
Streamflow and Groundwater Conditions in Massachusetts

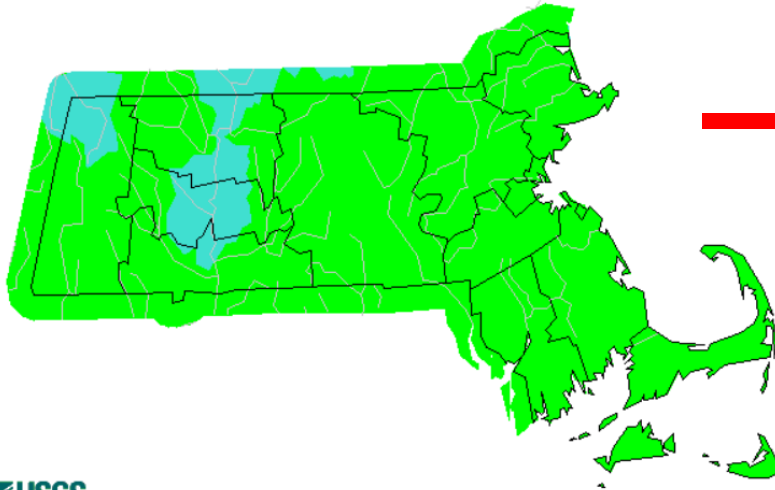
June 9, 2022

Jason Pollender & Chris Bruet
U.S. Geological Survey
New England Water Science Center



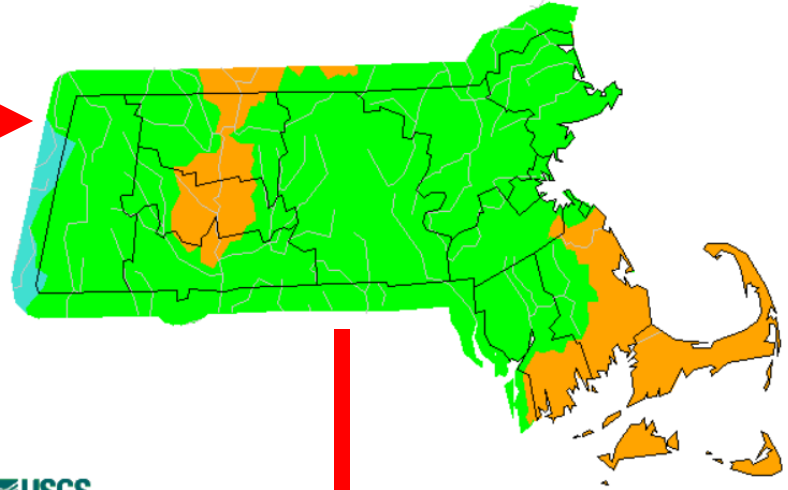
Average Streamflow Conditions – March to May 2022

