
Streamflow and Groundwater Conditions in Massachusetts

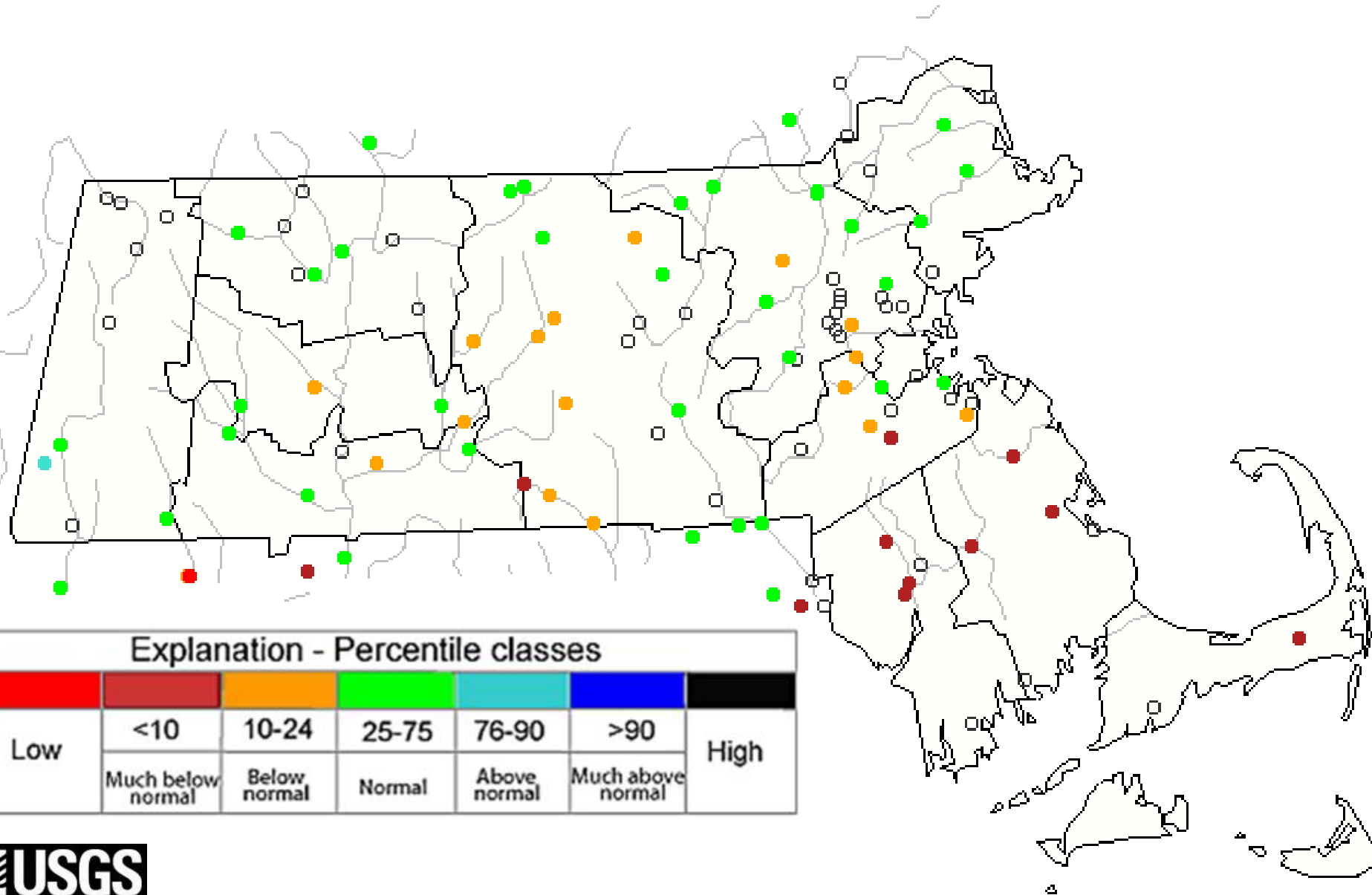
April 11, 2017

Peter Weiskel
U.S. Geological Survey
New England Water Science Center



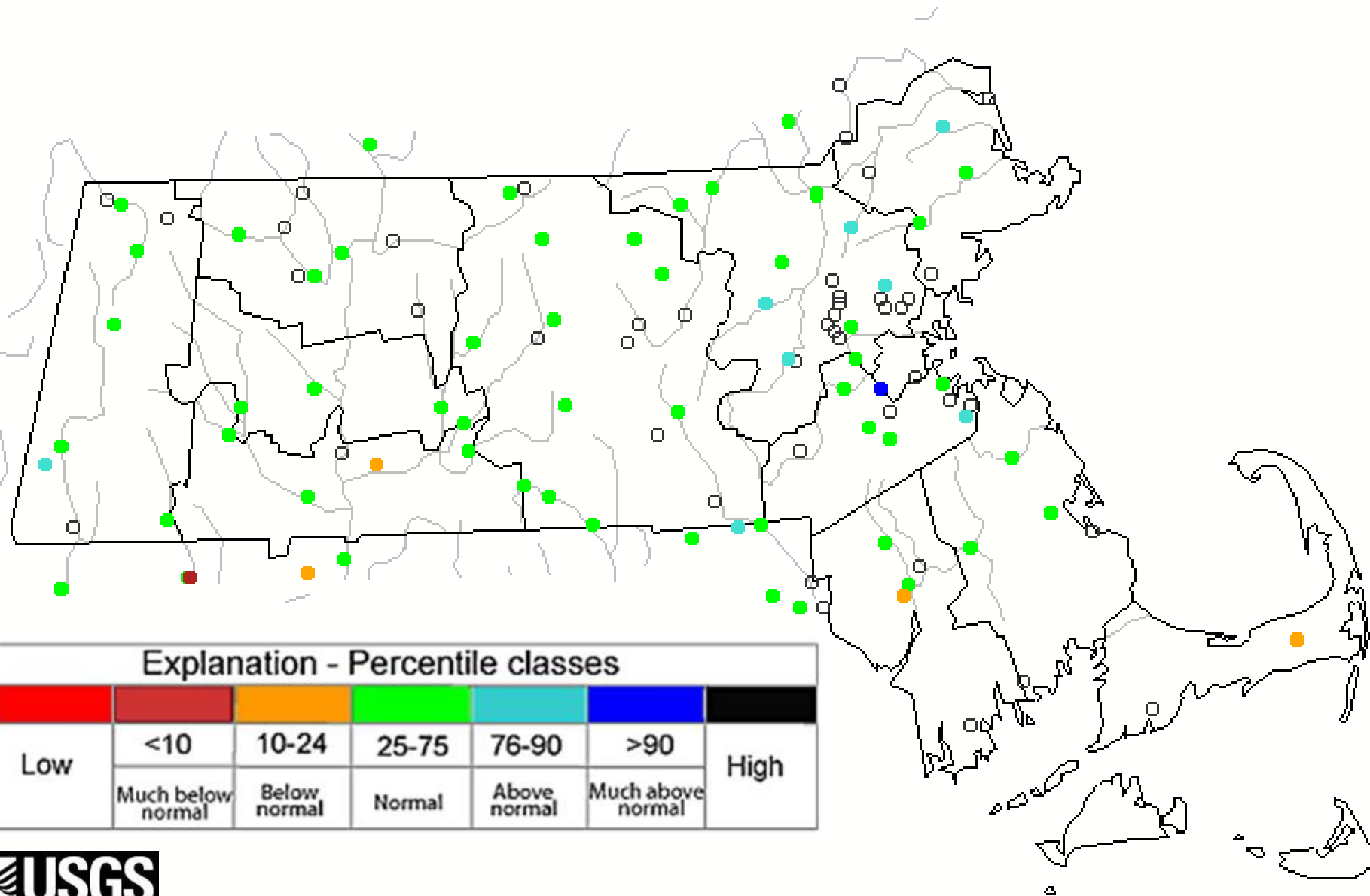
Average Streamflow Conditions – Dec. 2016

December 2016



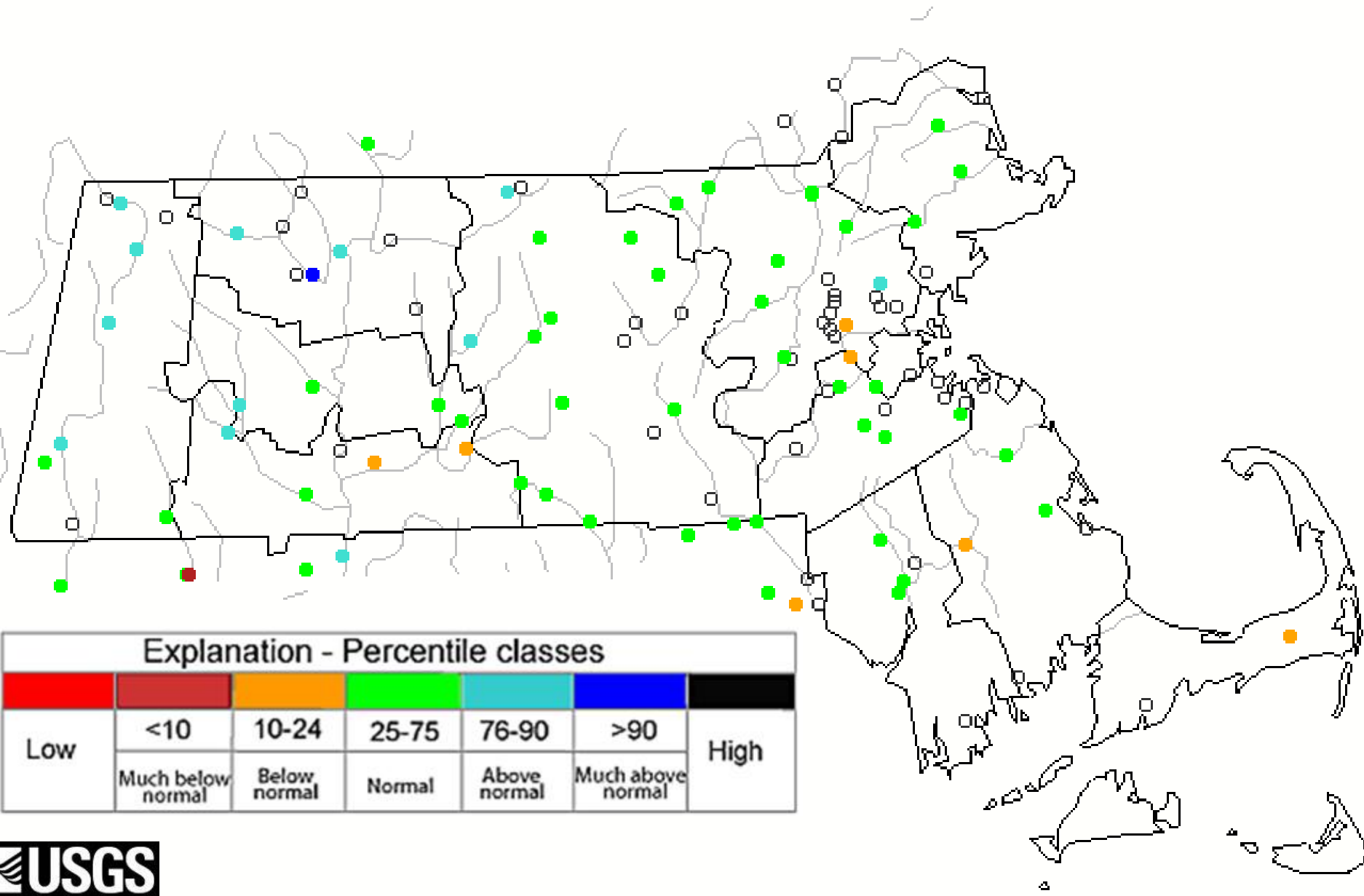
Average Streamflow Conditions – Jan. 2017

