
Streamflow and Groundwater Conditions in Massachusetts

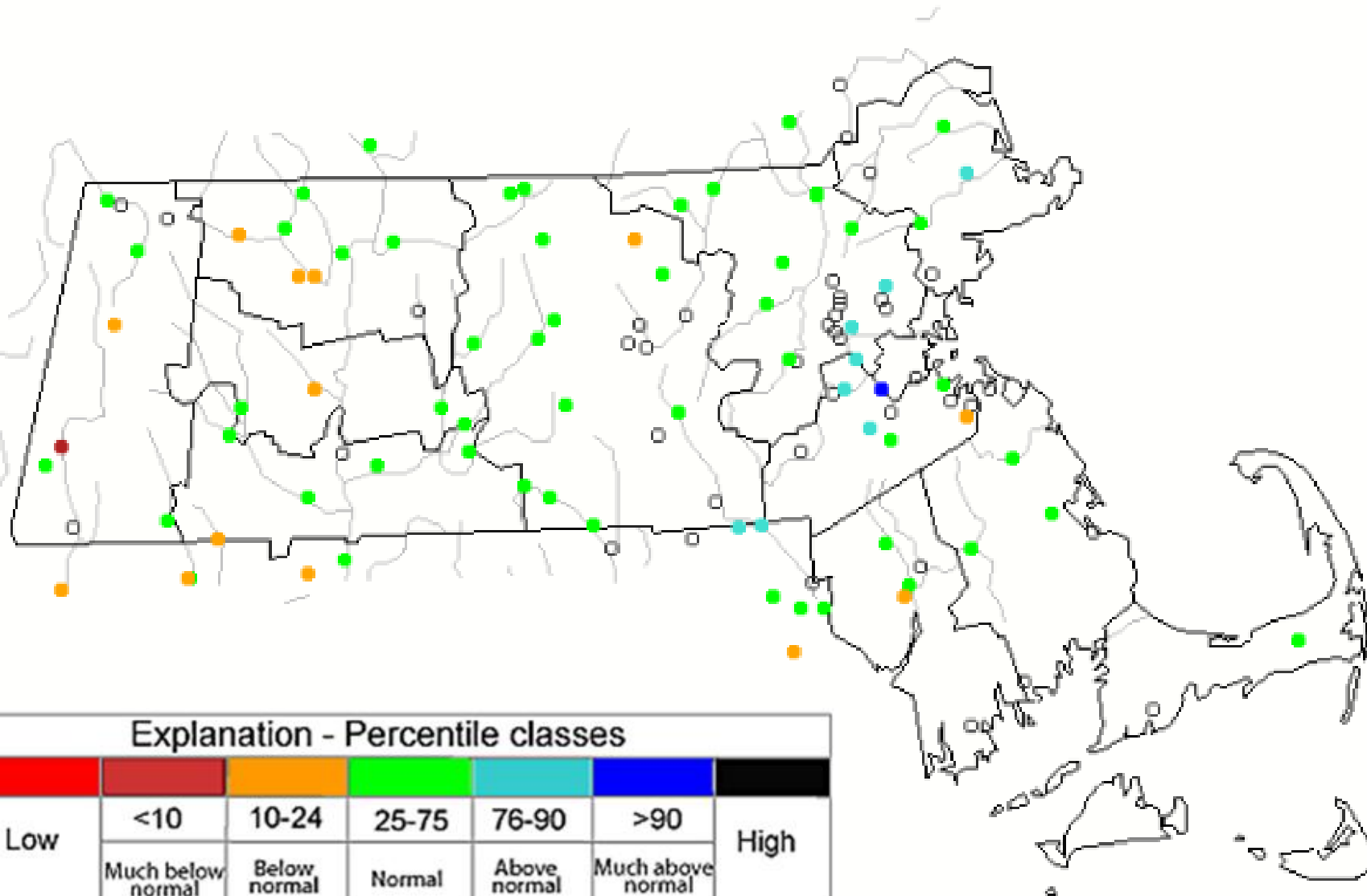
November 14, 2019

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



Average Streamflow Conditions – Aug. 2019

August 2019

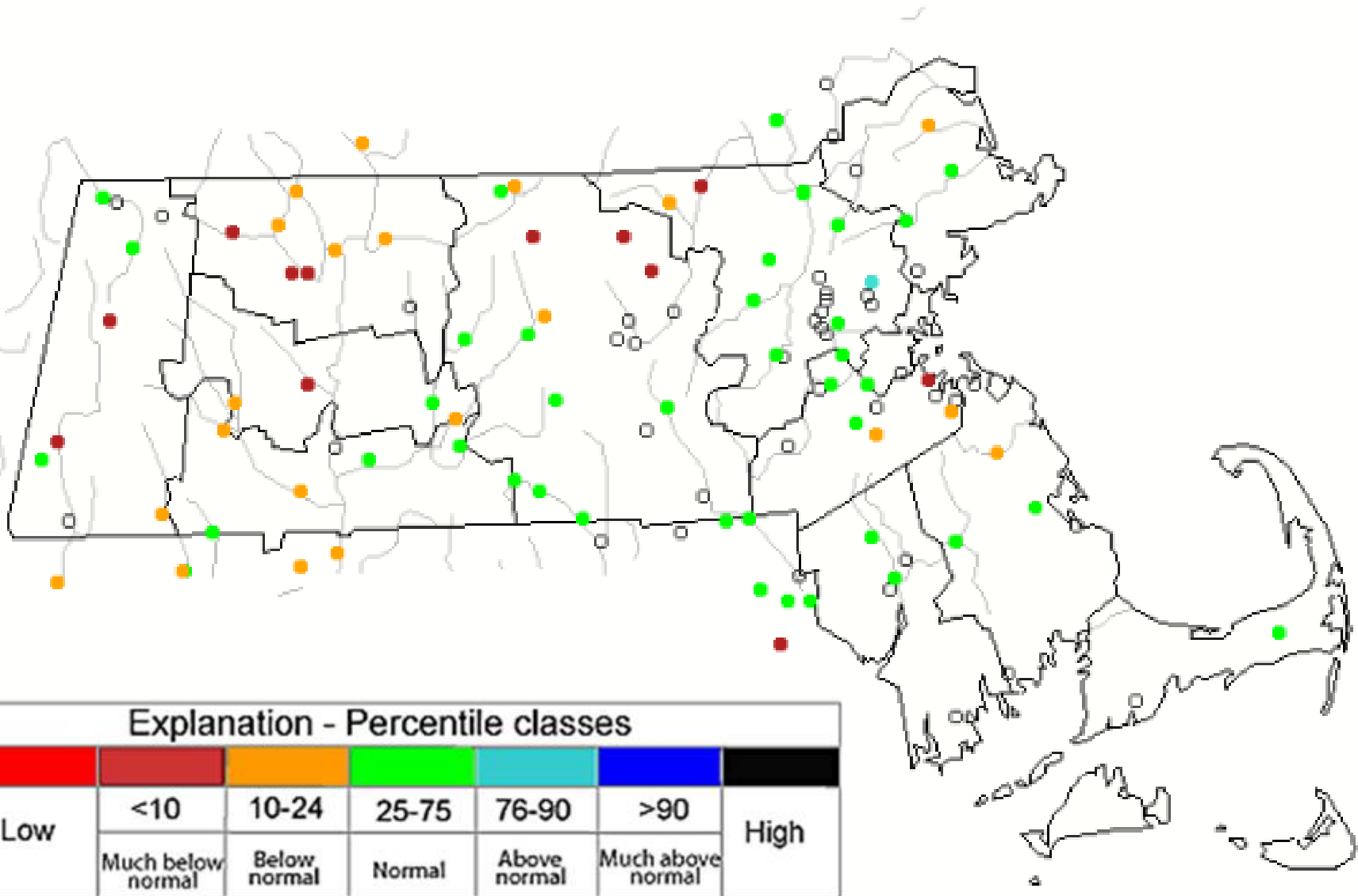