March 2022



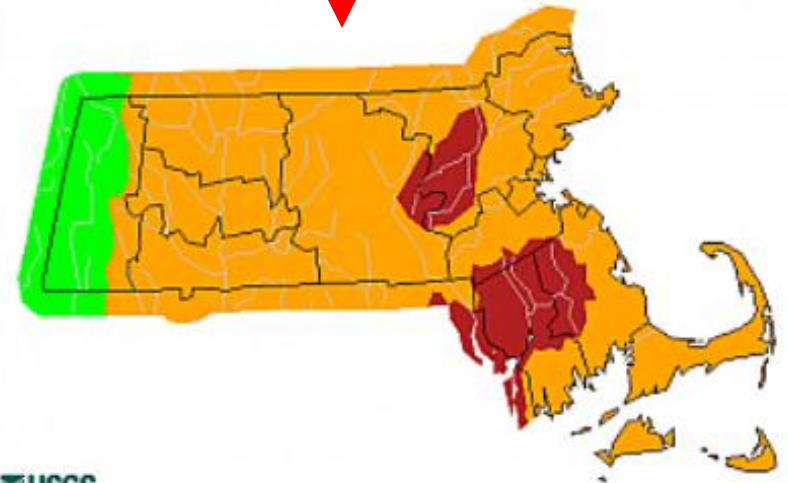
USGS

April 2022



USGS

May 2022

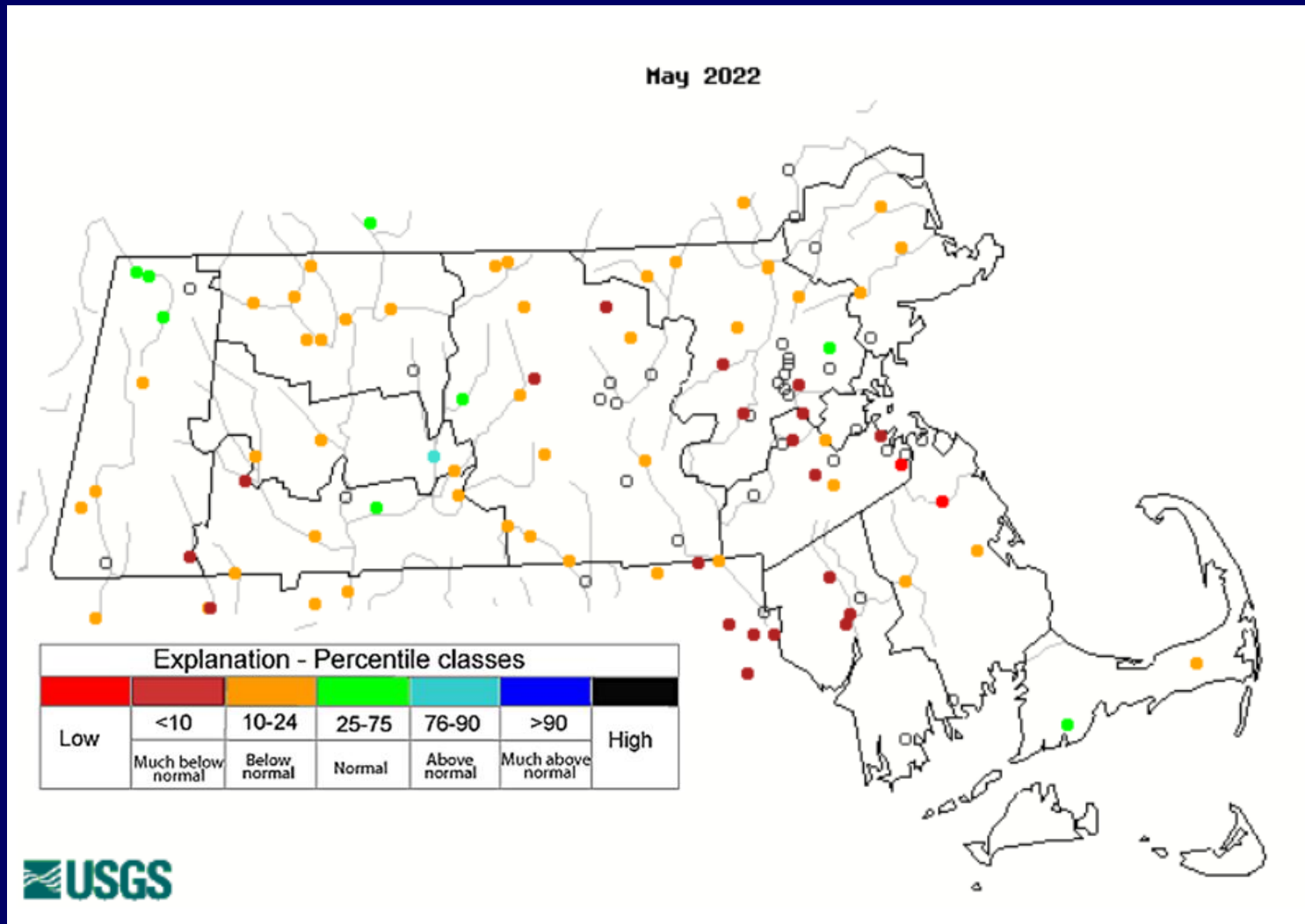


USGS

Explanation - Percentile classes

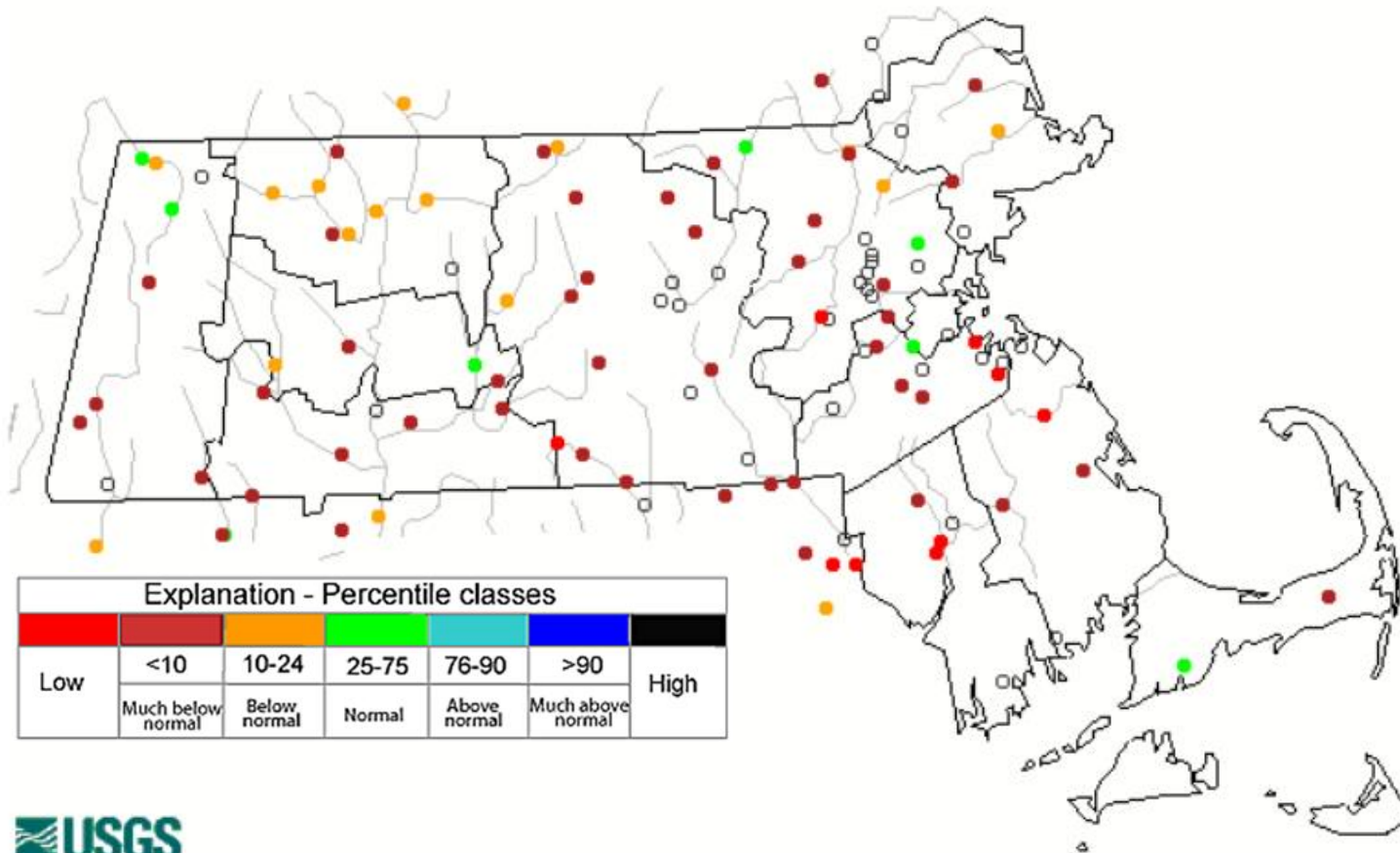
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

Average Streamflow Conditions – May 2022



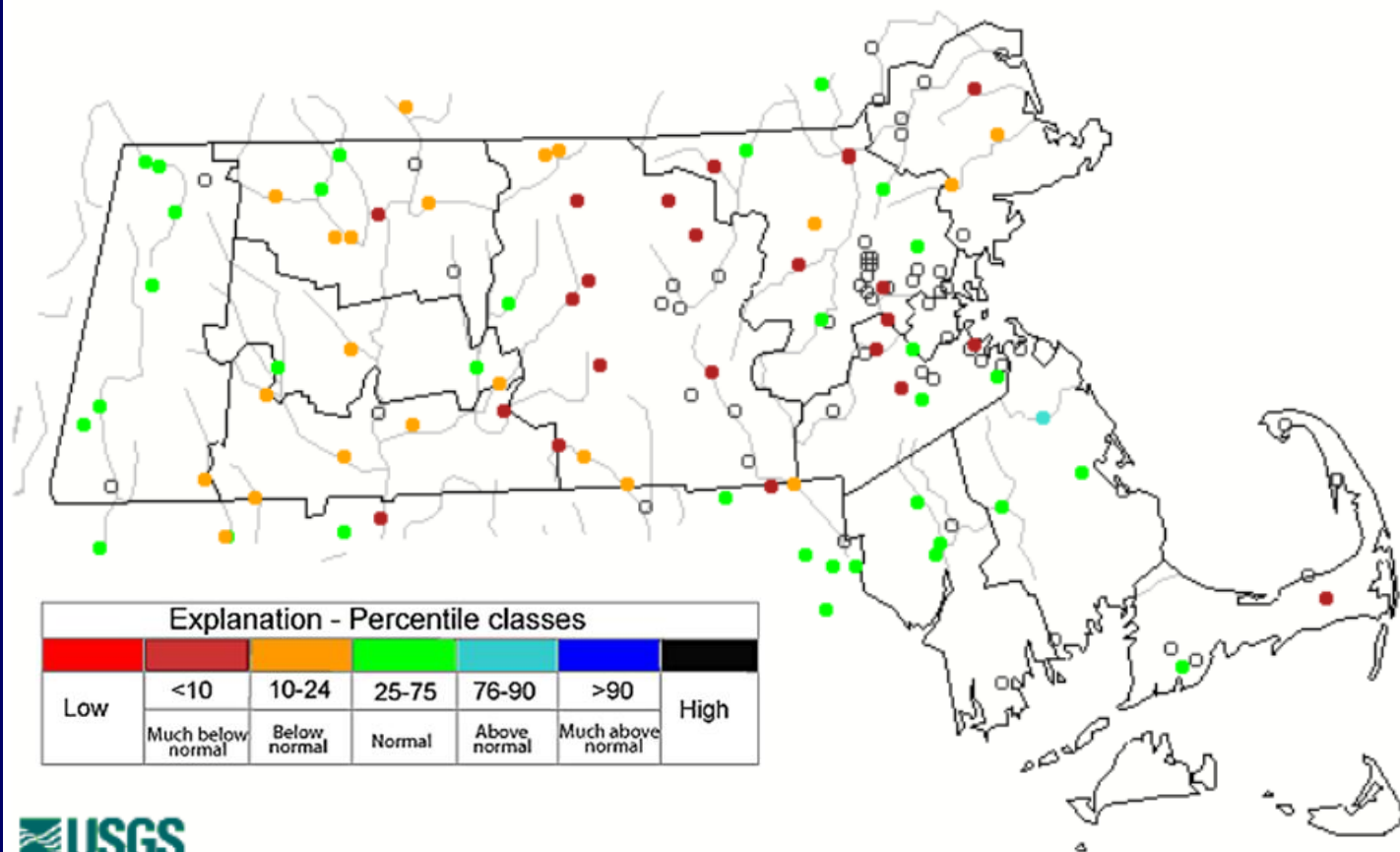
Average Streamflow Conditions – June 7, 2022