January 2017



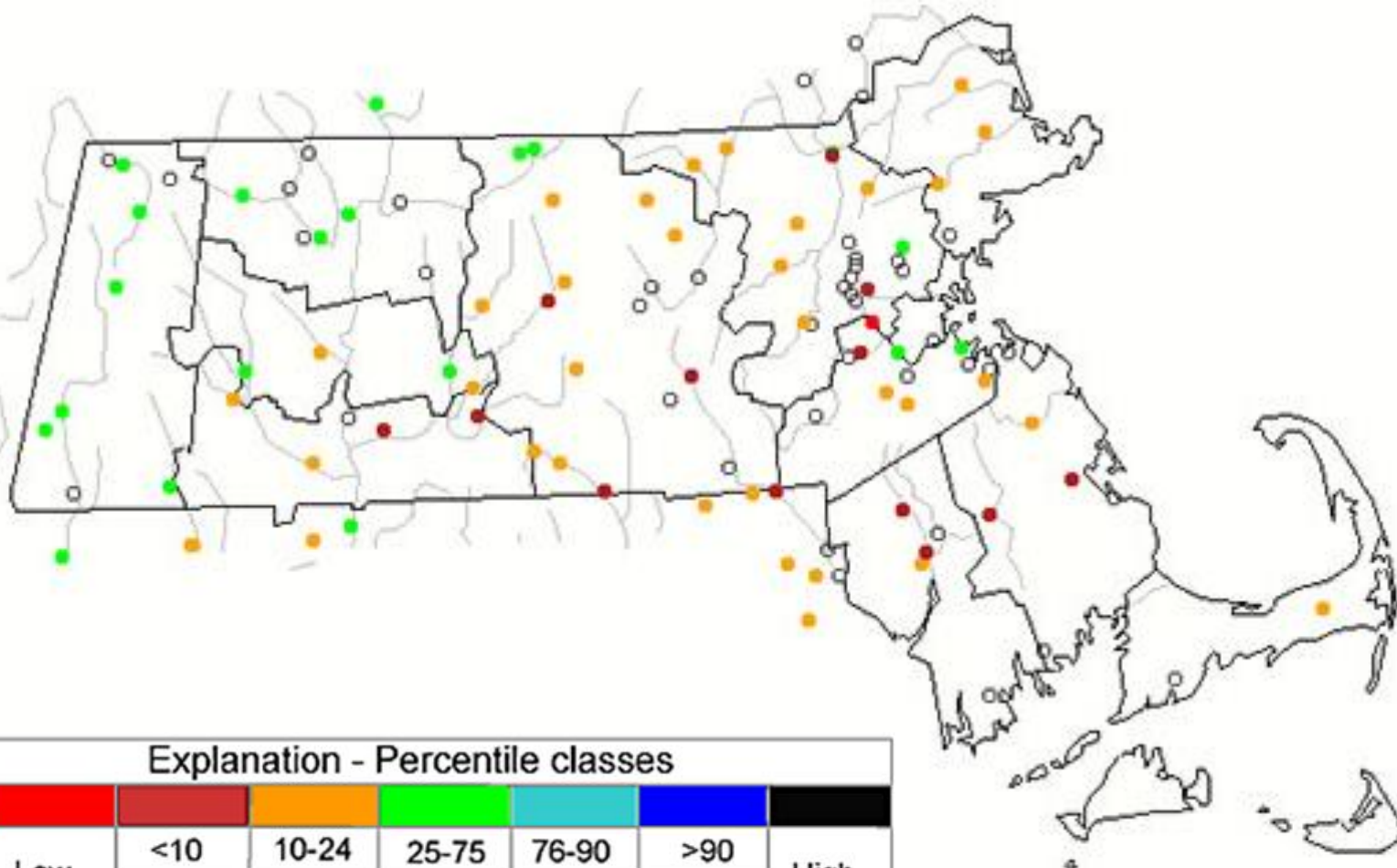
Average Streamflow Conditions – Feb. 2017