Explanation - Percentile classes

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

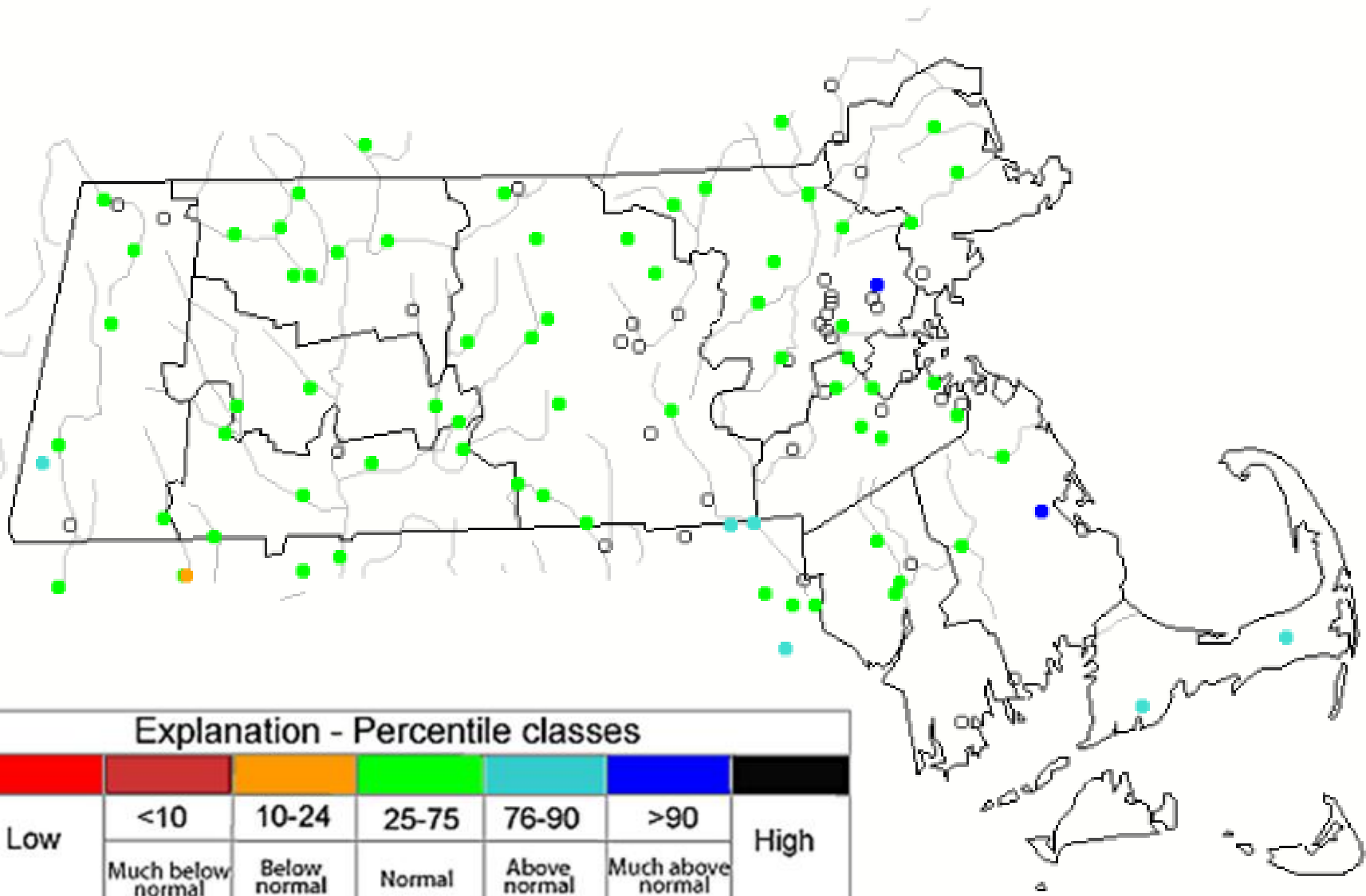
Average Streamflow Conditions – Sept. 2019

September 2019



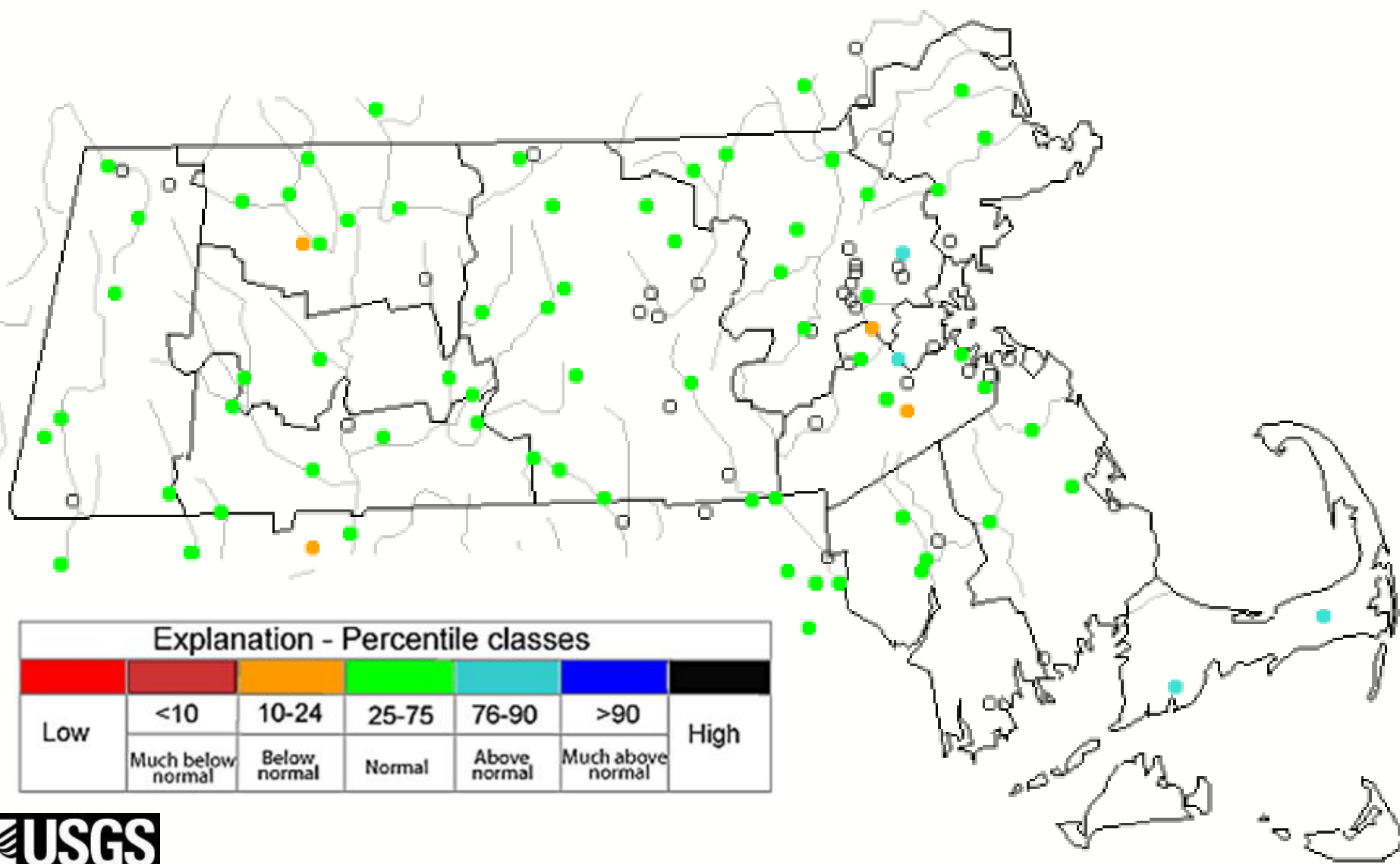
Average Streamflow Conditions – Oct. 2019