Tuesday, June 07, 2022



Current Streamflow Conditions – June 9, 2022

Thursday, June 09, 2022 06:30ET

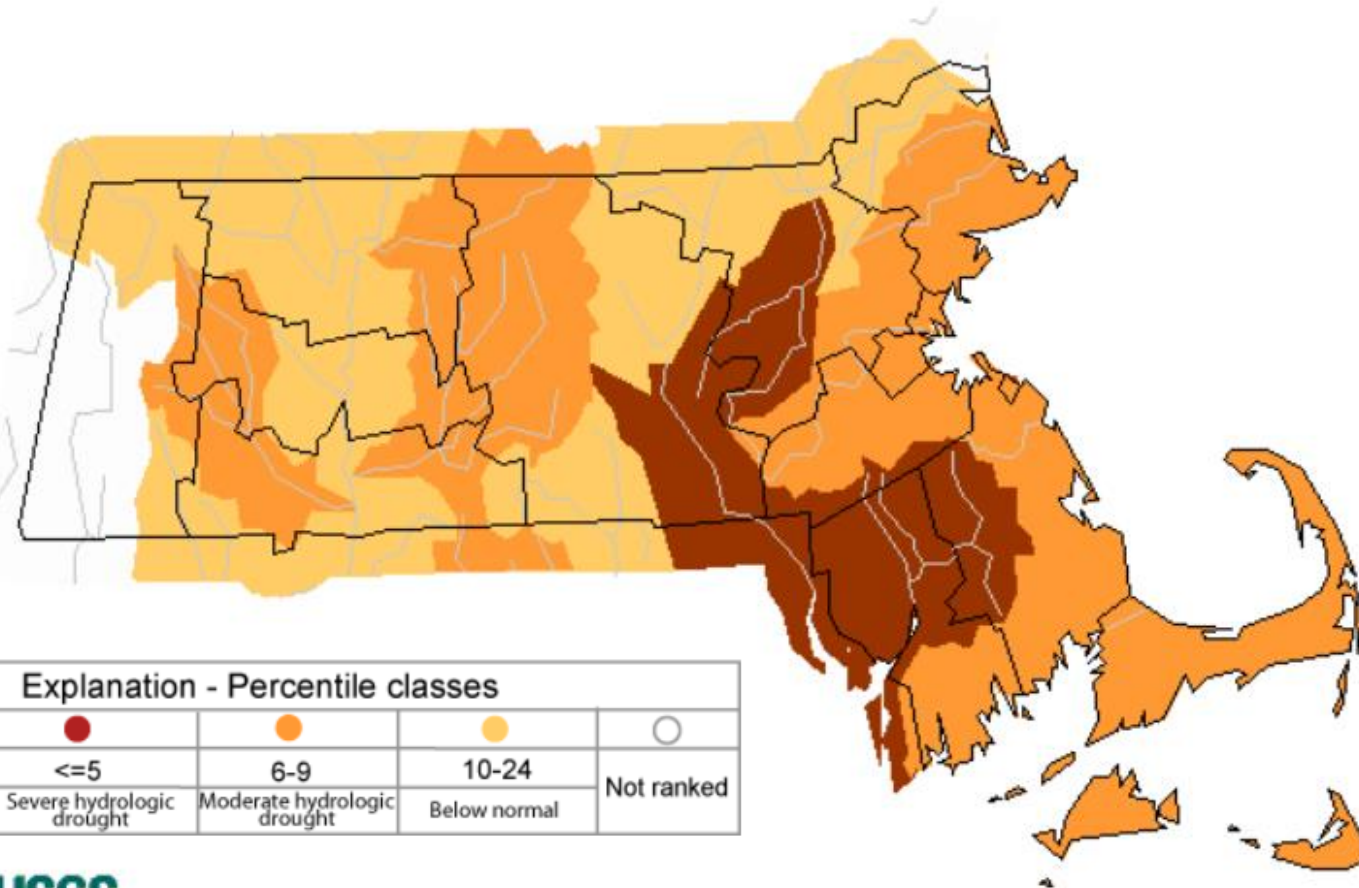


Explanation - Percentile classes						
						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	