February 2017



Average Streamflow Conditions – March 2017

March 2017

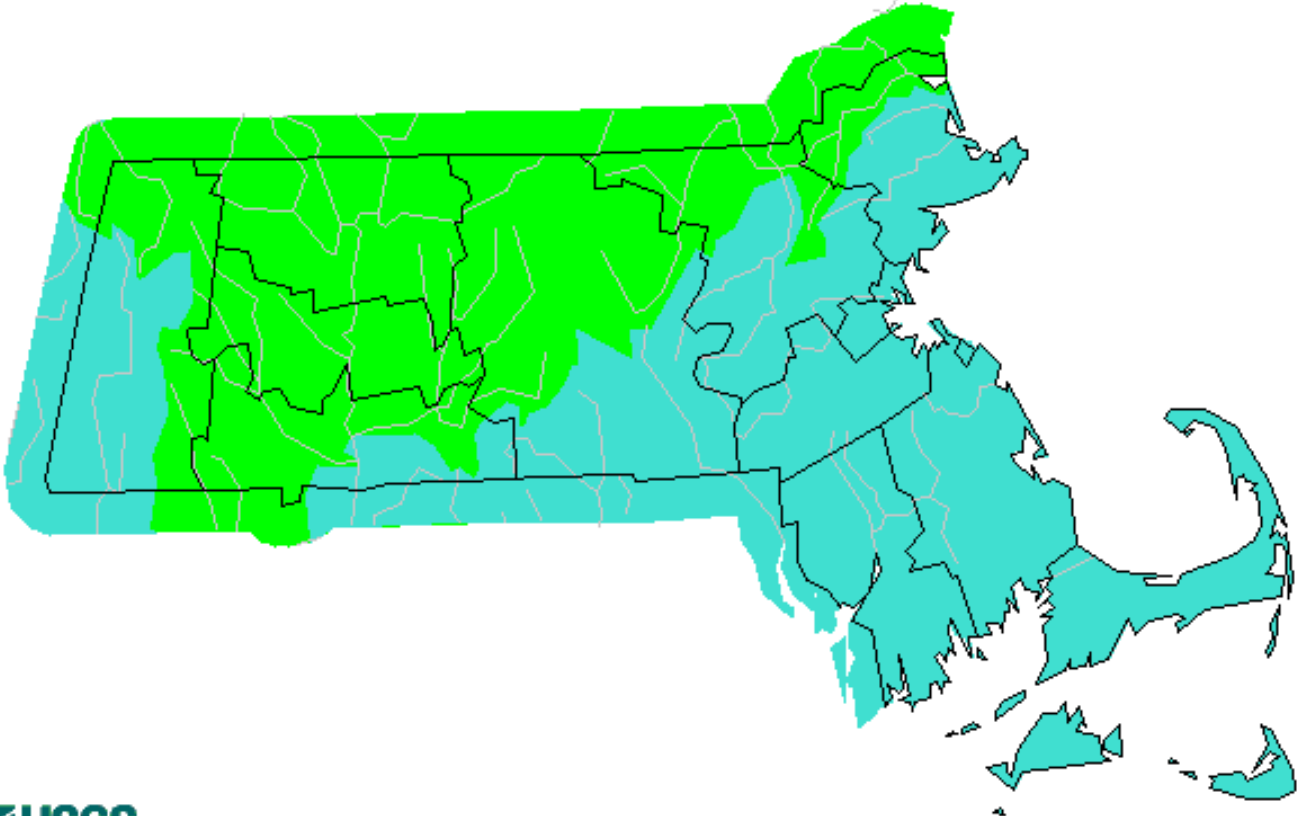










Explanation - Percentile classes

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

Current Streamflow Conditions – April 2017

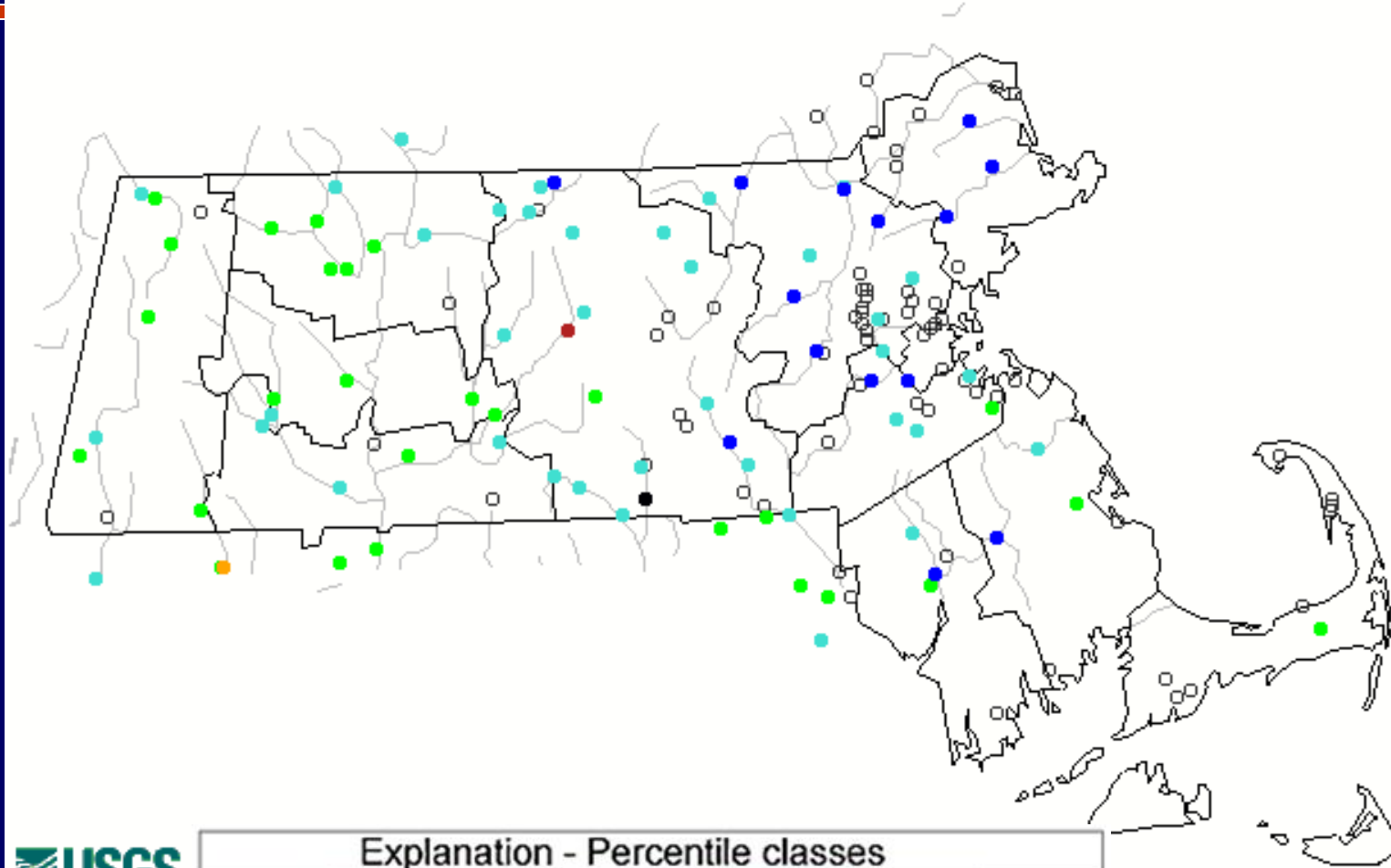
Wednesday, April 05, 2017



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			

Current Streamflow Conditions – April 2017

Monday, April 10, 2017 09:30ET

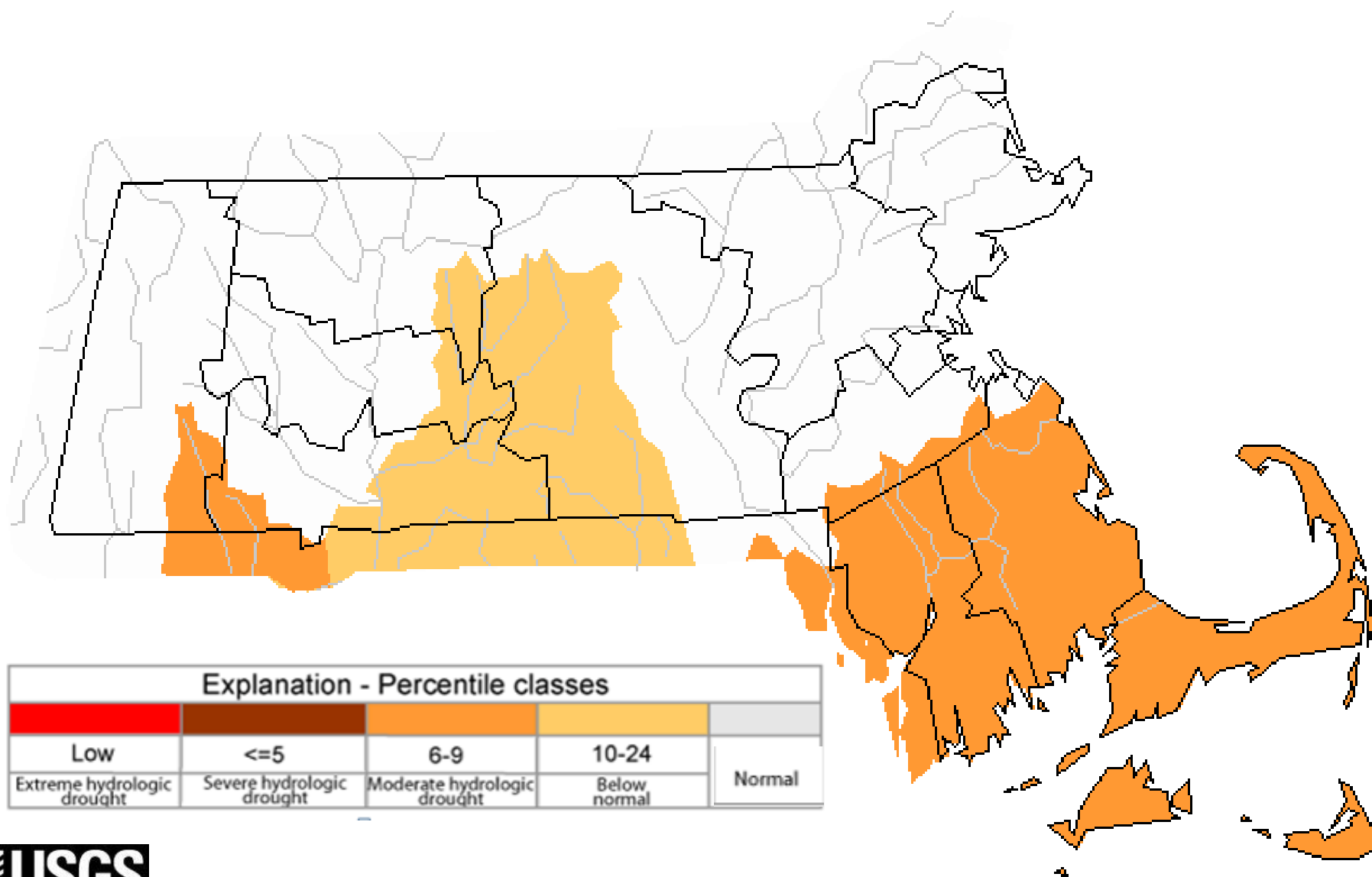


Explanation - Percentile classes

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

Below normal average monthly streamflow – Dec. 2016

December 2016

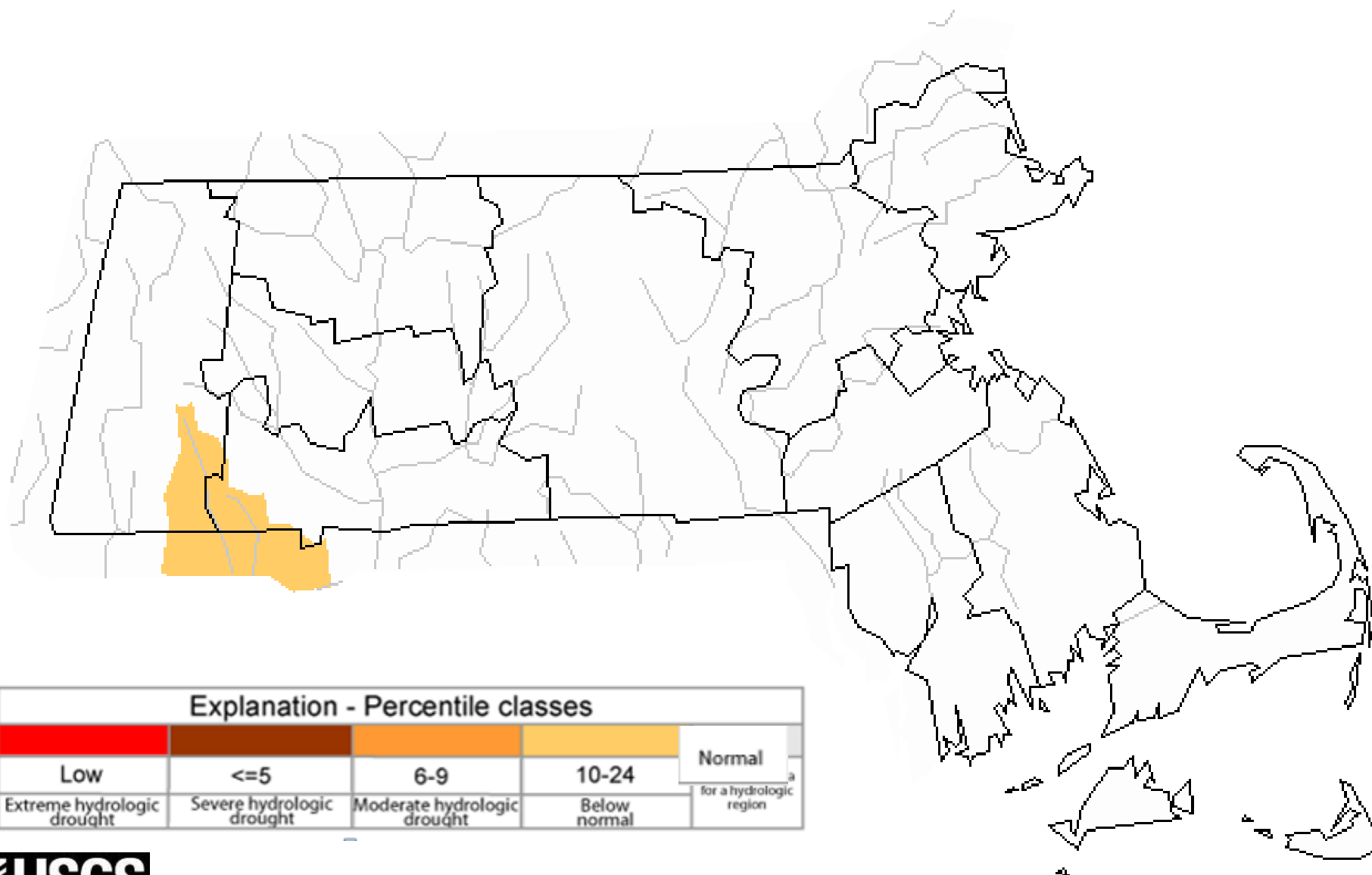


Explanation - Percentile classes

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

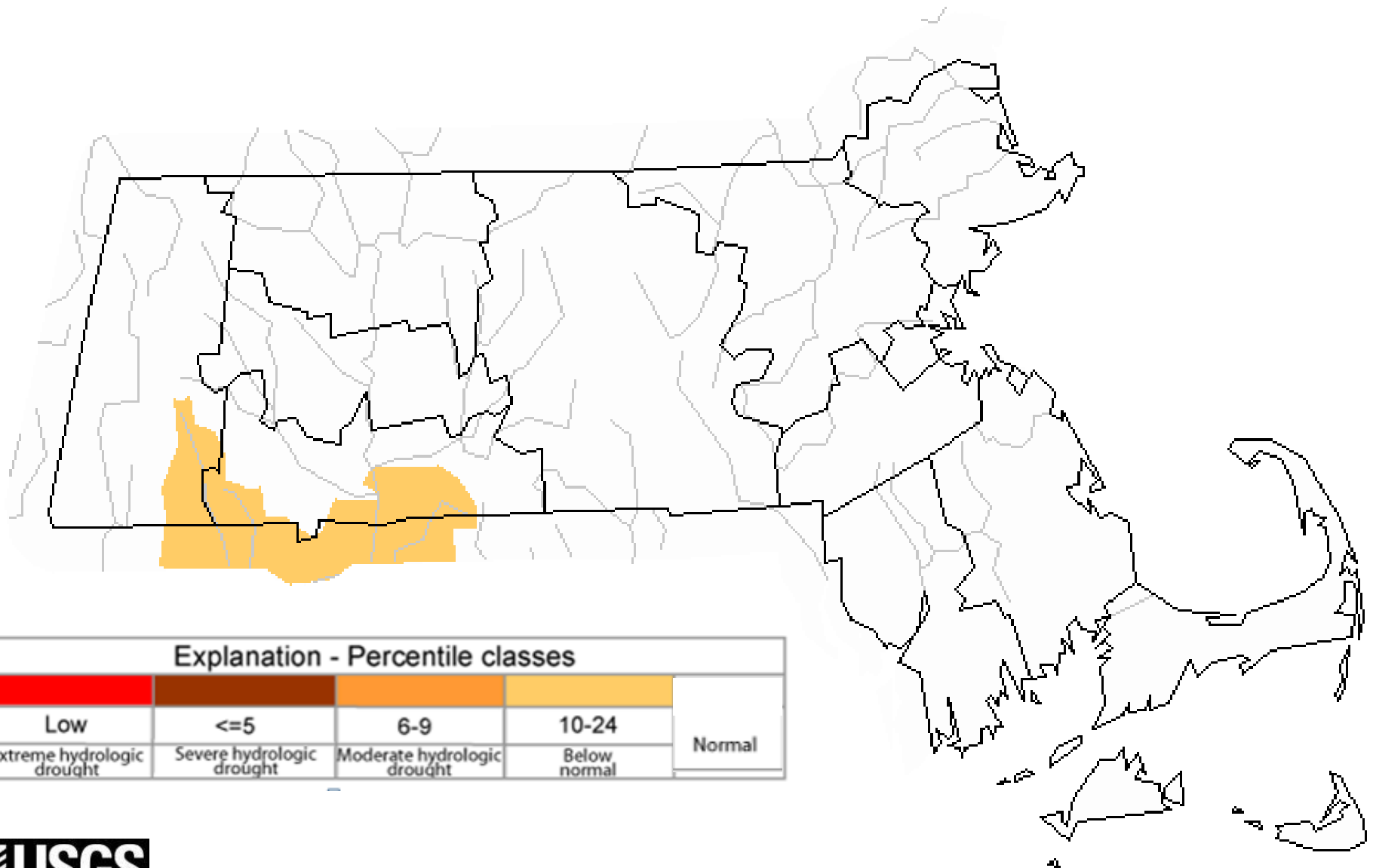
Below normal average monthly streamflow – Jan. 2017