October 2019



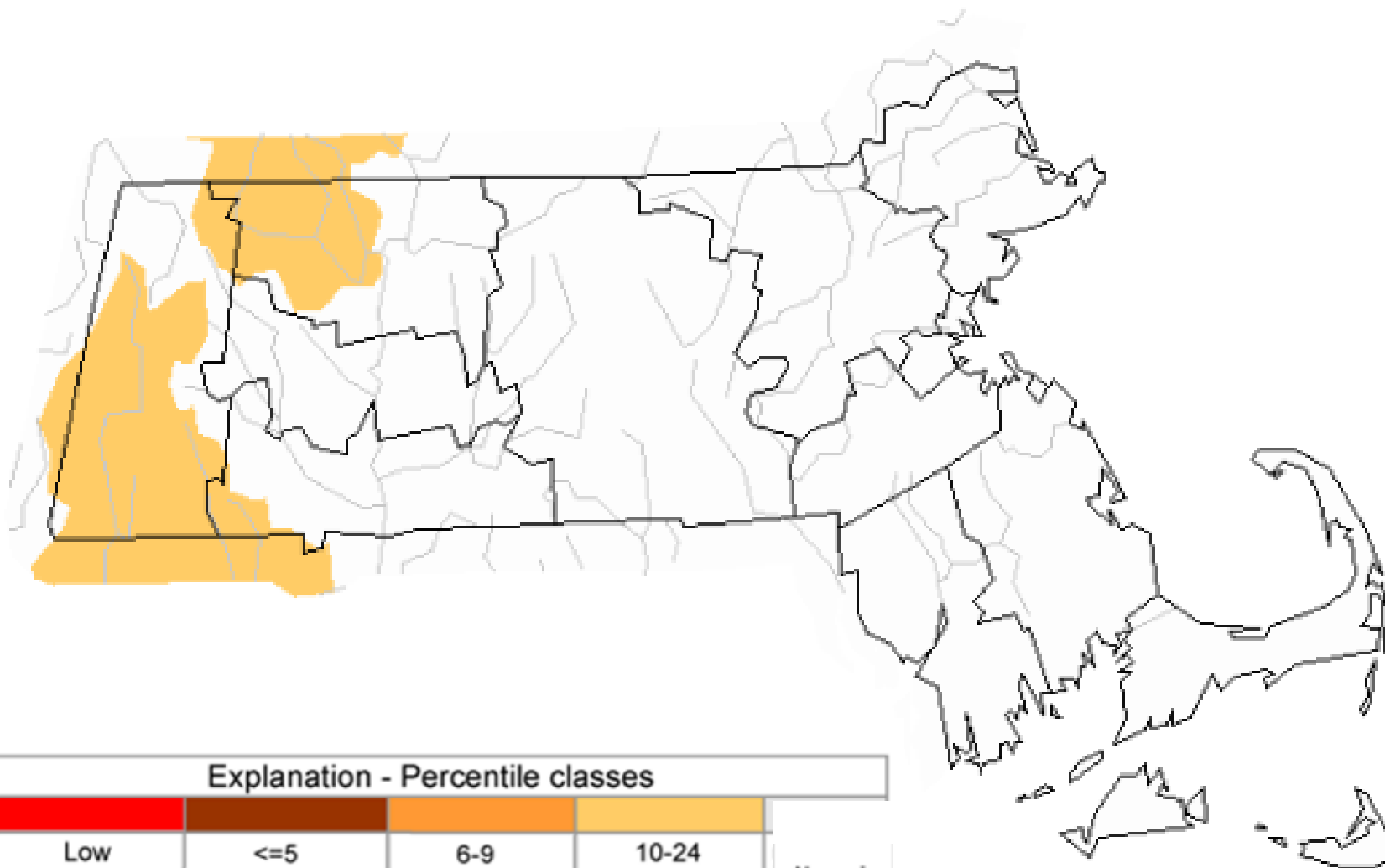
Current Streamflow Conditions – Nov. 11, 2019