Map of Below Normal 7 Day Average Streamflow – June 7, 2022

Tuesday, June 07, 2022

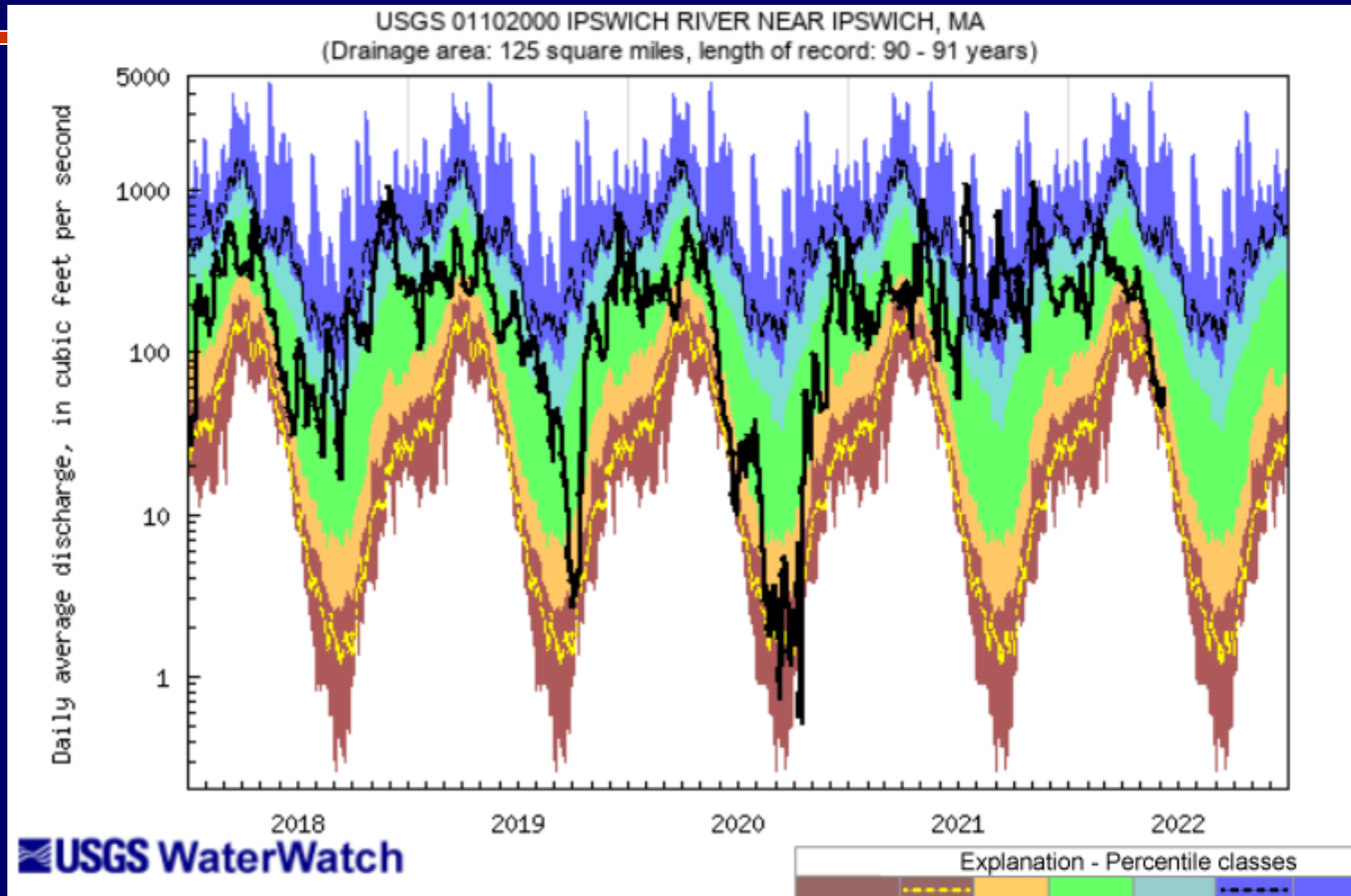


Explanation - Percentile classes

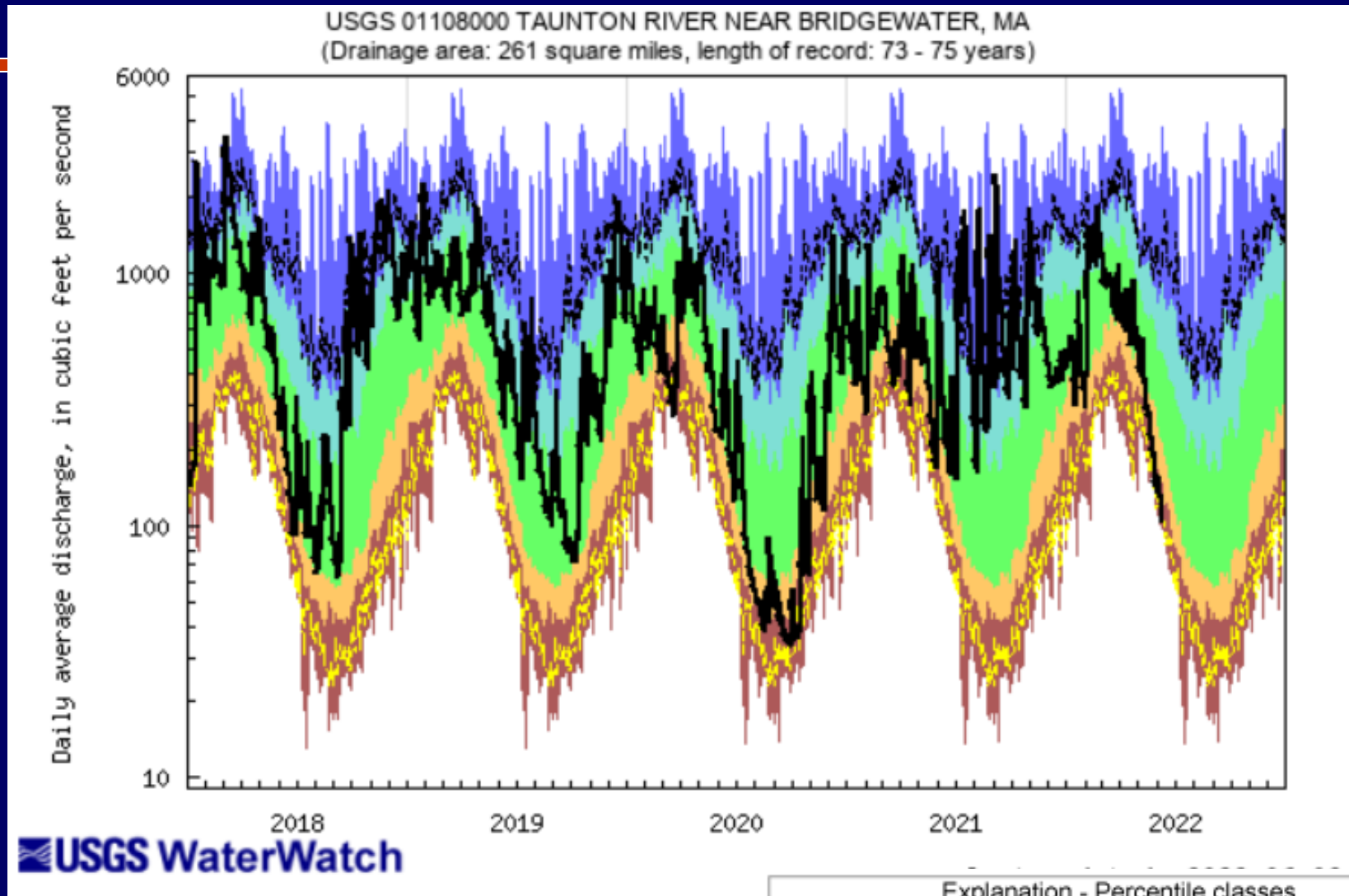
				
New low	≤ 5	6-9	10-24	Not ranked
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	



Daily Avg. – Ipswich River – Northeastern MA