January 2017



Below normal average monthly streamflow – Feb. 2017

February 2017

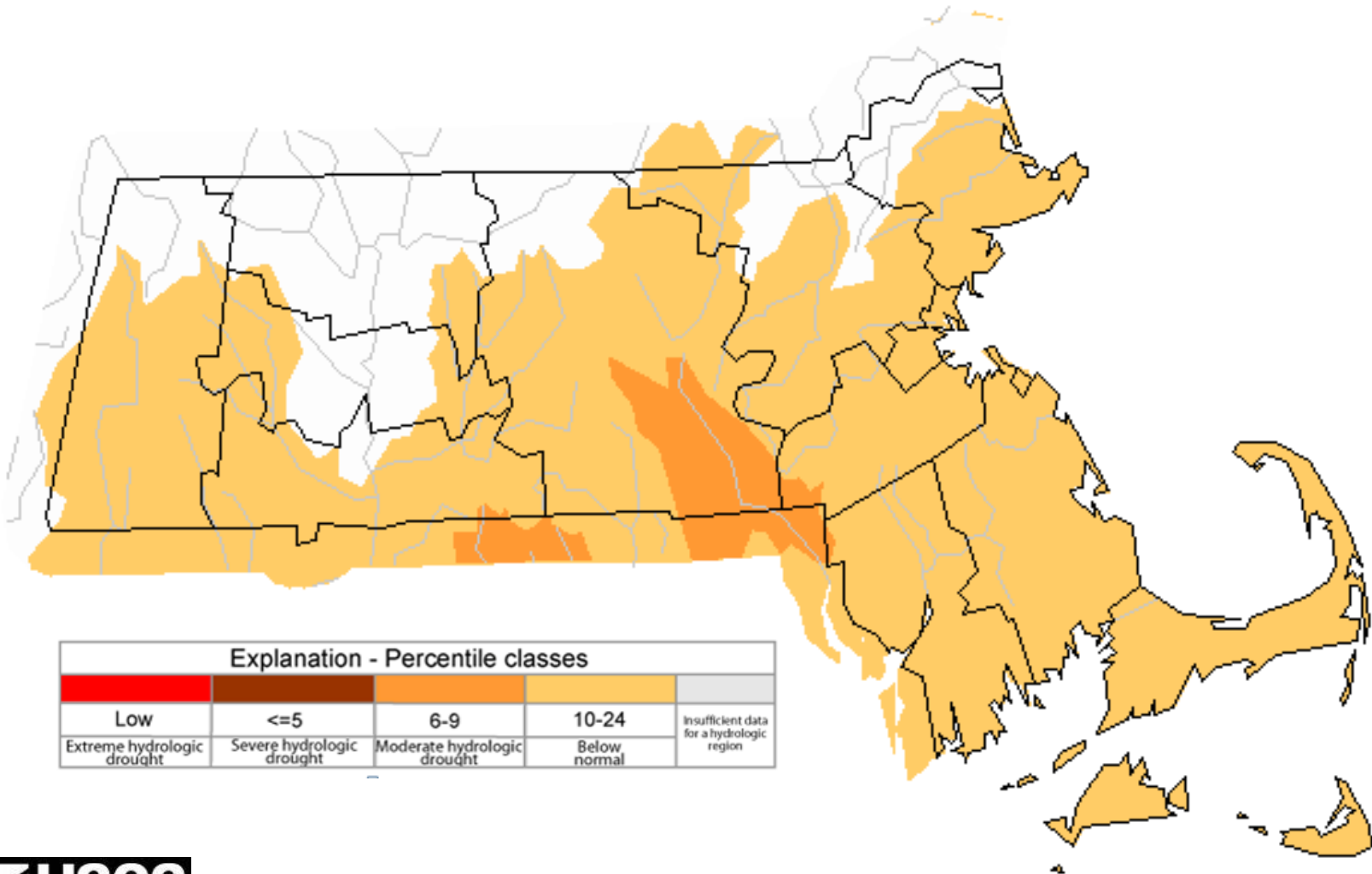


Explanation - Percentile classes

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

Below normal average monthly streamflow – March 2017

March 2017

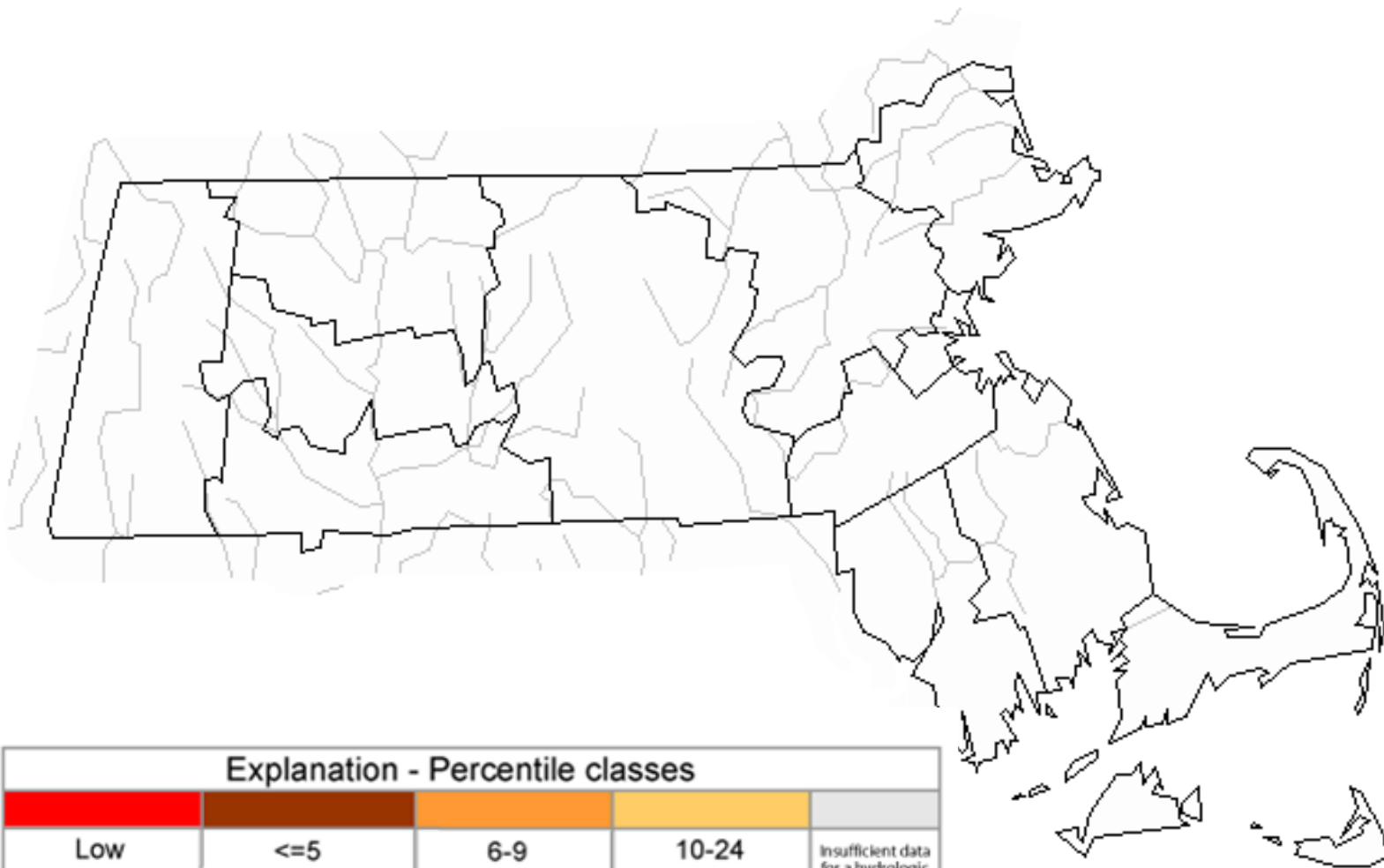


Explanation - Percentile classes

Low	<=5	6-9	10-24	Insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

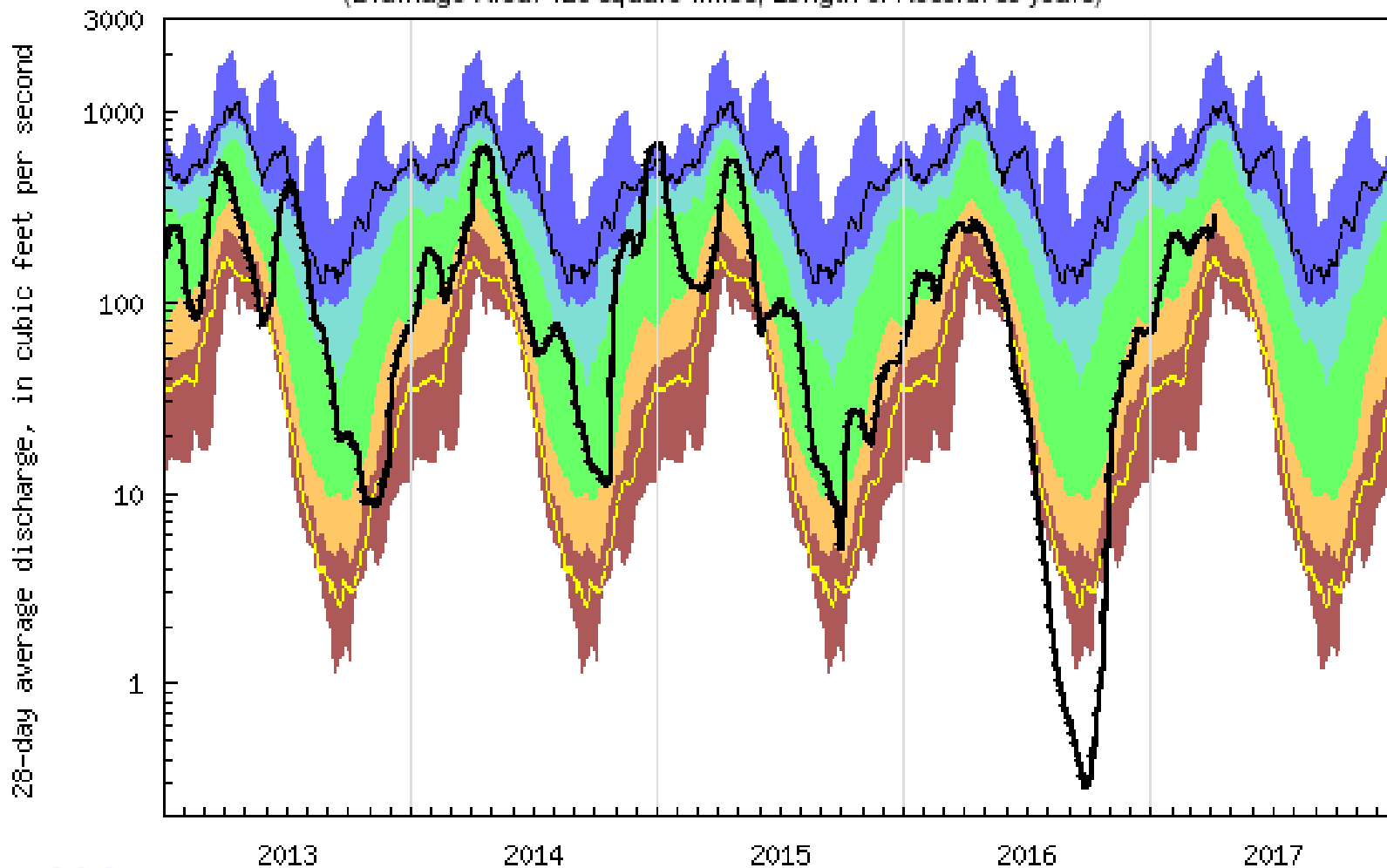
Below normal 7-day average streamflow – current

