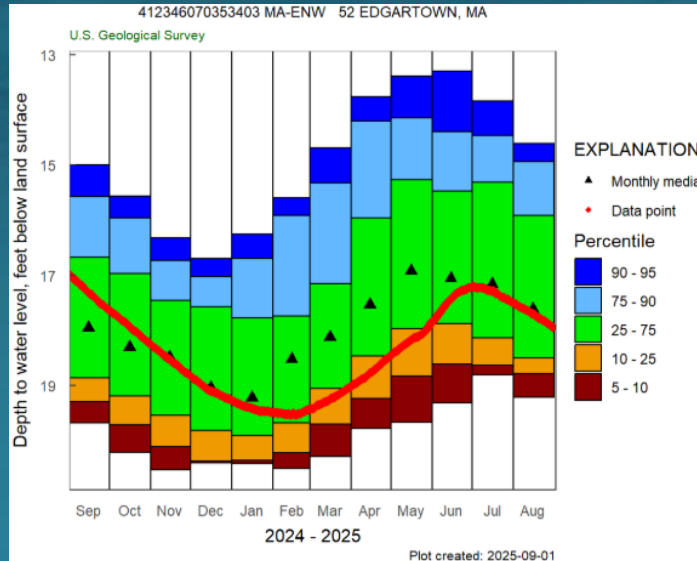
Period of Record: 63 yrs; Cont. 24 yrs



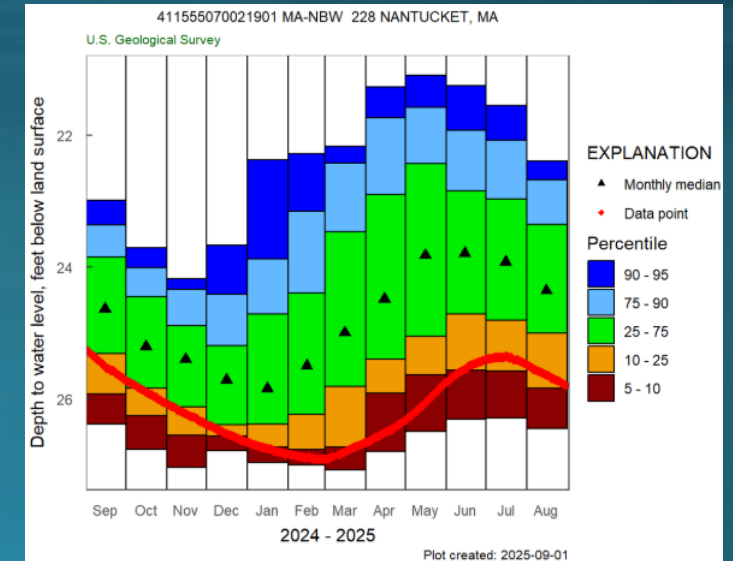
Period of Record: 63 yrs; Cont. 13 yrs



Period of Record: 63 yrs; Cont. 13 yrs

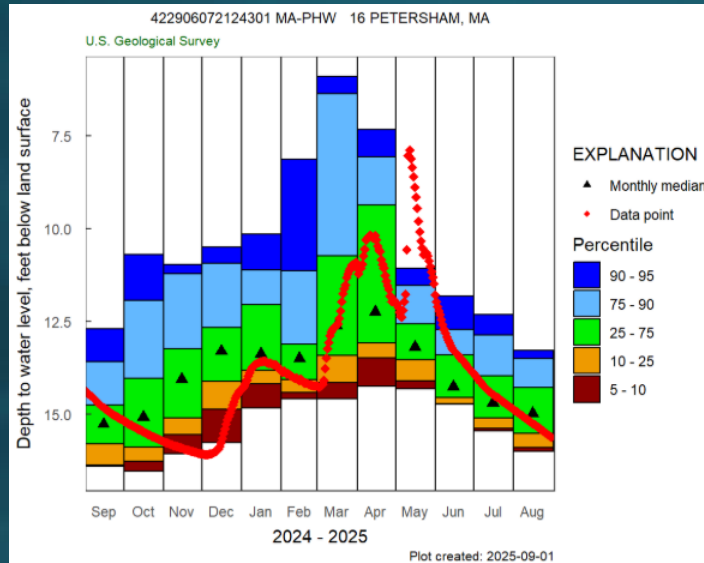


Period of Record: 49 yrs; Cont. 6 yrs

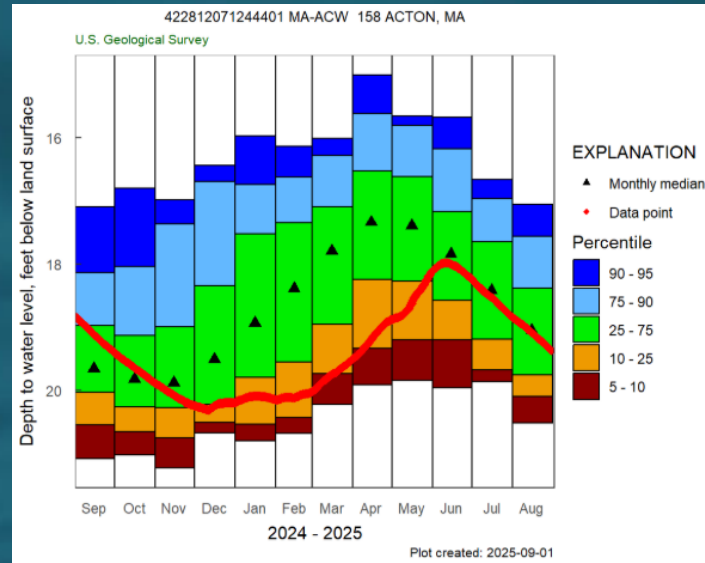


Period of Record: 49 yrs; Cont. 3 yrs

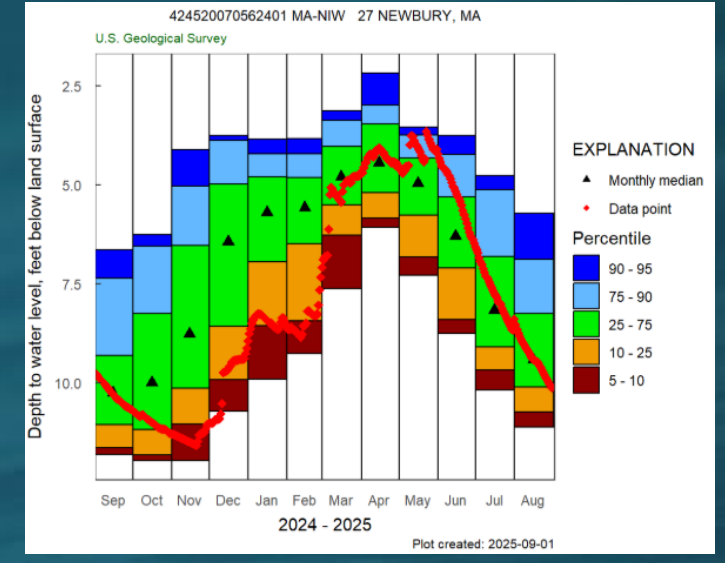
Groundwater Conditions – Selected Wells