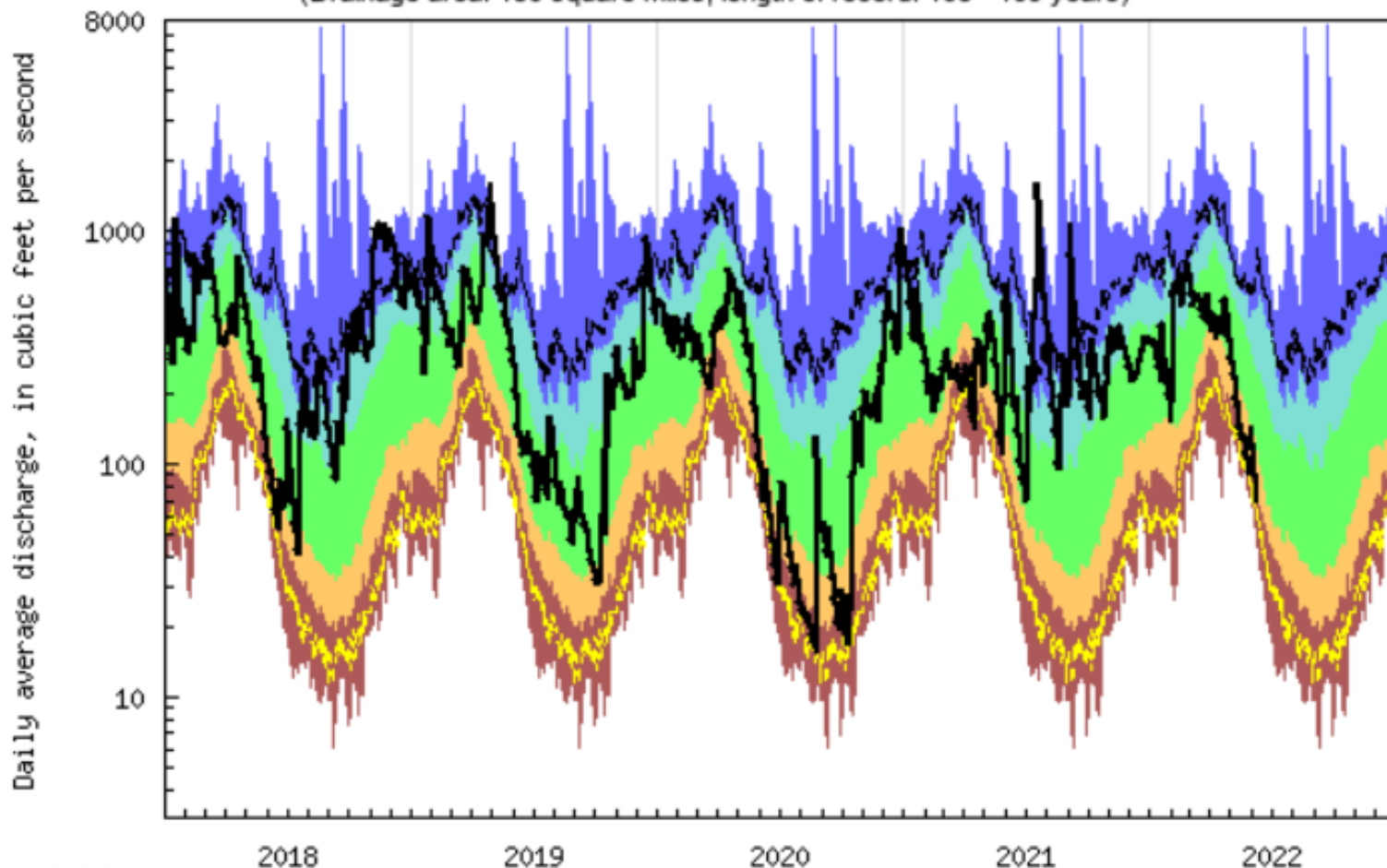
Daily Avg. – Taunton River – Southeastern MA









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

Daily Avg. – Quaboag River – Central MA

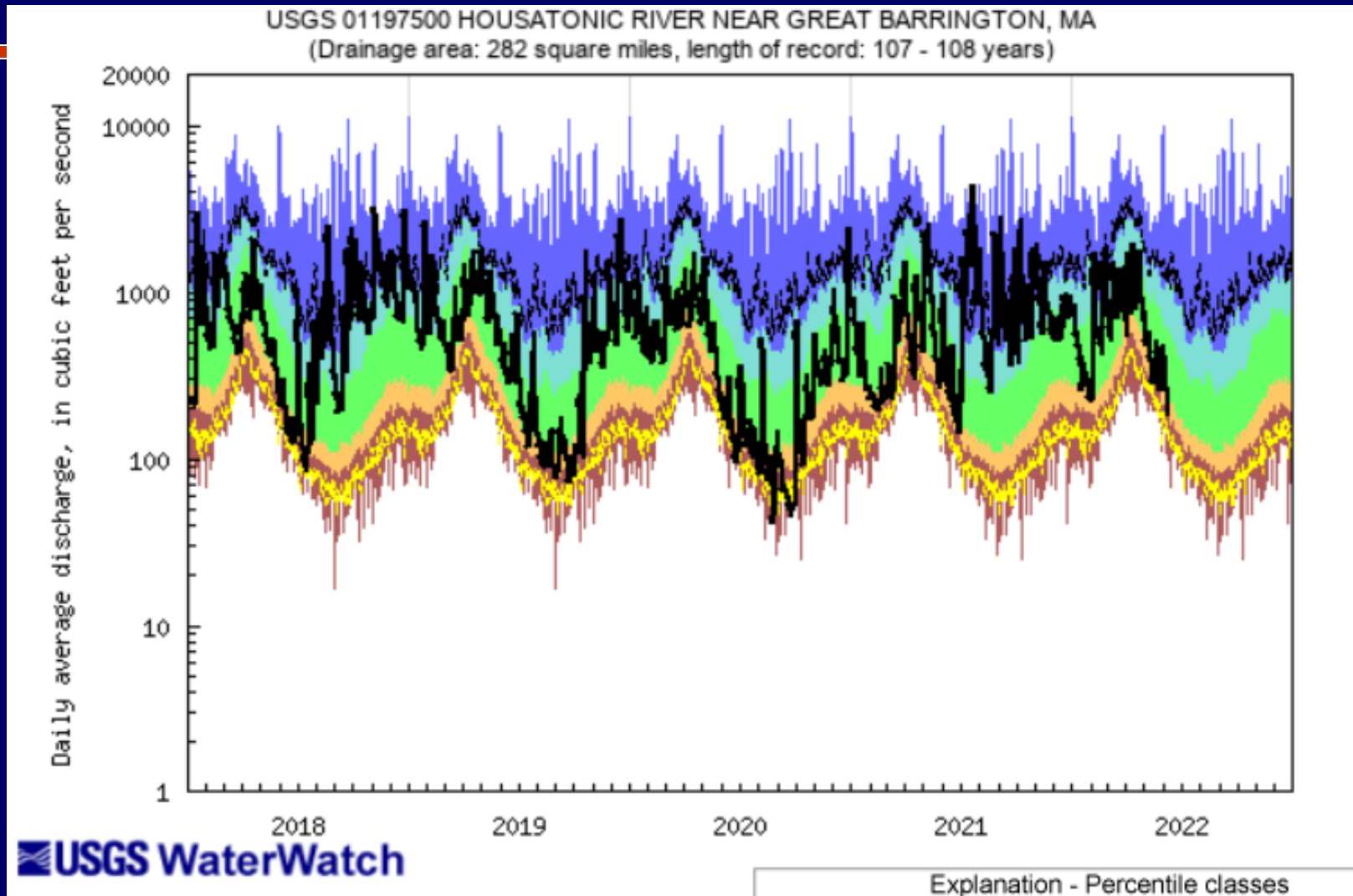
USGS 01176000 QUABOAG RIVER AT WEST BRIMFIELD, MA
(Drainage area: 150 square miles, length of record: 108 - 109 years)