Monday, November 11, 2019



Below normal average monthly streamflow – Aug. 2019

August 2019

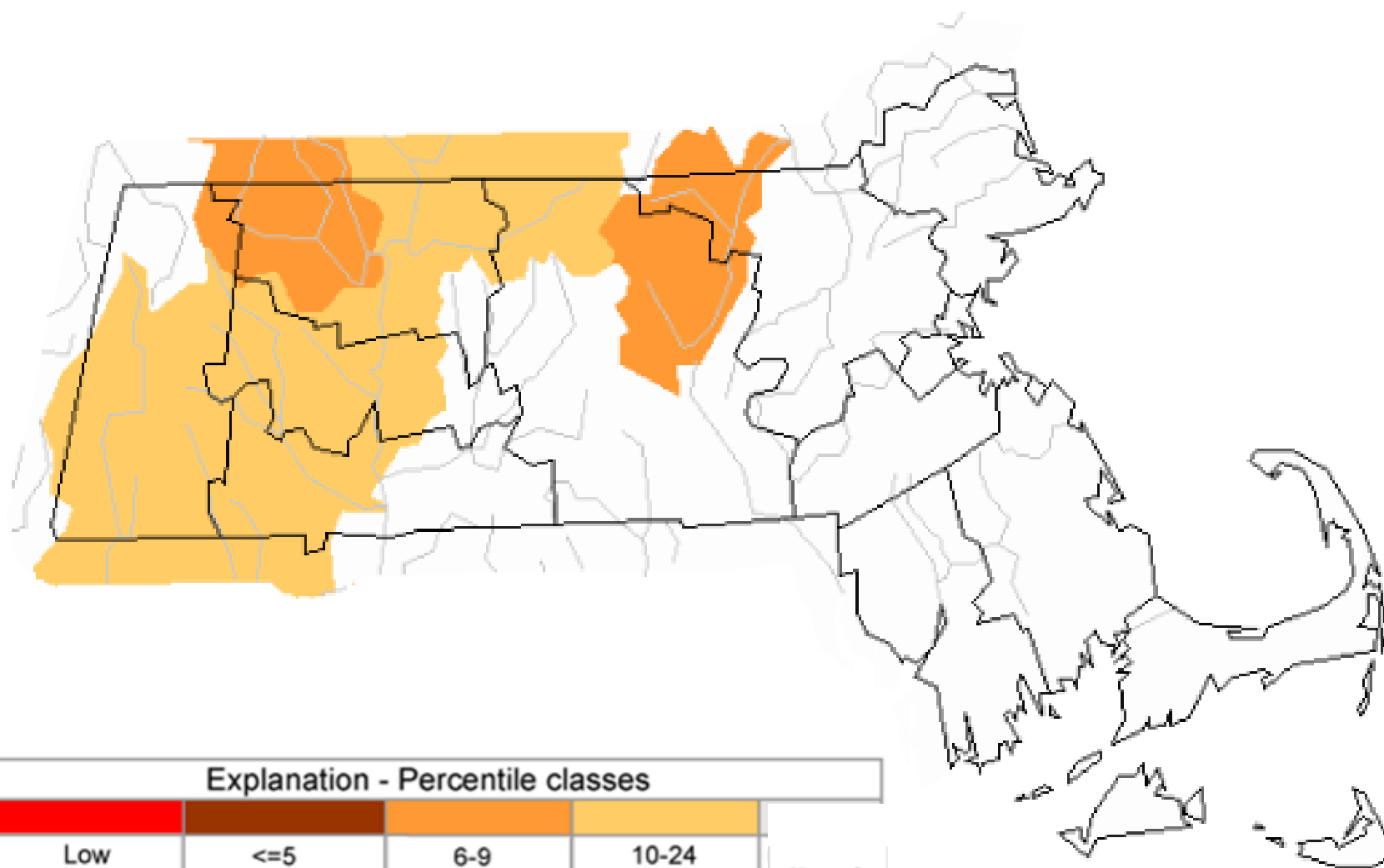


Explanation - Percentile classes

Low	≤ 5	6-9	10-24	Normal
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

Below normal average monthly streamflow – Sept. 2019

September 2019

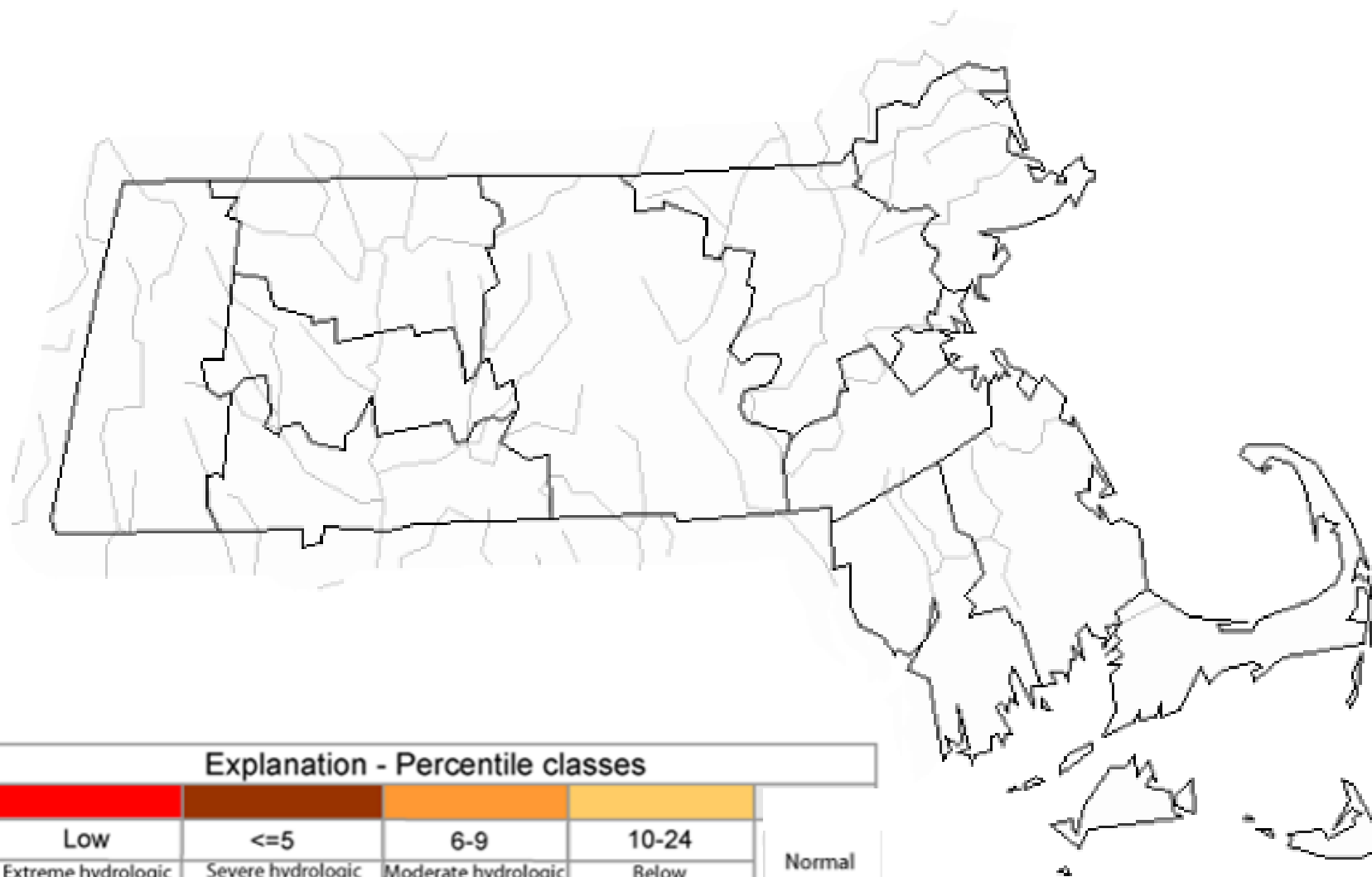


Explanation - Percentile classes

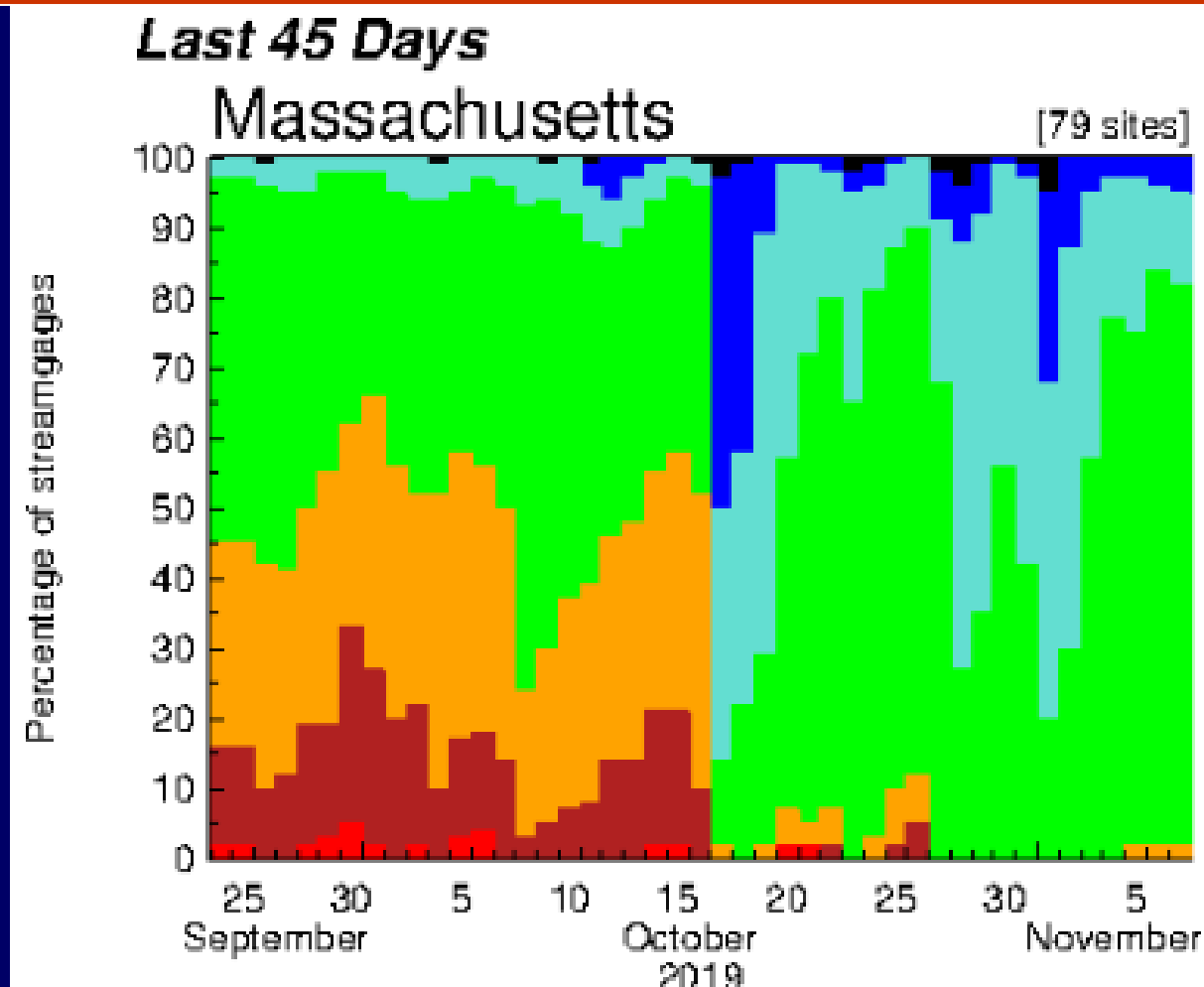
Low	≤ 5	6-9	10-24	Normal
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Below normal average monthly streamflow – Oct. 2019