Wednesday, April 05, 2017



Explanation - Percentile classes				
Low	≤ 5	6-9	10-24	insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

USGS 01102000 IPSWICH RIVER NEAR IPSWICH, MA
 (Drainage Area: 125 square miles, Length of Record: 85 years)



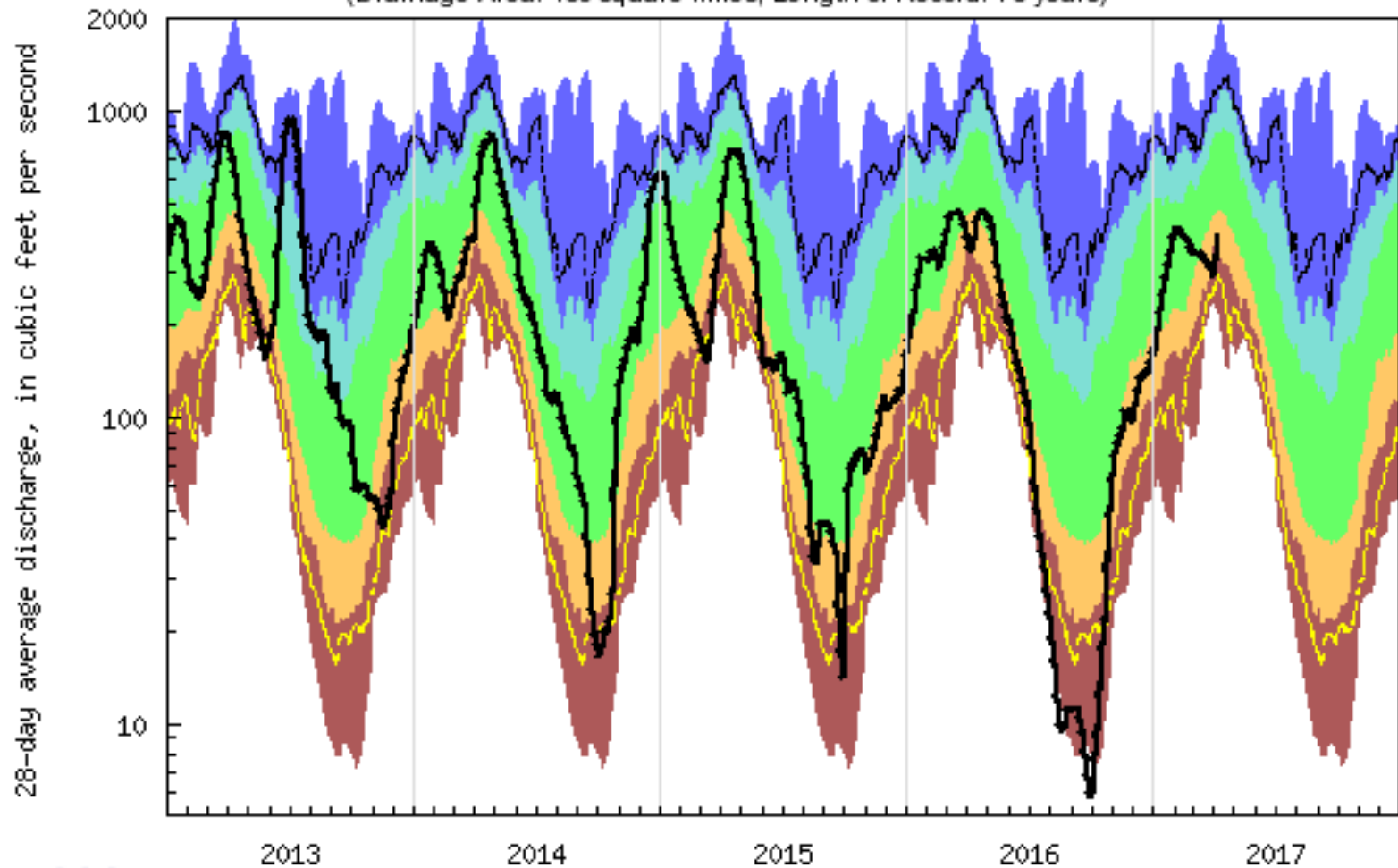
USGS WaterWatch

Last updated: 2017-04-05

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 01103500 CHARLES RIVER AT DOVER, MA
 (Drainage Area: 183 square miles, Length of Record: 78 years)



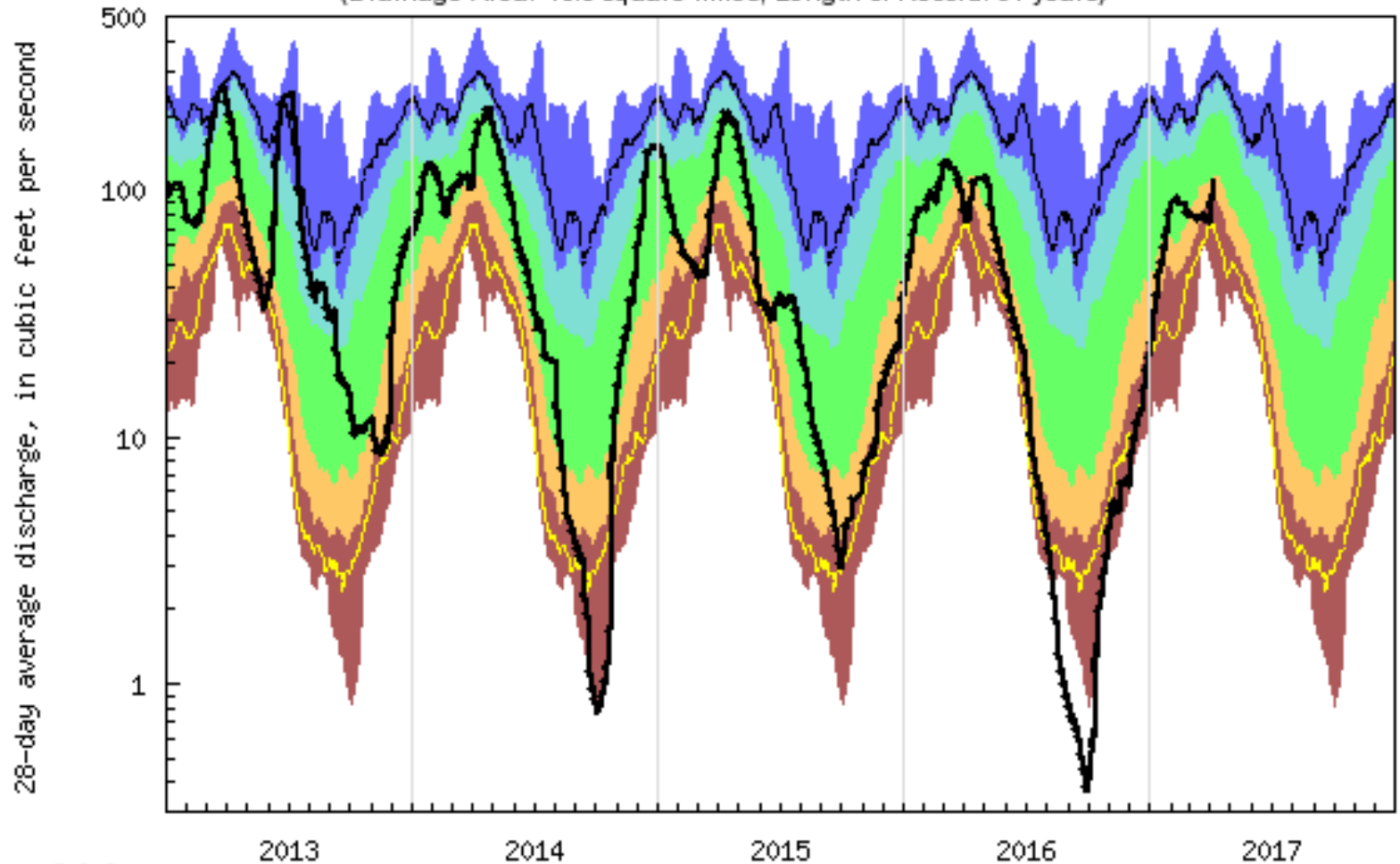
USGS WaterWatch

Last updated: 2017-04-05

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 01109000 WADING RIVER NEAR NORTON, MA
 (Drainage Area: 43.3 square miles, Length of Record: 91 years)