USGS WaterWatch

Explanation - Percentile classes						
						
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		Flow

Daily Avg. – Housatonic River – Western MA

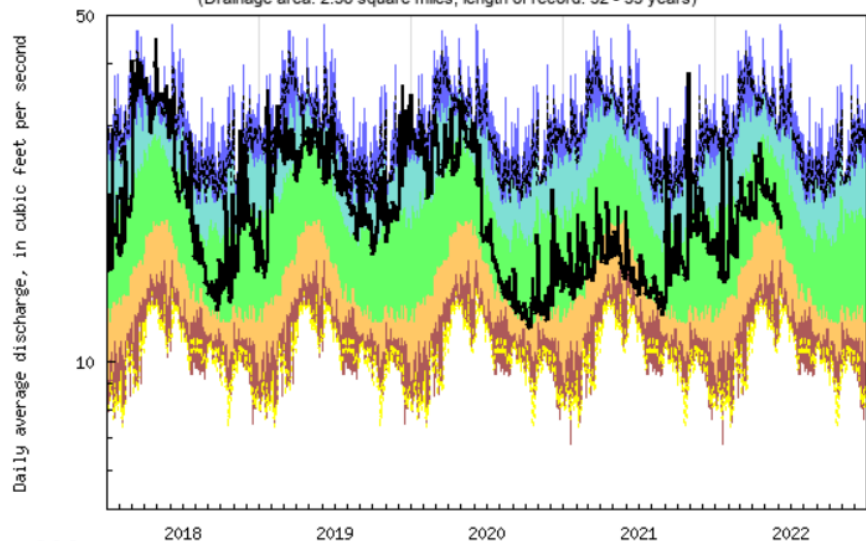


Explanation - Percentile classes							
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest	Flow
Much below Normal		Below normal	Normal	Above normal	Much above normal		

Daily Avg. Herring and Quashnet River – Cape Cod



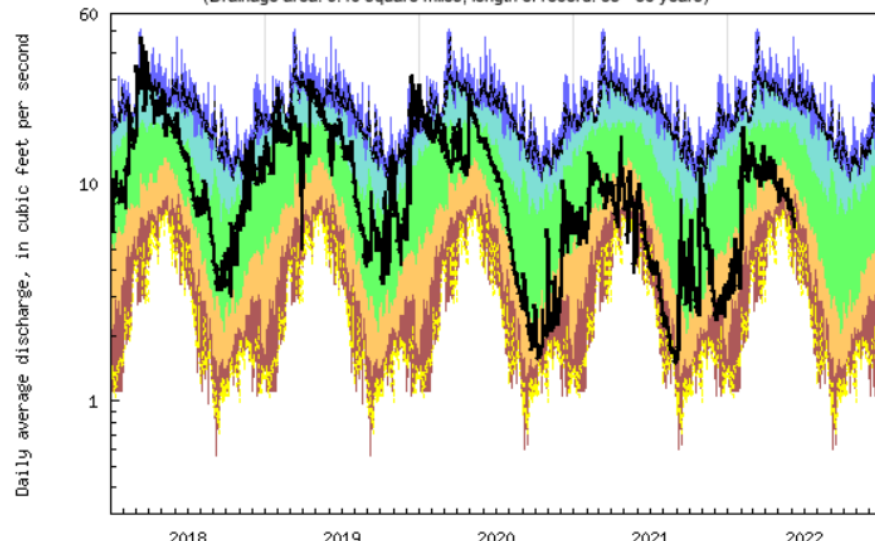
USGS 011058837 QUASHNET RIVER AT WAQUOIT VILLAGE, MA
(Drainage area: 2.58 square miles, length of record: 32 - 33 years)



USGS WaterWatch

Last updated: 2022-06-08

USGS 01105880 HERRING RIVER AT NORTH HARWICH, MA
(Drainage area: 9.40 square miles, length of record: 35 - 36 years)