October 2019

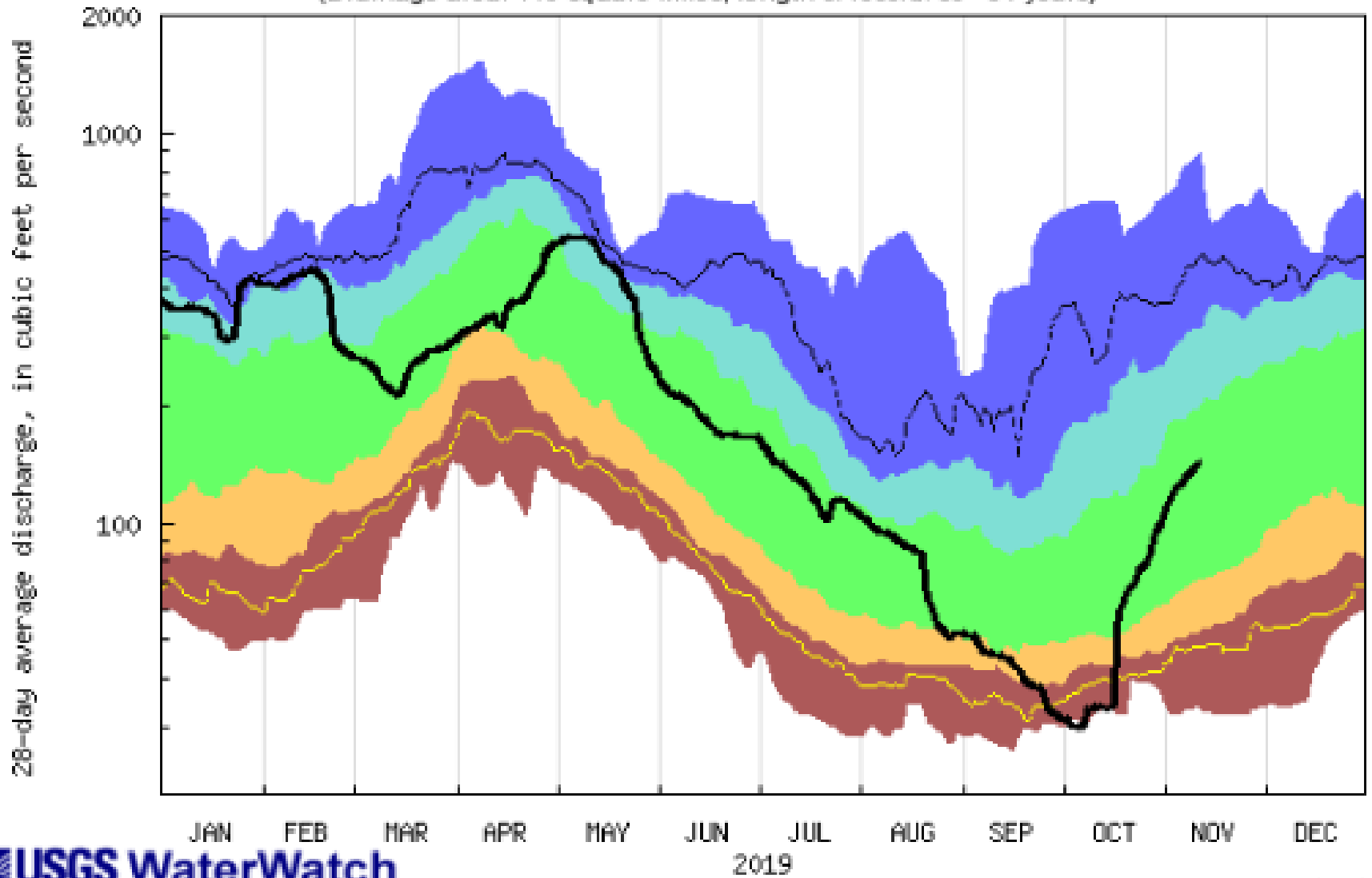


Last 45 days – Compared to Day of the Year



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

USGS 01094500 NORTH NASHUA RIVER NEAR LEOMINSTER, MA
 (Drainage area: 110 square miles, length of record: 83 - 84 years)