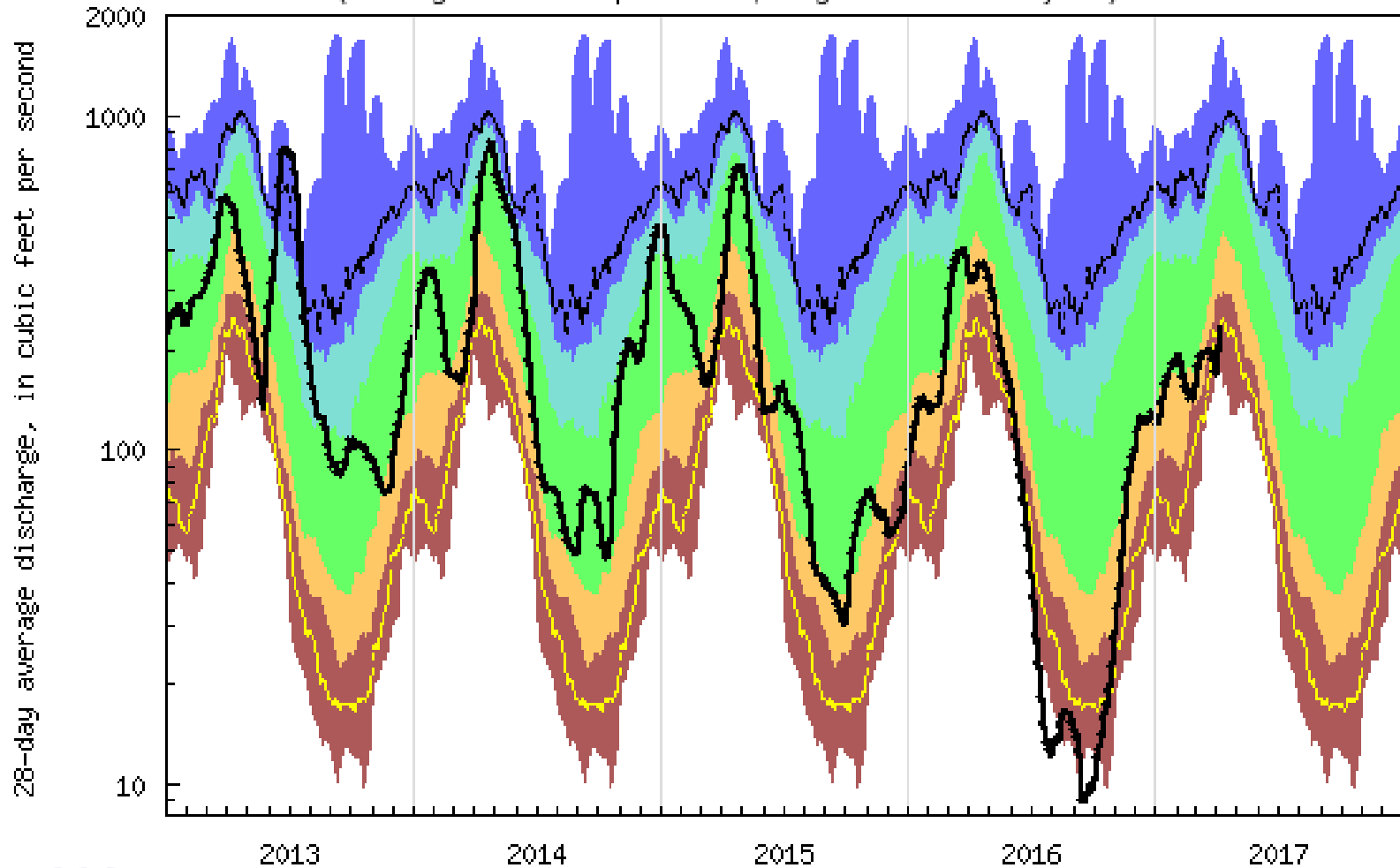
USGS WaterWatch

Last updated: 2017-04-05

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 01176000 QUABOAG RIVER AT WEST BRIMFIELD, MA
 (Drainage Area: 150 square miles, Length of Record: 103 years)



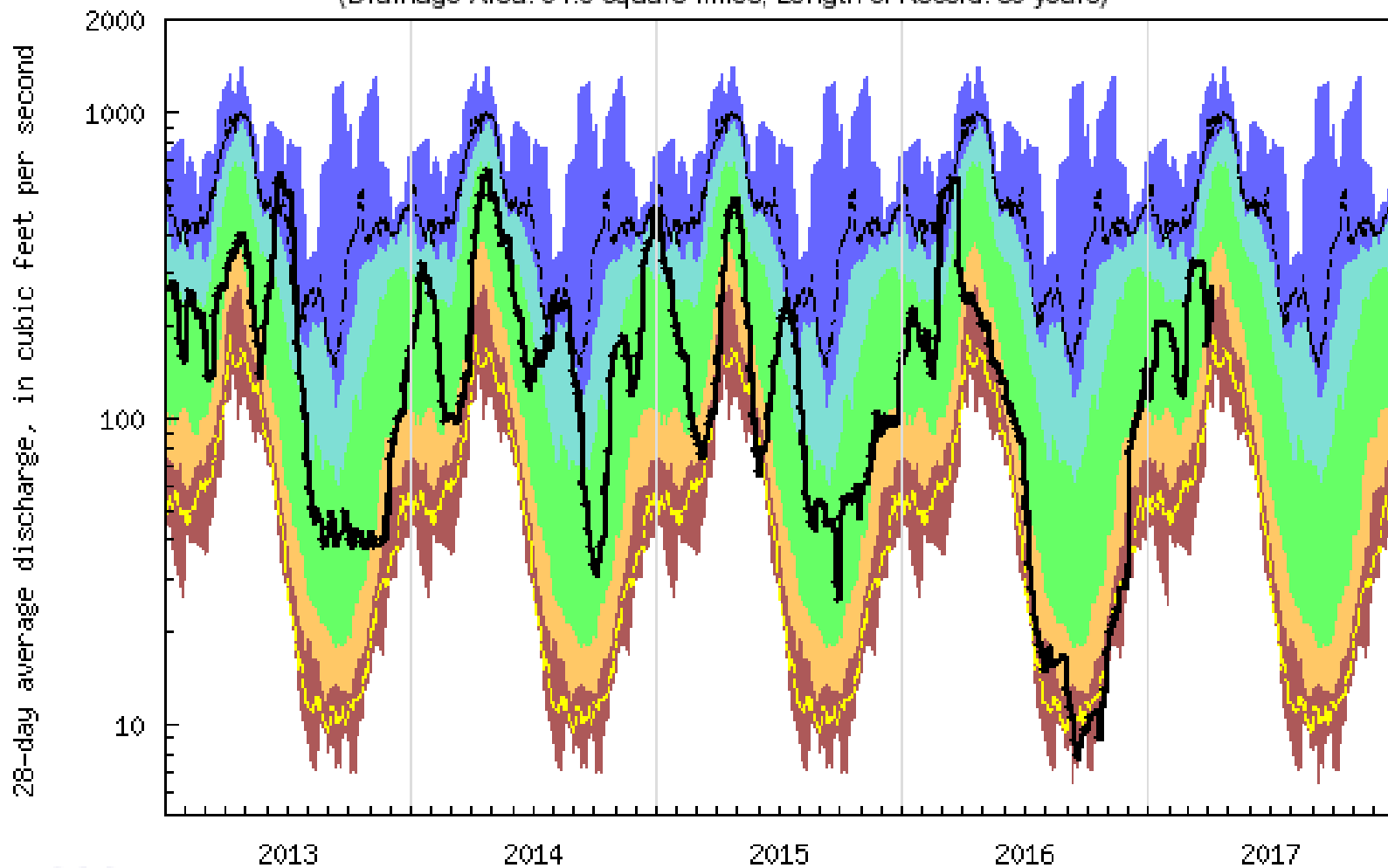
USGS WaterWatch

Last updated: 2017-04-05

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: 80 years)



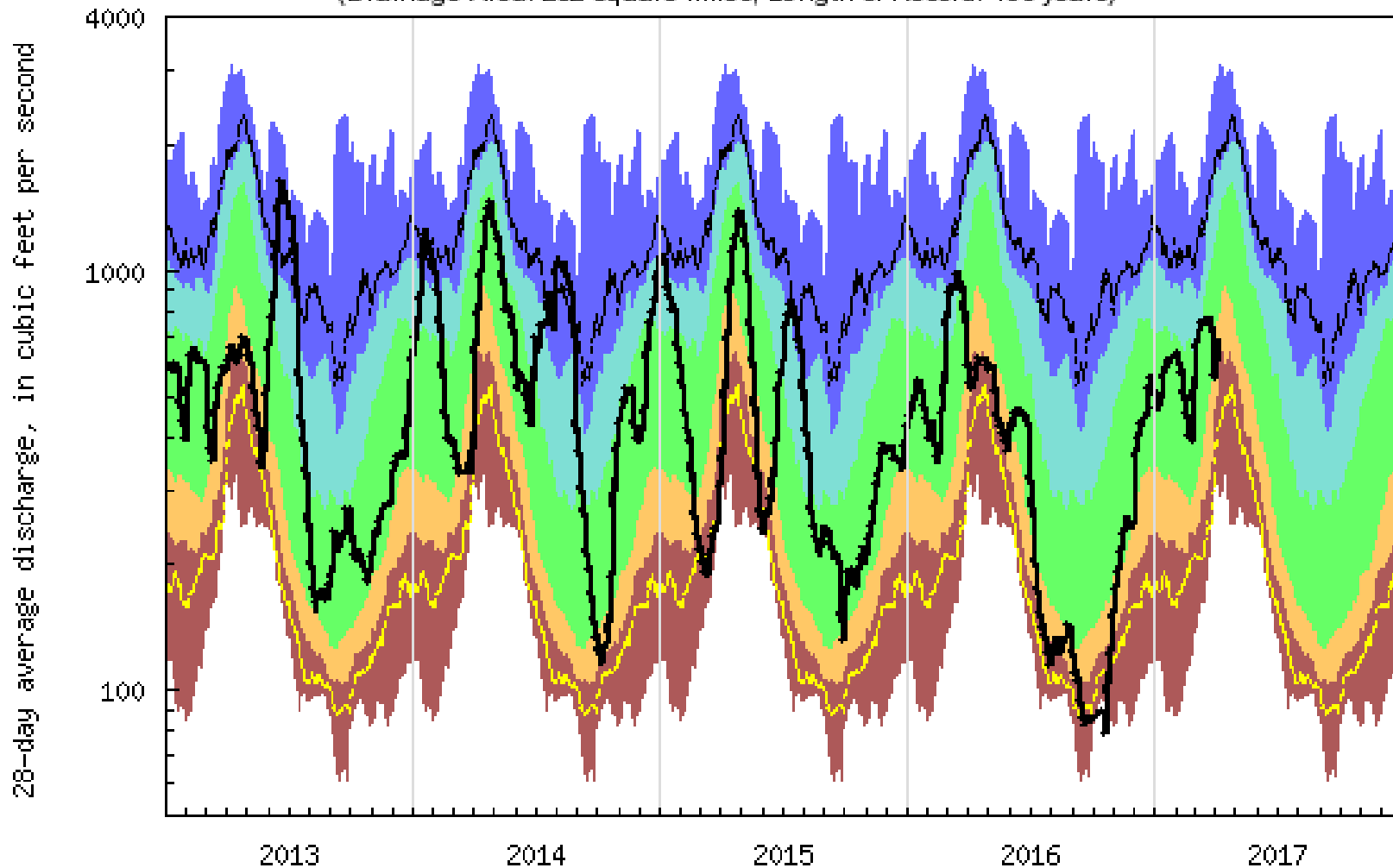
USGS WaterWatch

Last updated: 2017-04-05

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: 103 years)