USGS WaterWatch

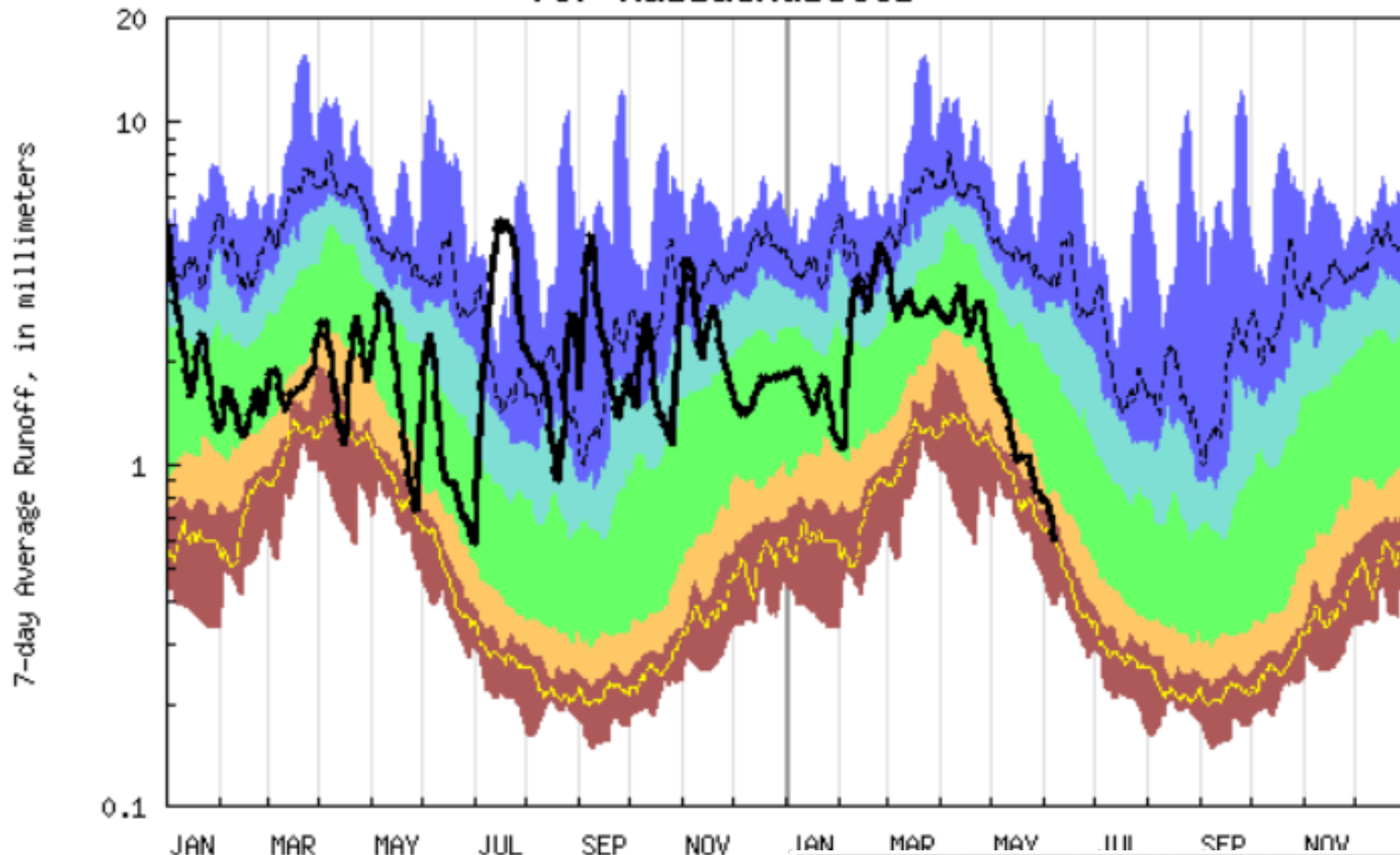
Last updated: 2022-06-08

Explanation - Percentile classes

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		Flow

7-Day Streamflow Conditions Oct. 1, 2020 - Sept. 30, 2022

Duration hydrograph of 7-day average runoff for Massachusetts

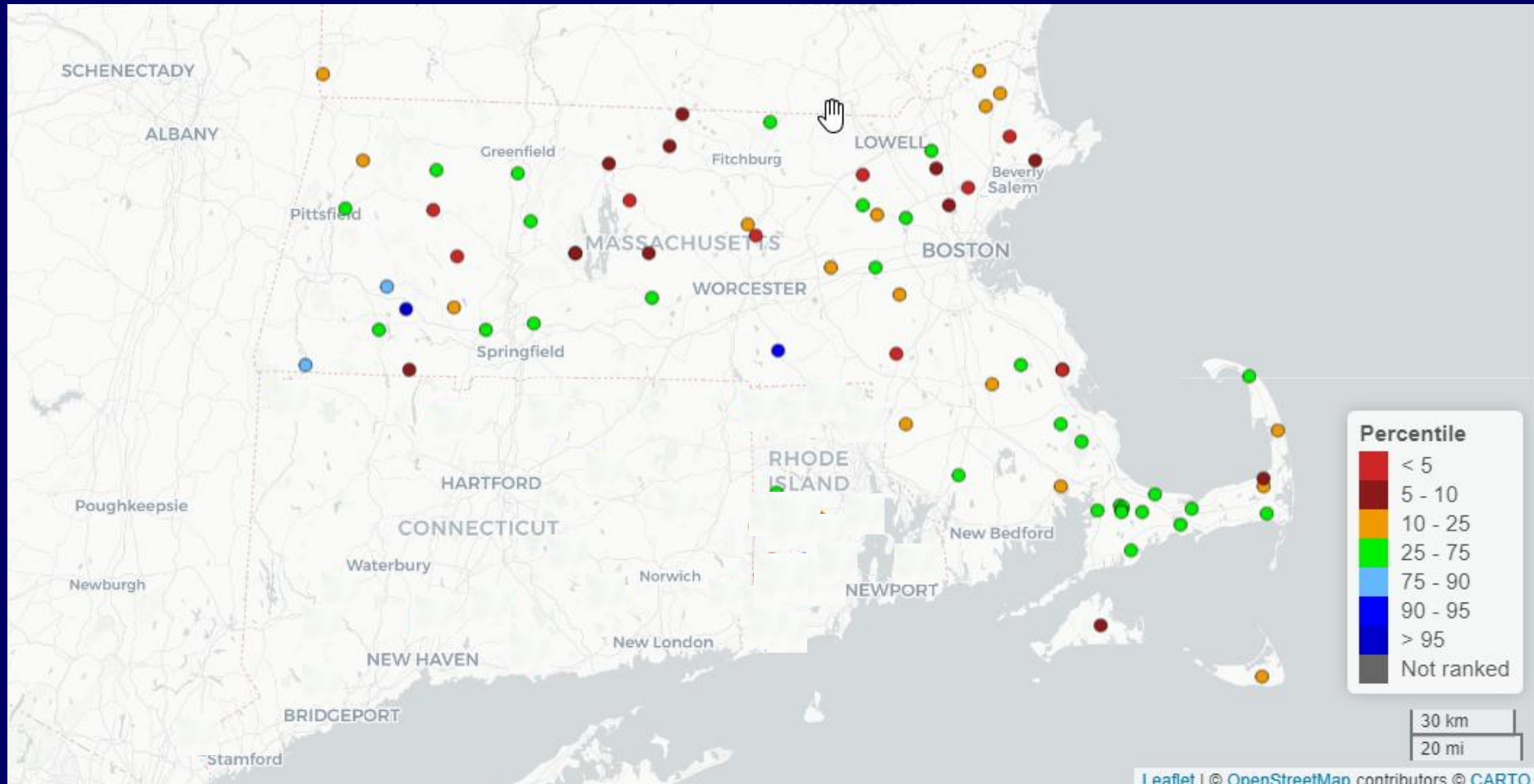


USGS WaterWatch 2021

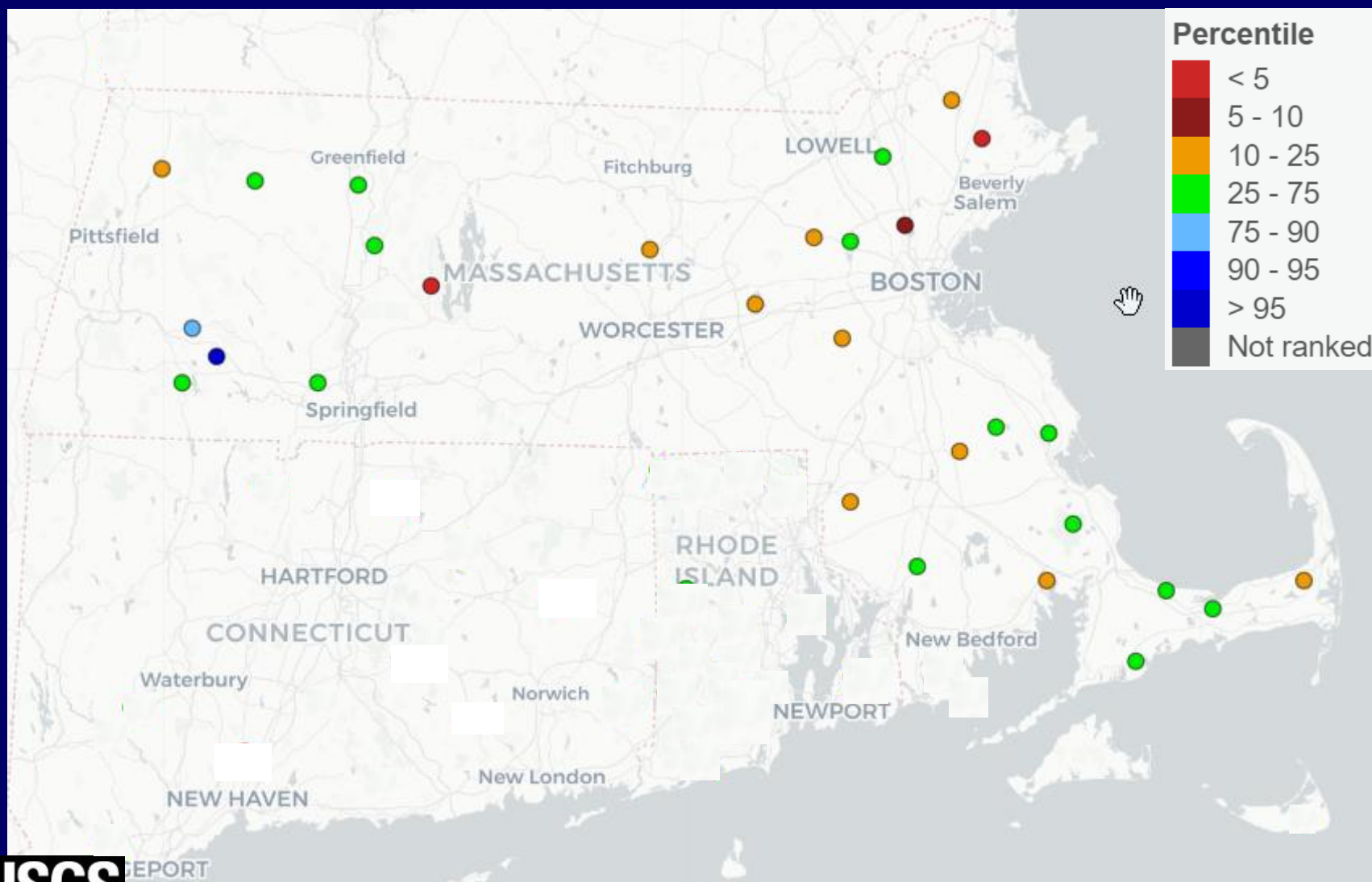
Explanation - Percentile classes

Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

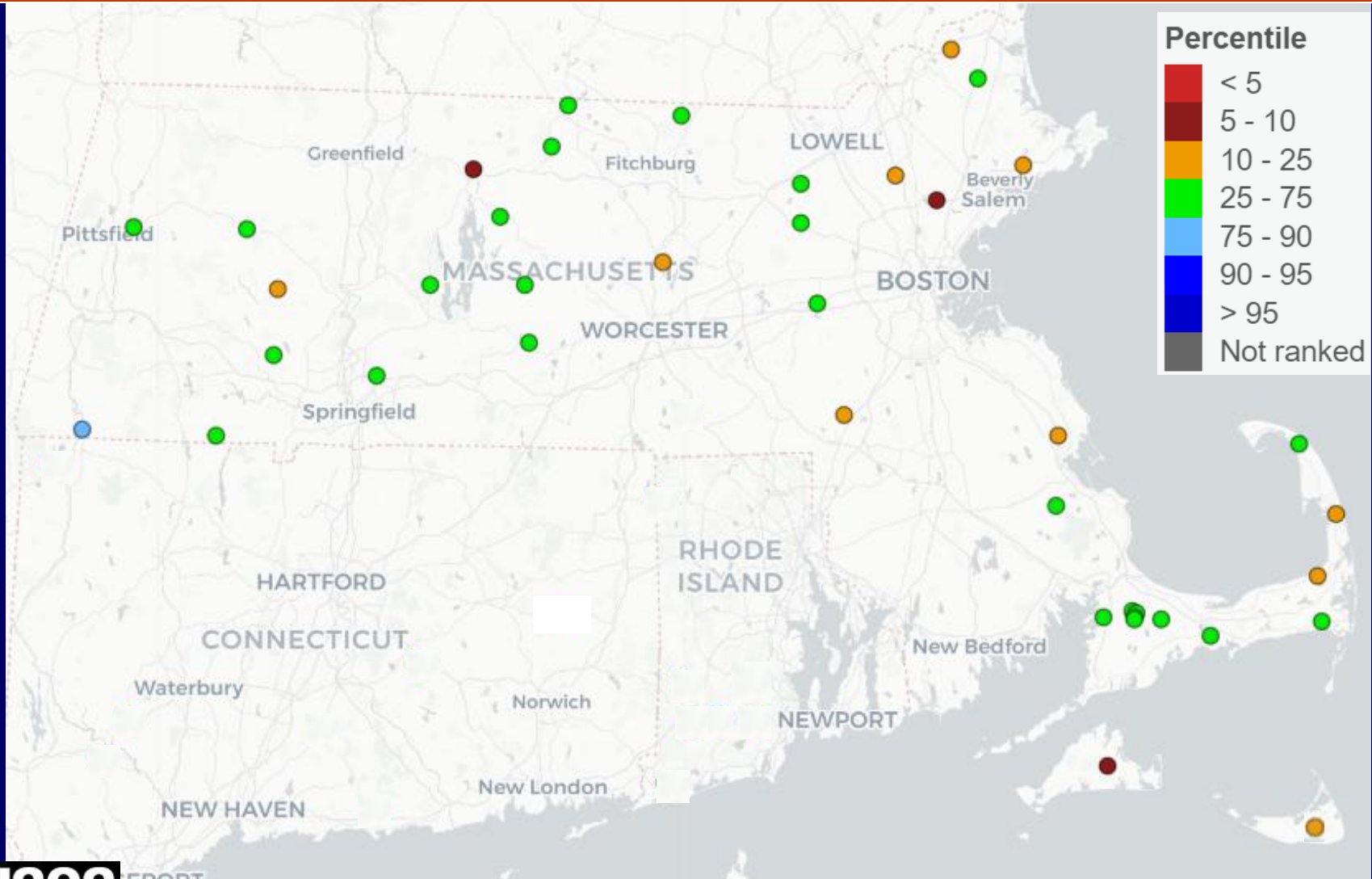
Climate Response Network (CRN) Groundwater Conditions in May 2022