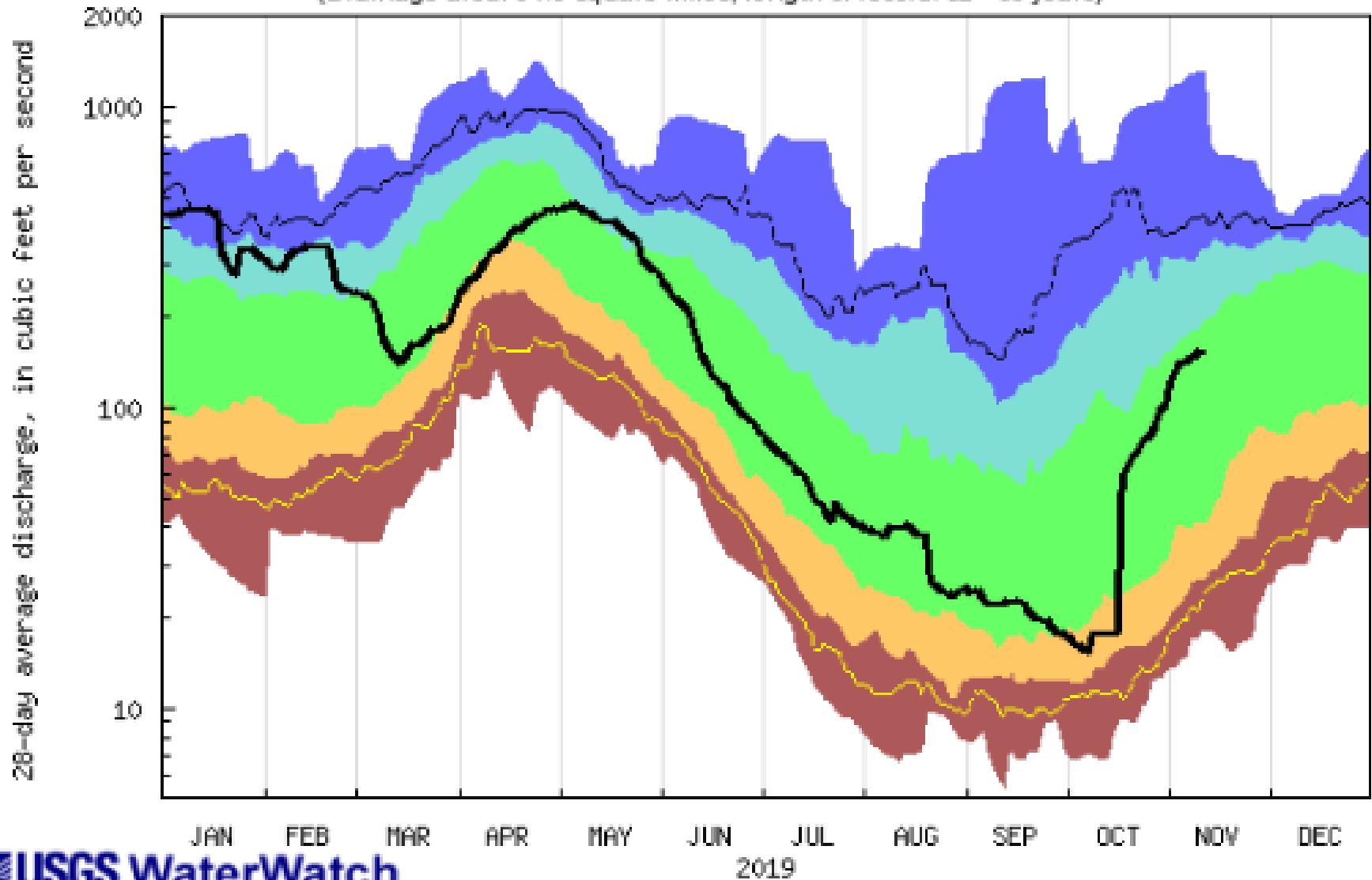
USGS WaterWatch

Last updated: 2019-11-12

Explanation - Percentile classes

lowest-5th percentile	6-9	10-24	25-75	76-90	91-94	95th percentile-highest	Flow
Severe hydrologic drought	Moderate hydrologic drought	Below normal	Normal	Above normal	Much above normal		

USGS 01181000 WEST BRANCH WESTFIELD RIVER AT HUNTINGTON, MA
 (Drainage area: 94.0 square miles, length of record: 82 - 83 years)



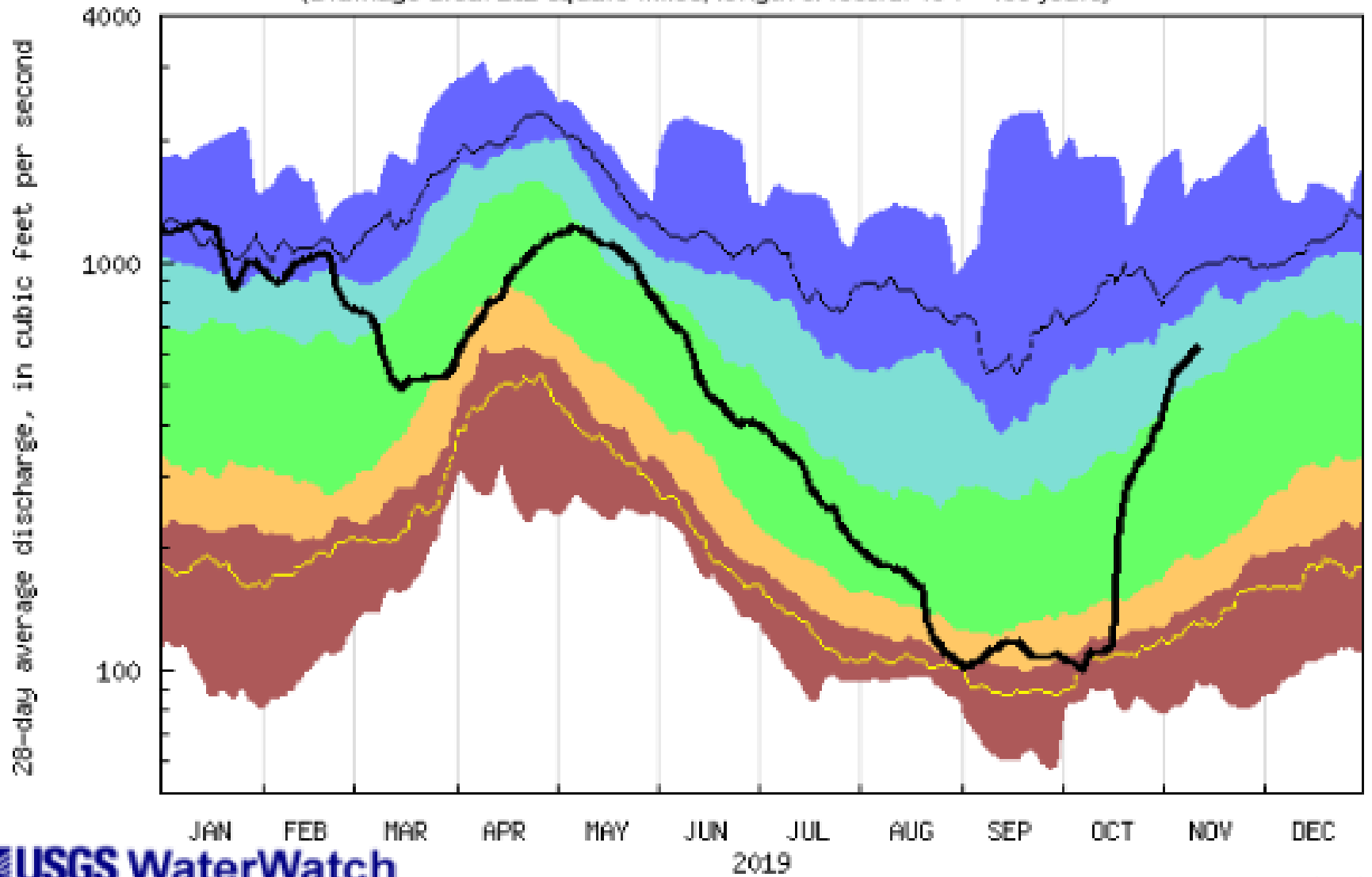
USGS WaterWatch

Last updated: 2019-11-12

Explanation - Percentile classes

	lowest-5th percentile	6-9	10-24	25-75	76-90	91-94	95th percentile -highest	Flow
	Severe hydrologic drought	Moderate hydrologic drought	Below normal	Normal	Above normal	Much above normal		

USGS 01197500 HOUSATONIC RIVER NEAR GREAT BARRINGTON, MA
 (Drainage area: 282 square miles, length of record: 104 - 105 years)