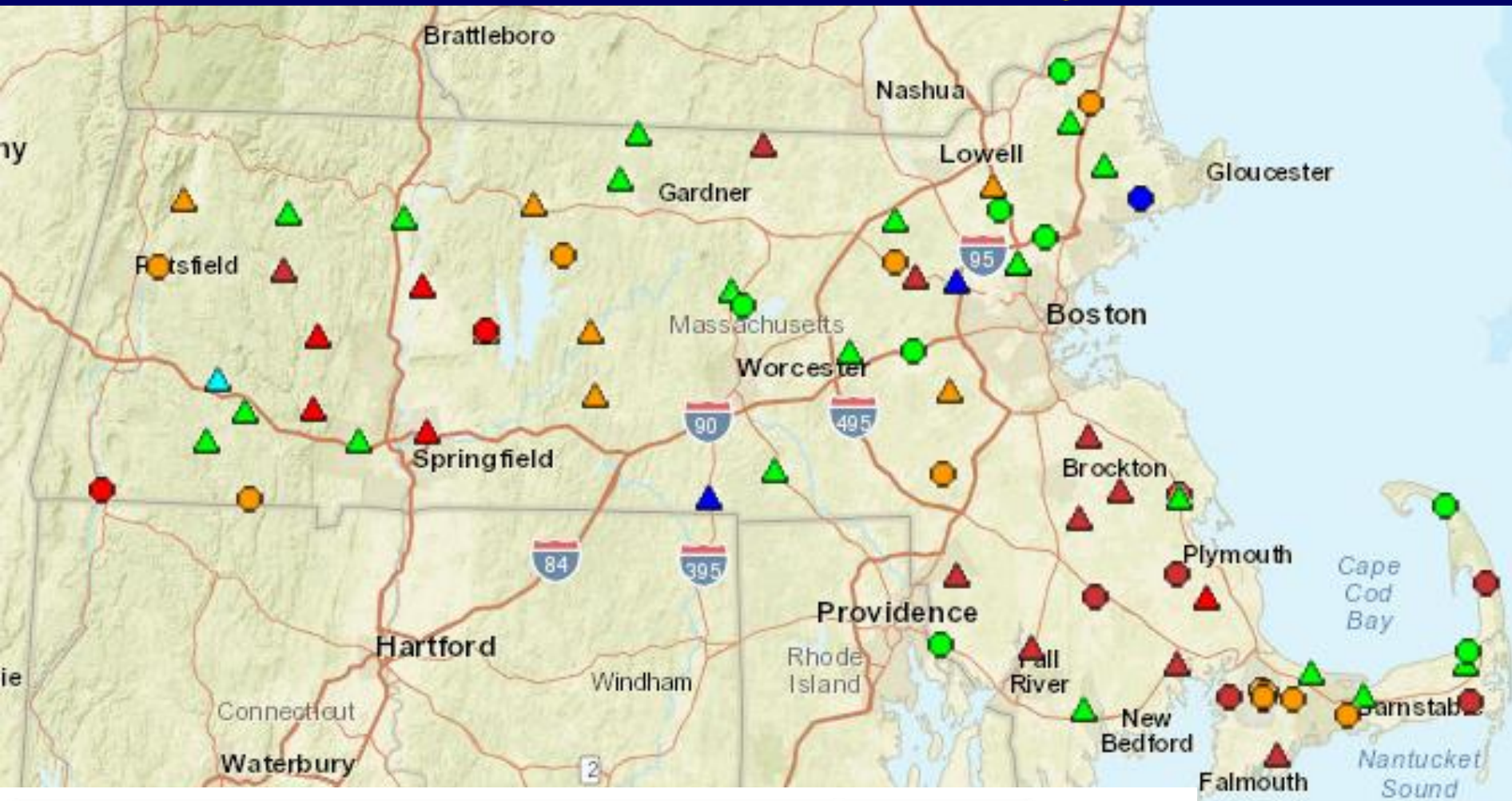
USGS WaterWatch

Last updated: 2017-04-05

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		

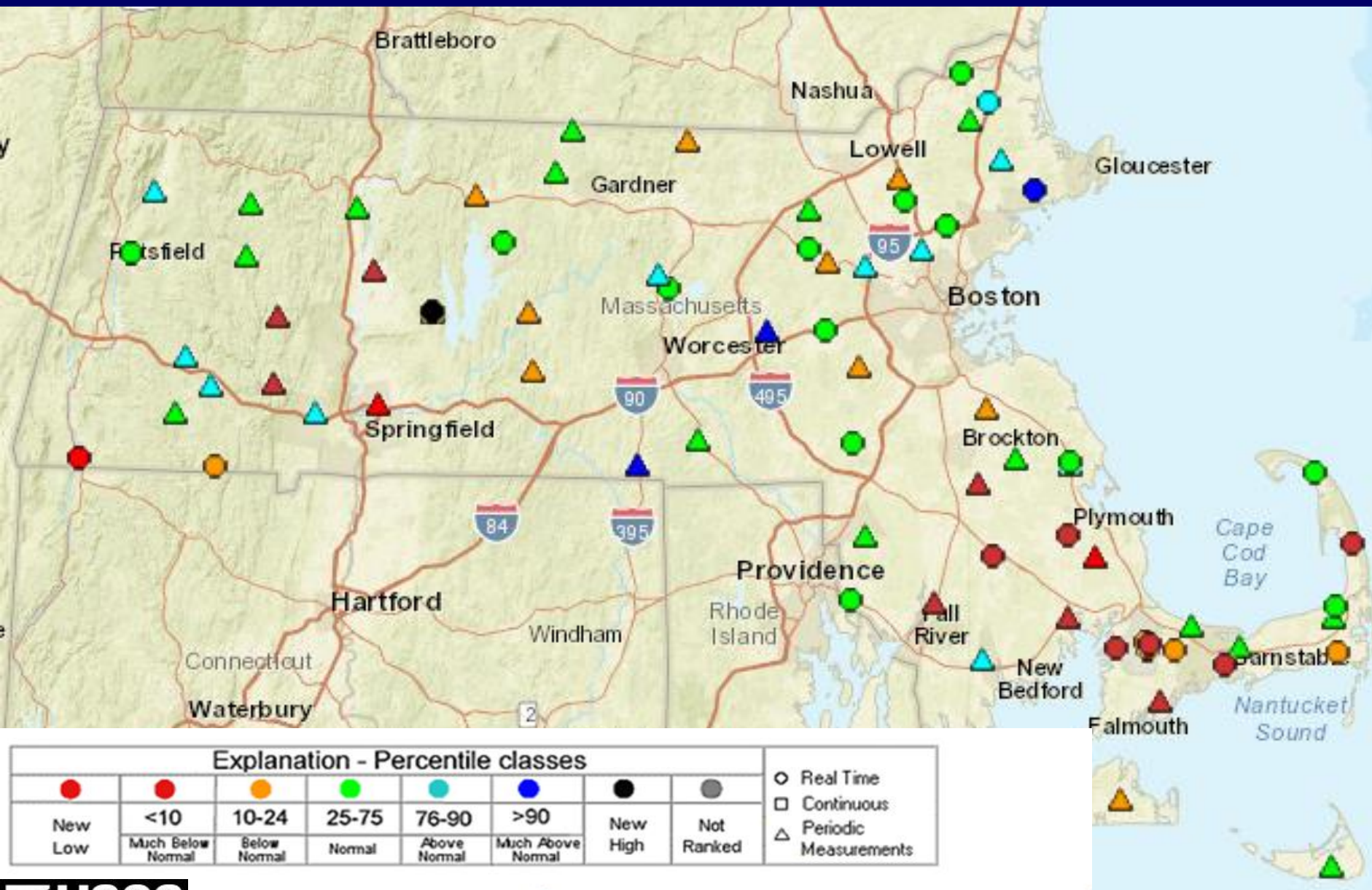
Groundwater Conditions During Dec. 2016



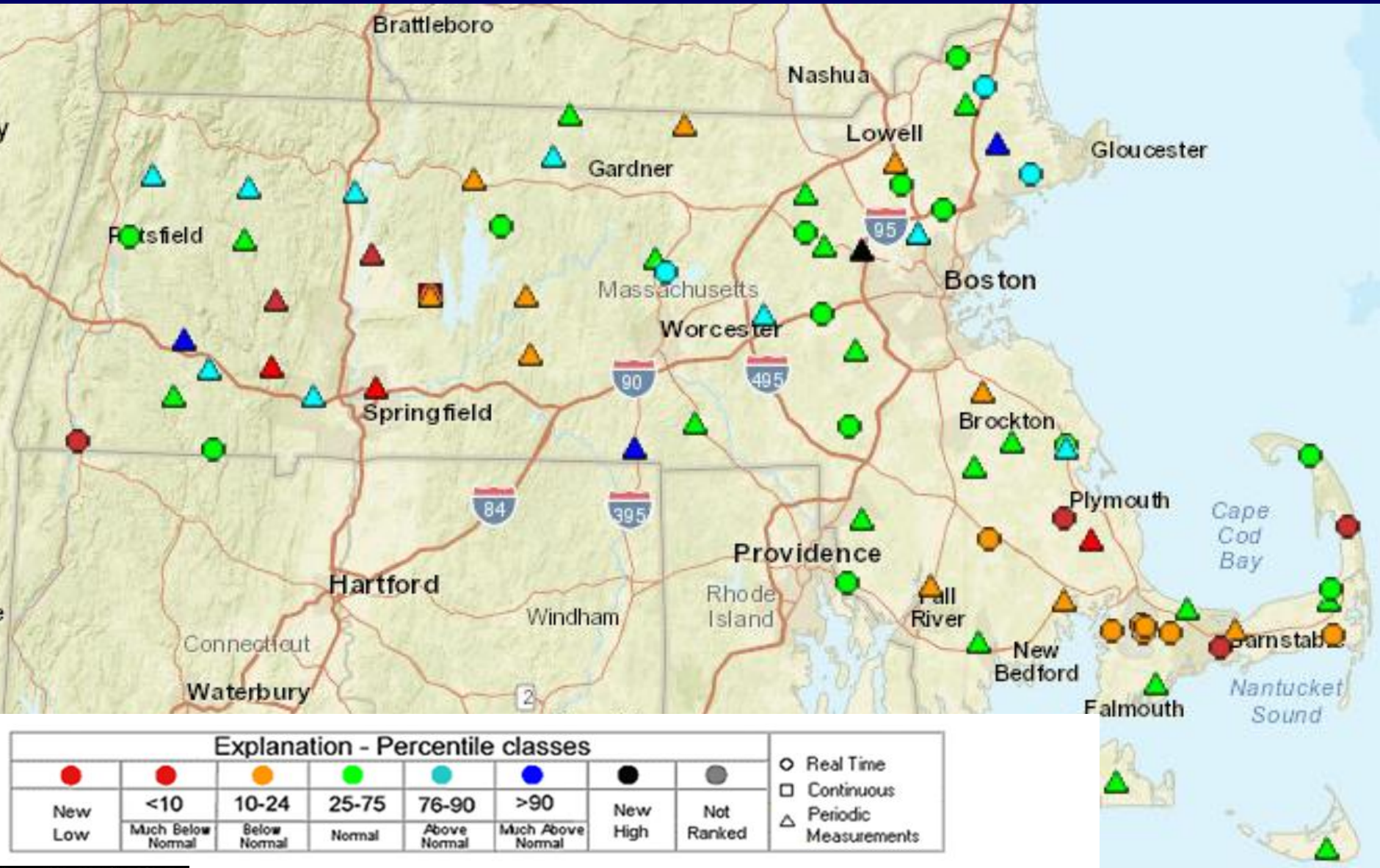
Explanation - Percentile classes

								Real Time Continuous Periodic Measurements
New Low	<10 Much Below Normal	10-24 Below Normal	25-75 Normal	76-90 Above Normal	>90 Much Above Normal	New High	Not Ranked	