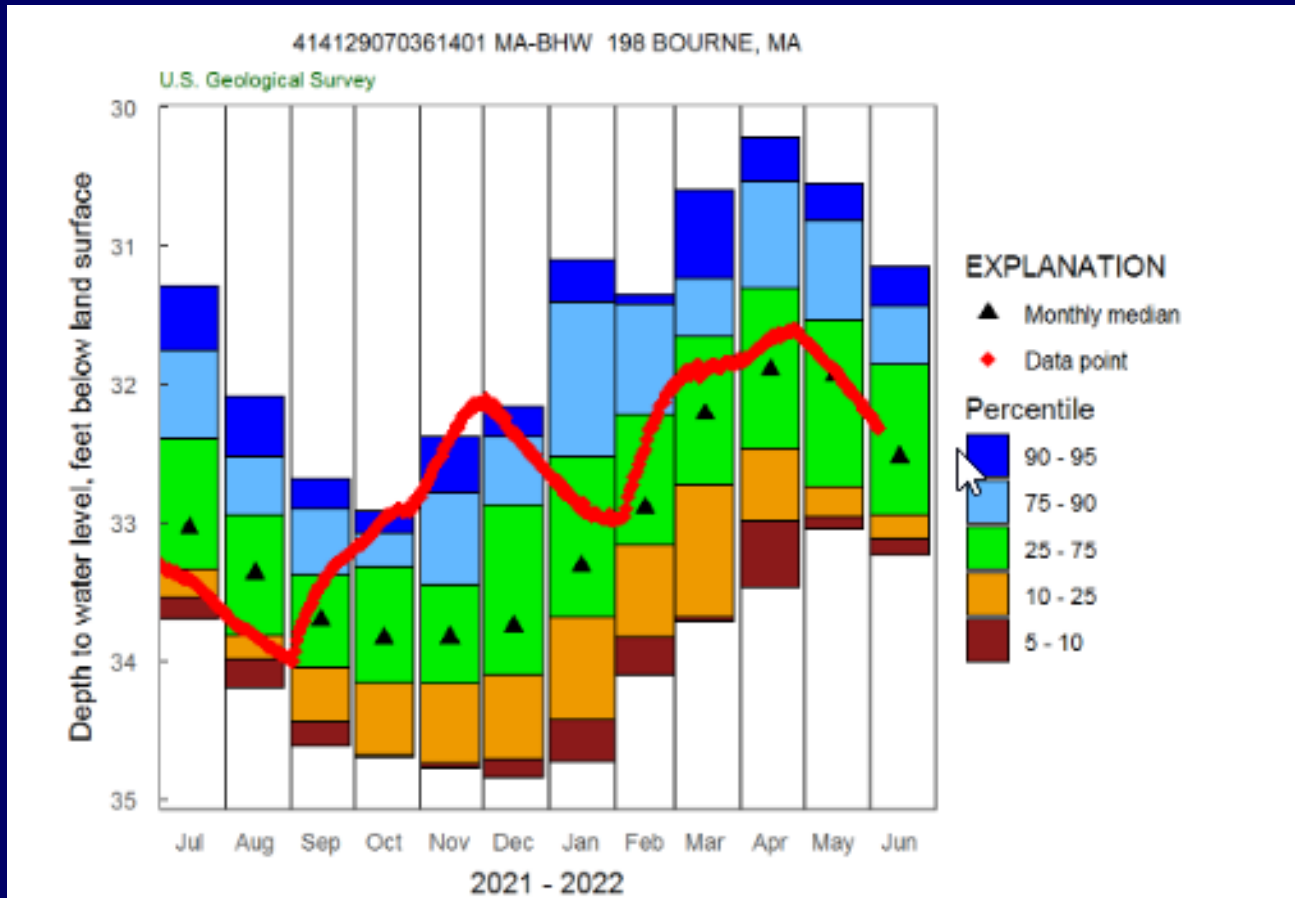
Discrete CRN Groundwater Conditions



Realtime CRN Groundwater Conditions



BHW 198, Bourne, MA

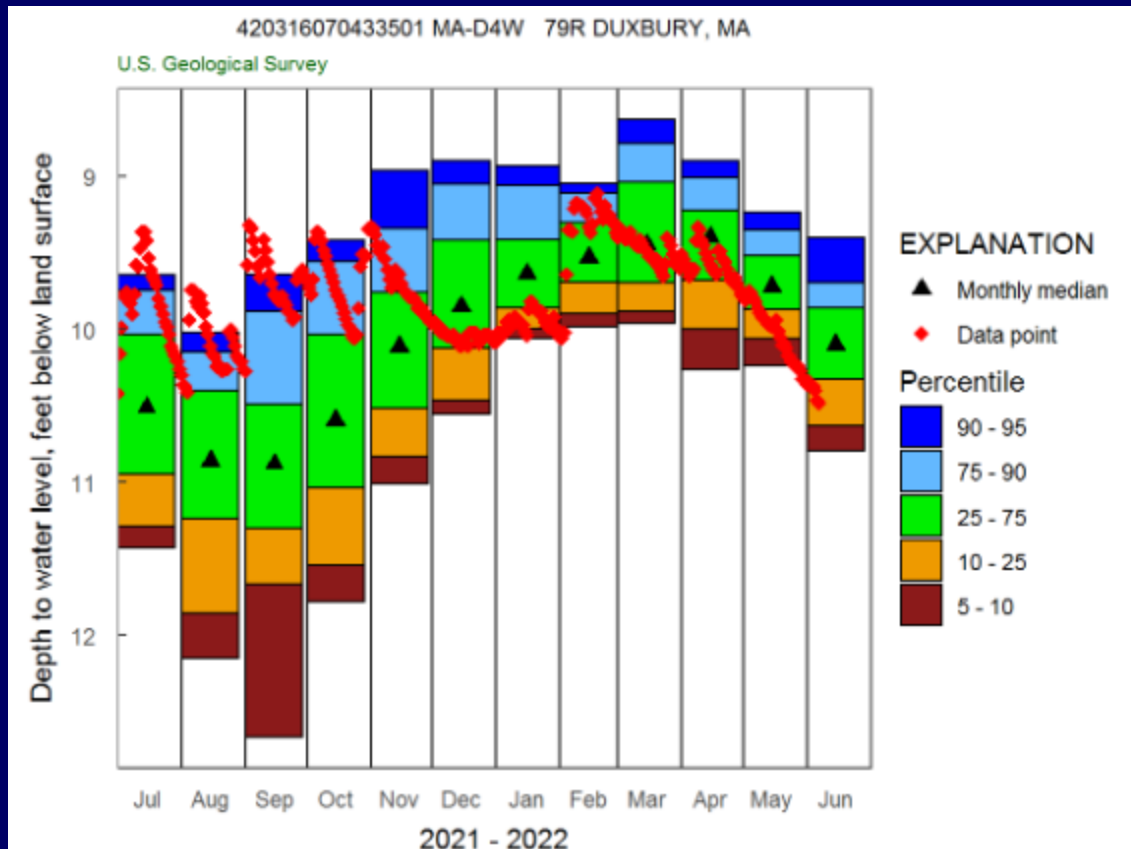


Period of Record

All data
1962 – present

Continuous data
May 2012- present

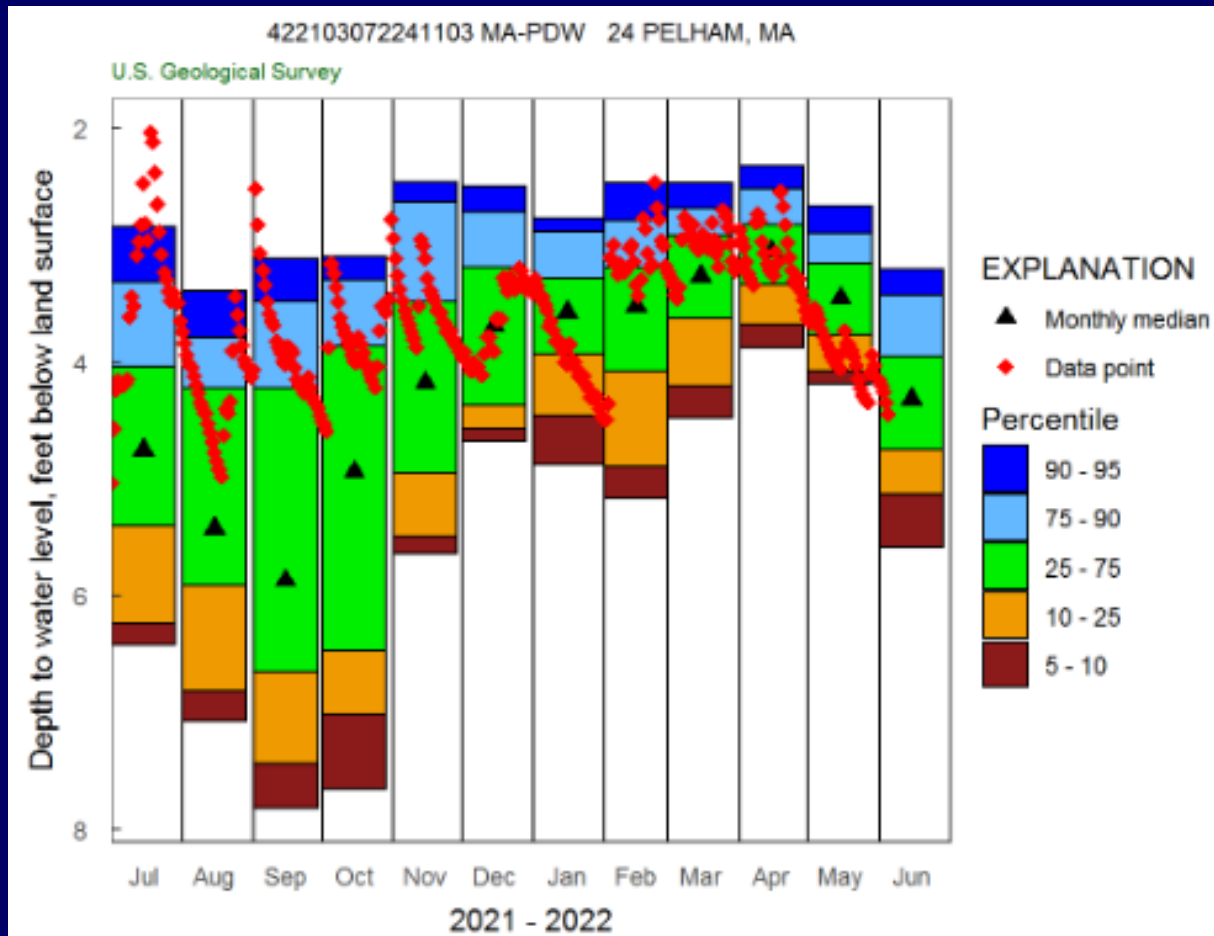
D4W 79R, DUXBURY, MA



Period of Record

1964 – present

PDW 24, PELHAM, MA



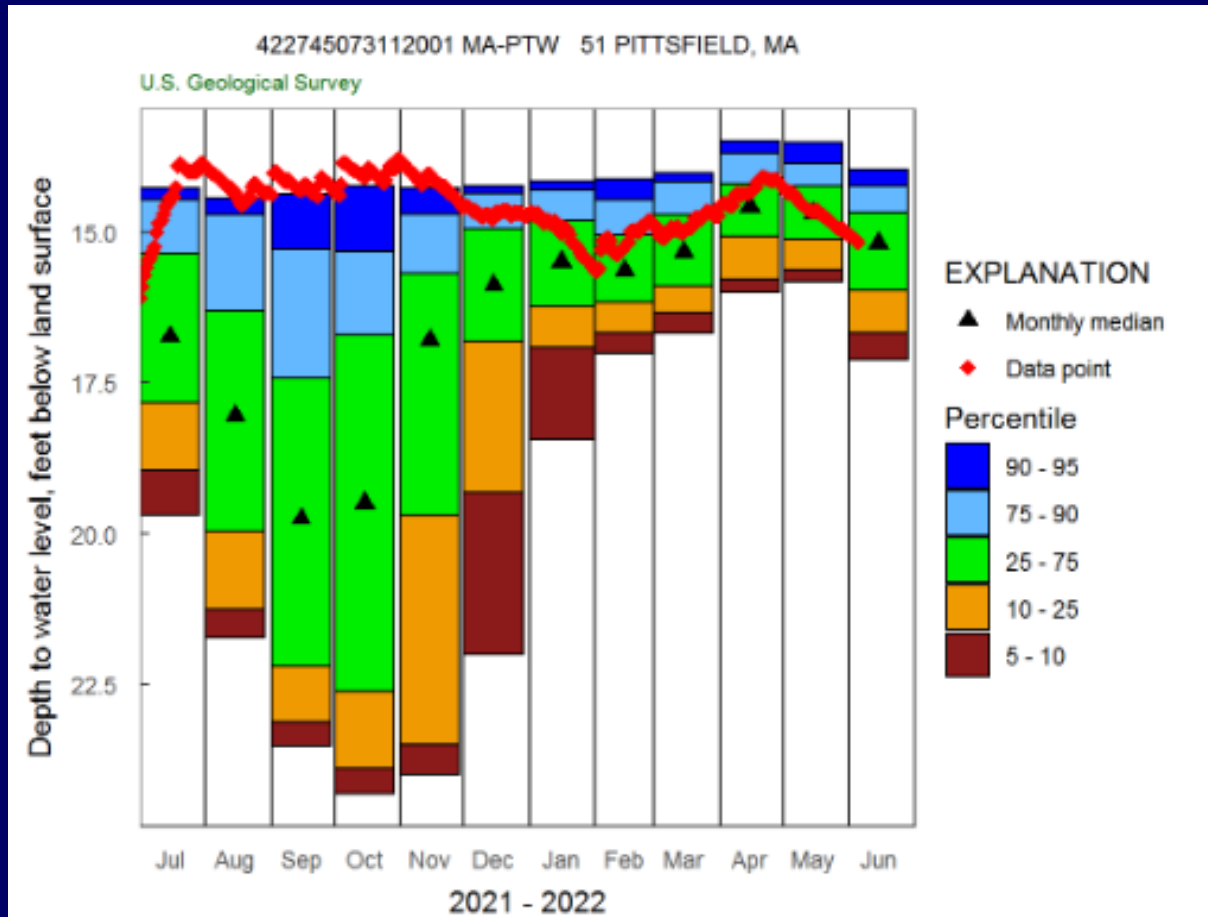
Period of Record

1983 – present

PTW 51, PITTSFIELD, MA

Period of Record

1963 – present



Questions