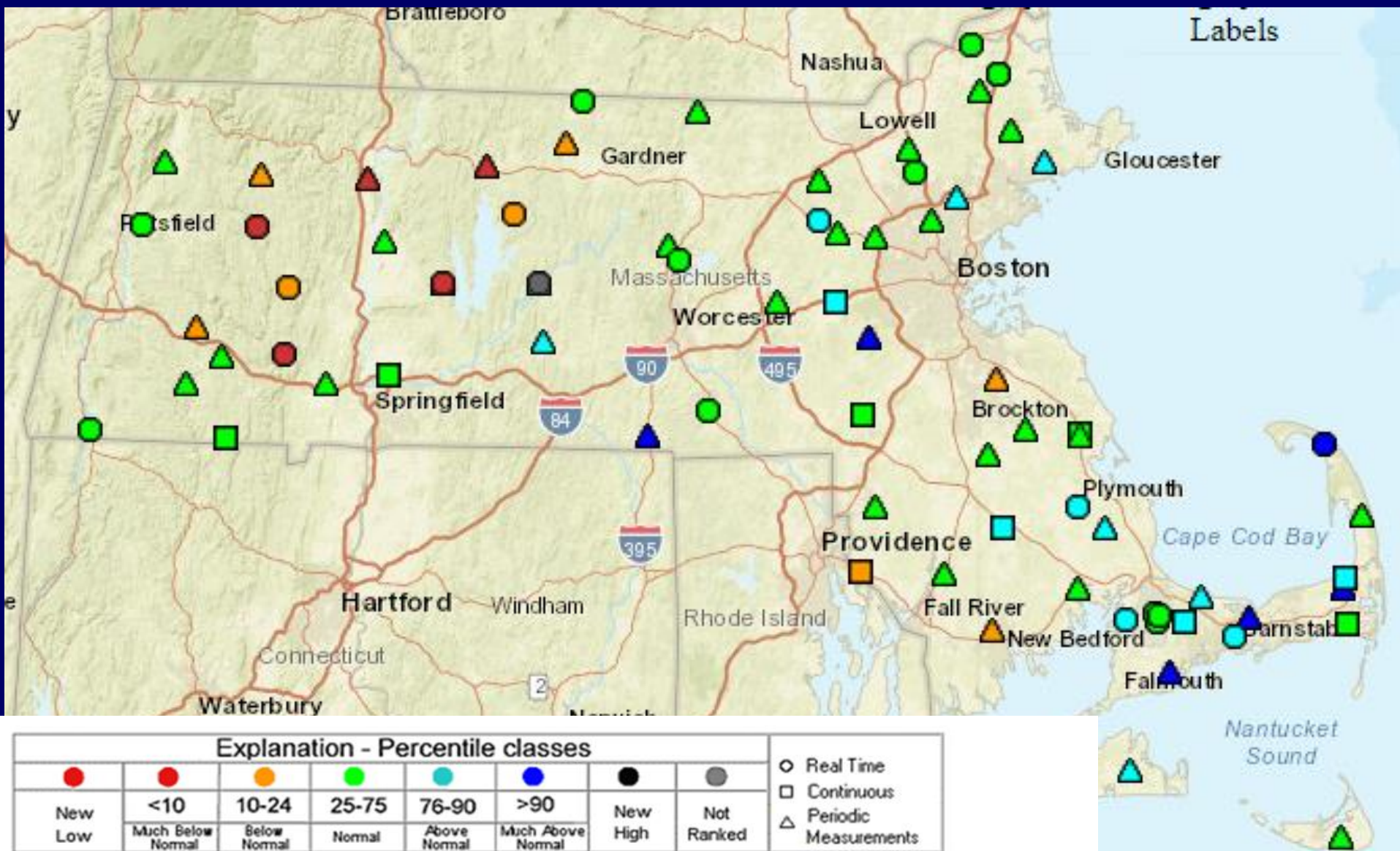
USGS WaterWatch

Last updated: 2019-11-12

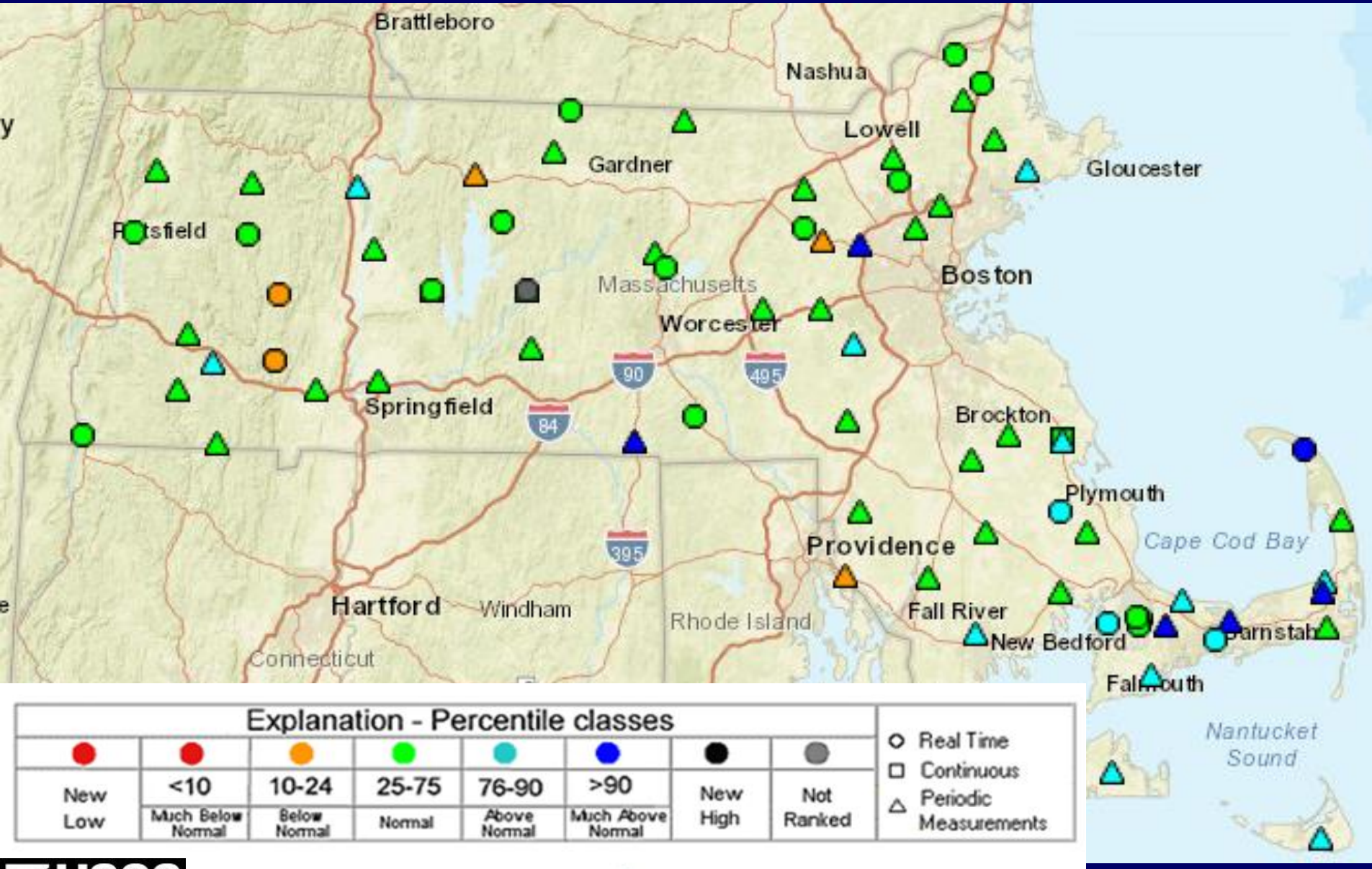
Explanation - Percentile classes

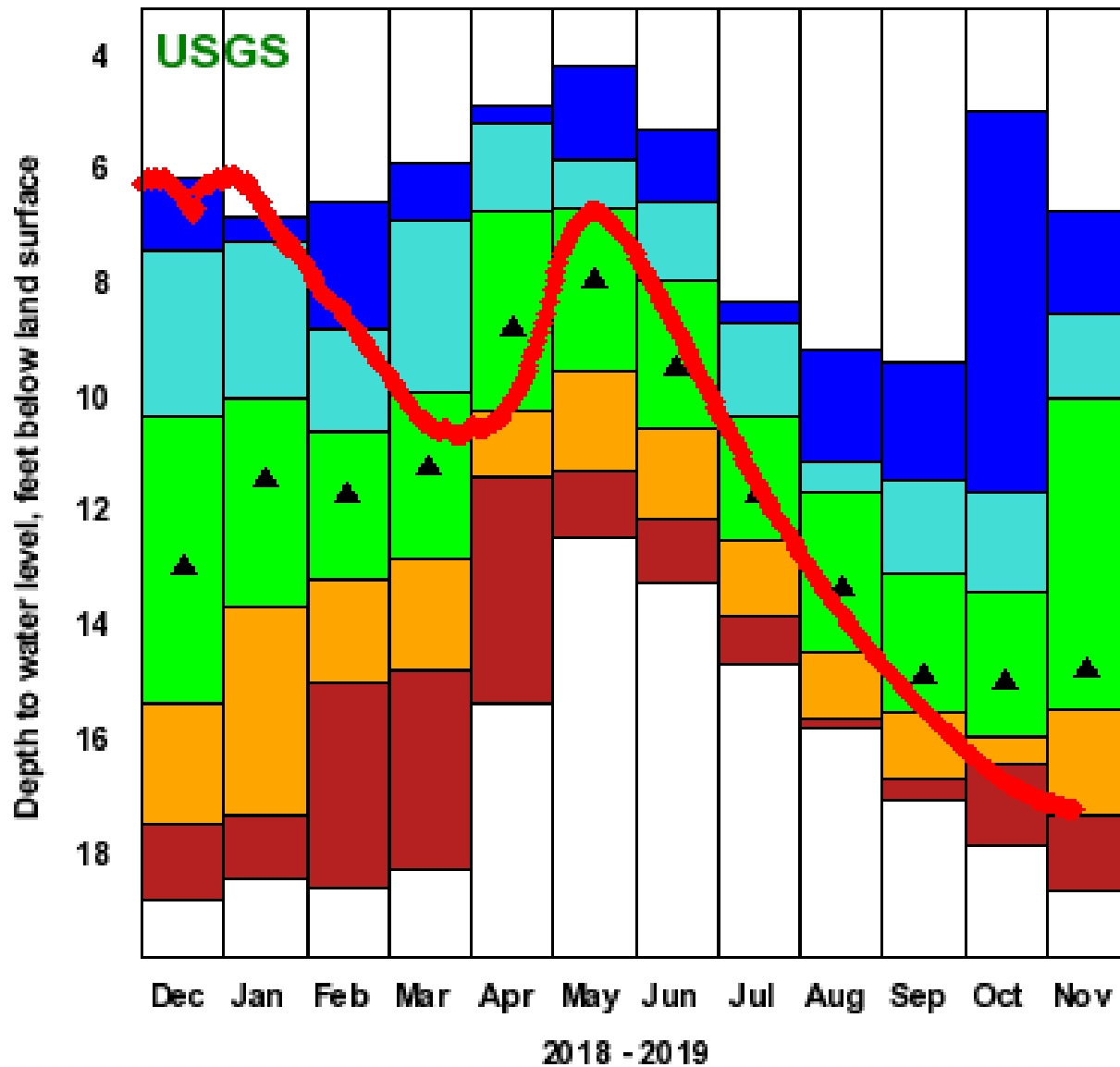
lowest-5th percentile	6-9	10-24	25-75	76-90	91-94	95th percentile-highest	Flow
Severe hydrologic drought	Moderate hydrologic drought	Below normal	Normal	Above normal	Much above normal		