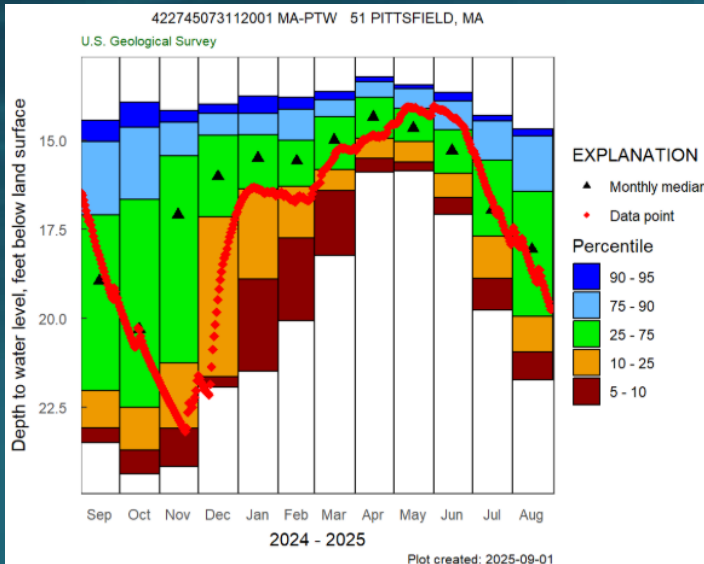
Period of Record: 41 yrs; Cont. 13 yrs



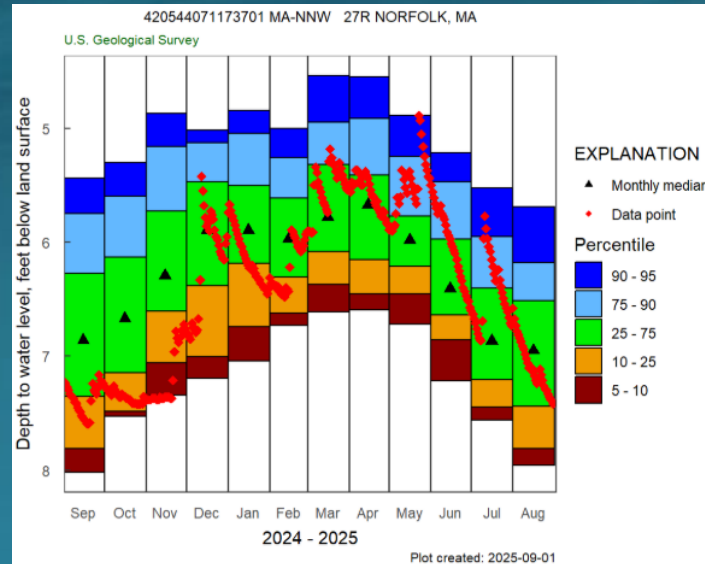
Period of Record: 60 yrs; Cont. 25 yrs



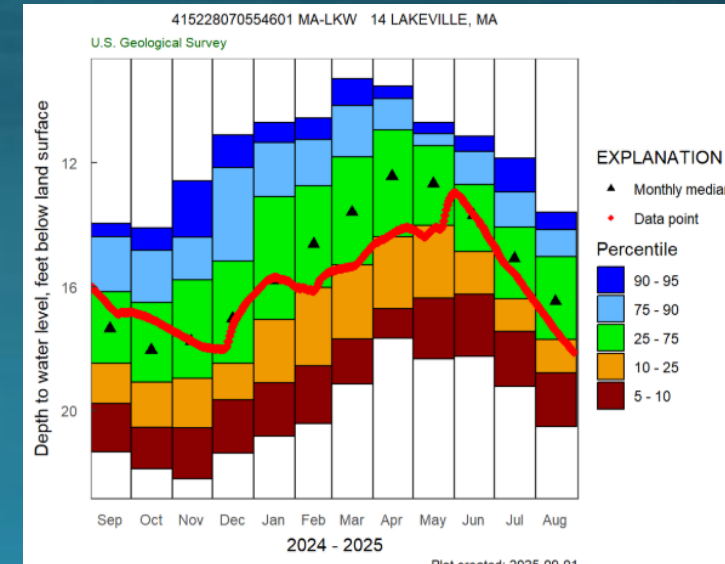
Period of Record: 64 yrs; Cont. 40 yrs



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

- August streamflow conditions generally declined as conditions in the northwest, north central, southeast parts of the State, and Cape Cod were mainly below normal.
- Streamflow conditions in southwestern and south central Massachusetts were mainly normal.
- August groundwater level conditions in the northwest, north central, northeast, southeastern parts of the State, and Cape Cod and the Islands were mainly below normal.
- An area across southwest and south central parts of the State into the metro-west area had groundwater level conditions that were mainly normal with a few wells having below normal conditions.