GW Conditions late Sept. – early Oct. 2019



GW Conditions late Oct. – early Nov. 2019





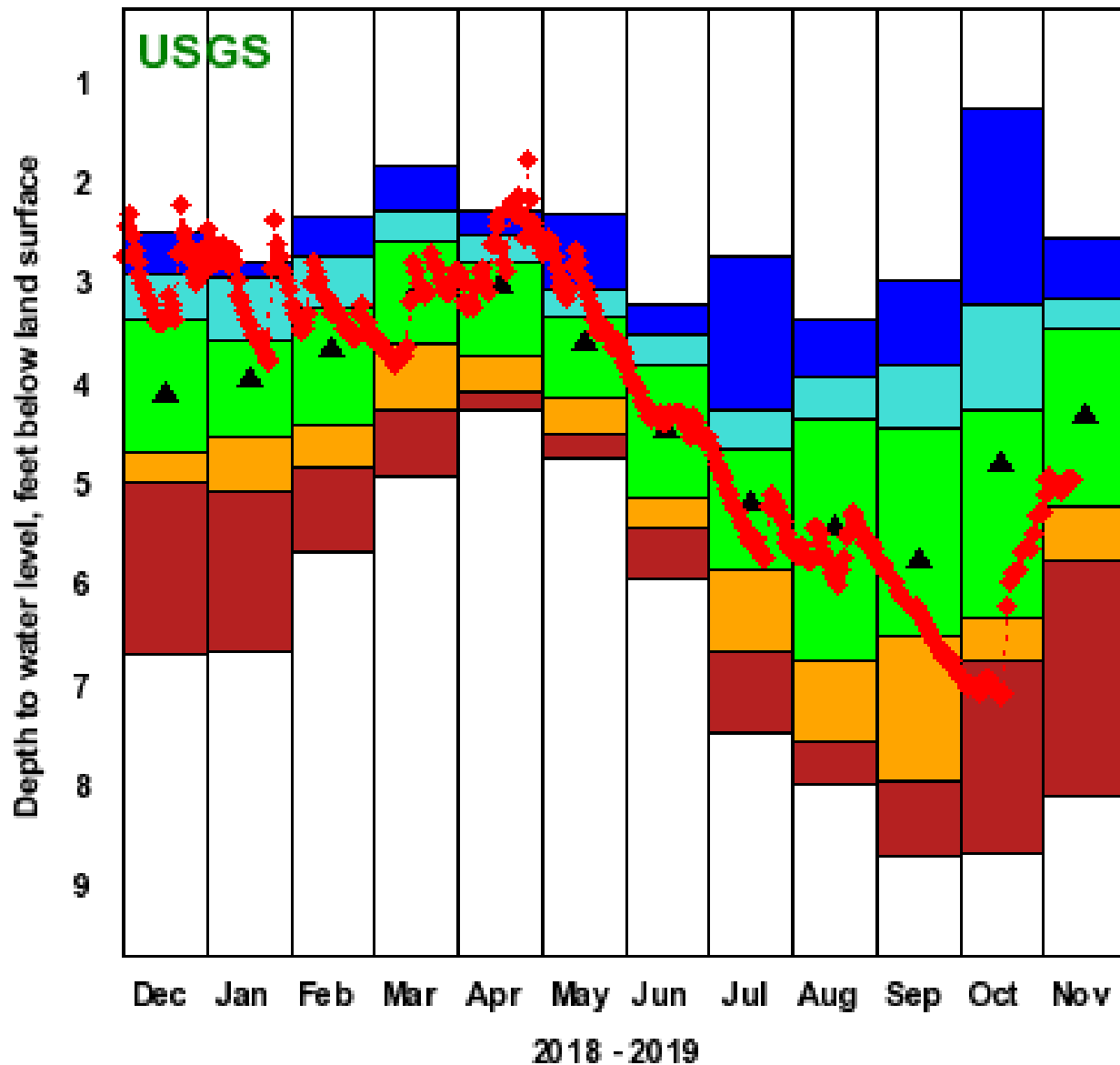
Plot created 11/11/19 19:27

Explanation - Percentile Classes

◆ Data Point

● < 10 ● 10 - 24 ● 25 - 75 ● 76 - 90 ● > 90

▲ Monthly Median



Pbt created 11/11/19 19:27

Explanation - Percentile Classes

◆ Data Point

● <10 ● 10-24 ● 25-75 ● 76-90 ● >90

▲ Monthly Median