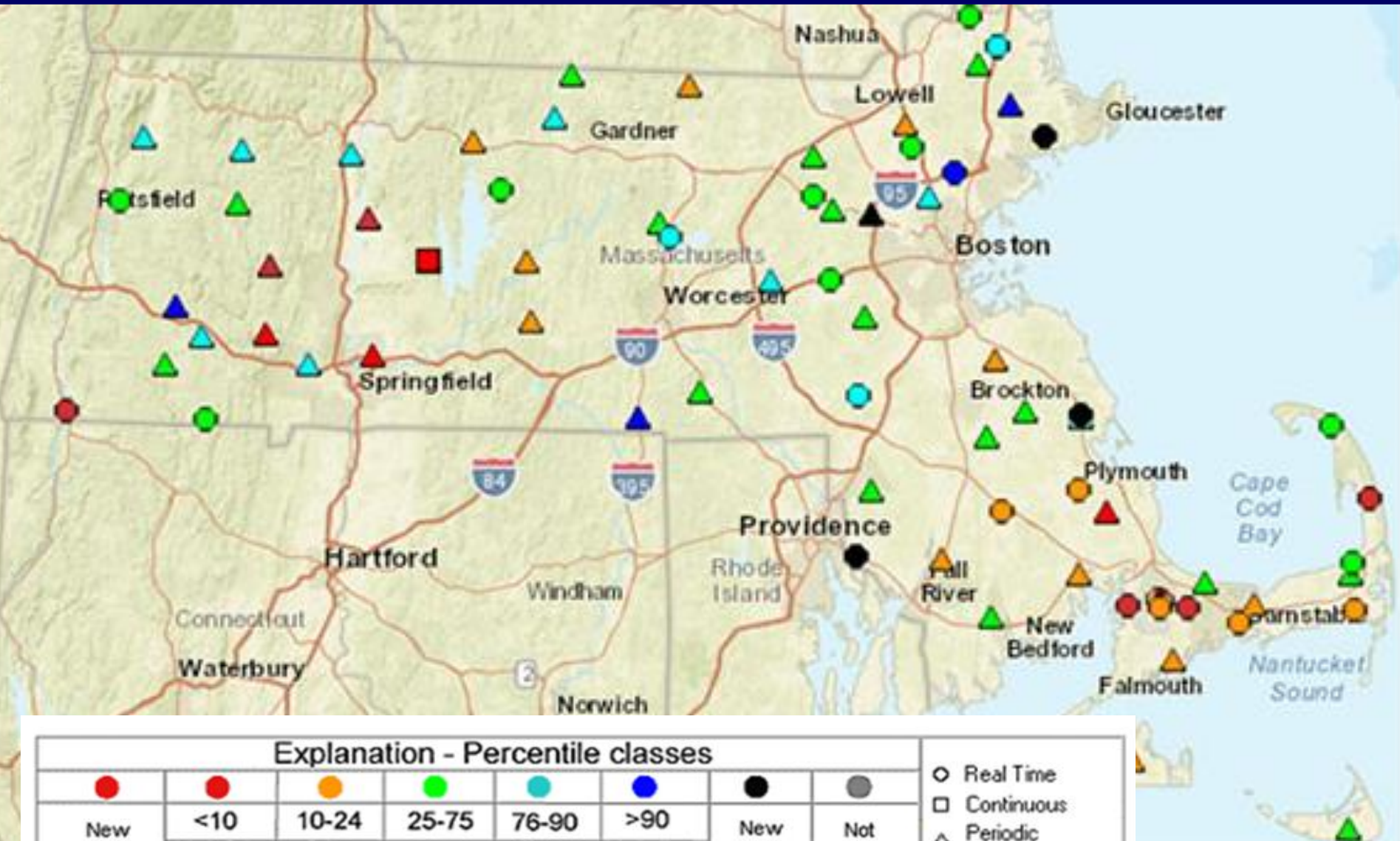
Groundwater Conditions During Jan. 2017



Groundwater Conditions During Feb. 2017

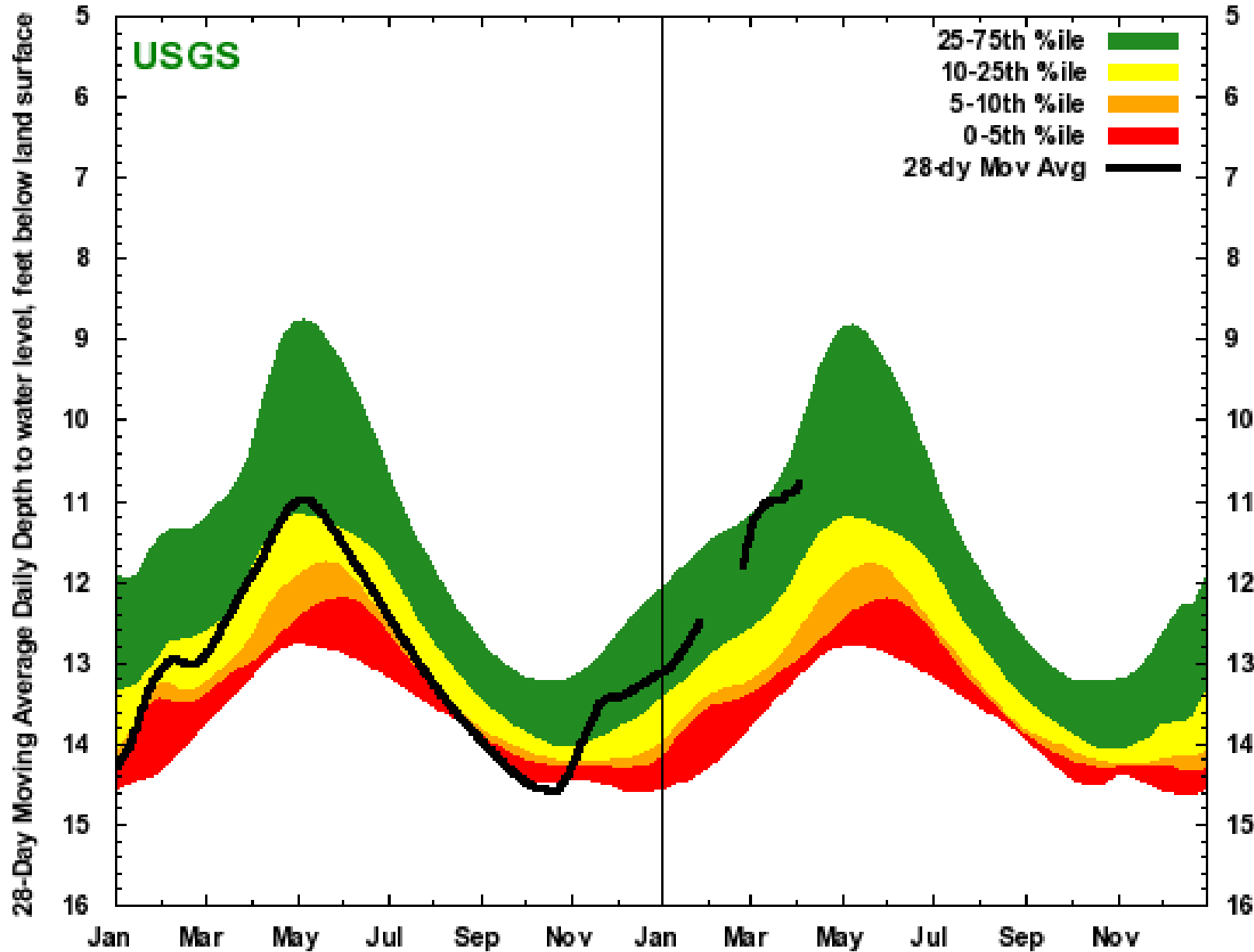


Groundwater Conditions During March 2017



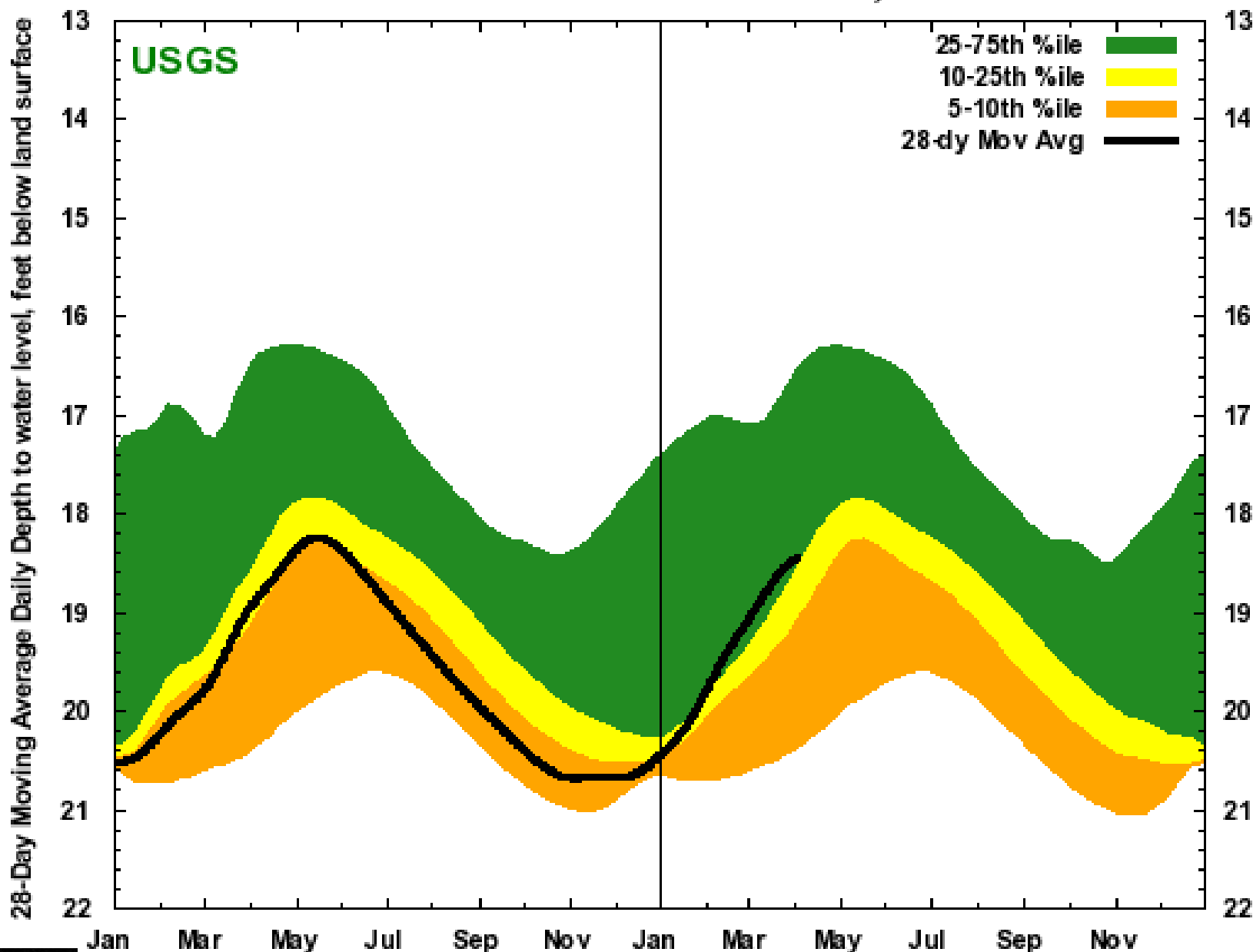
Explanation - Percentile classes

								<ul style="list-style-type: none"> Real Time Continuous Periodic Measurements
New Low	<10	10-24	25-75	76-90	>90	New High	Not Ranked	
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal			



USGS

- 25-75th %ile
- 10-25th %ile
- 5-10th %ile
- 0-5th %ile
- 28-dy Mov Avg

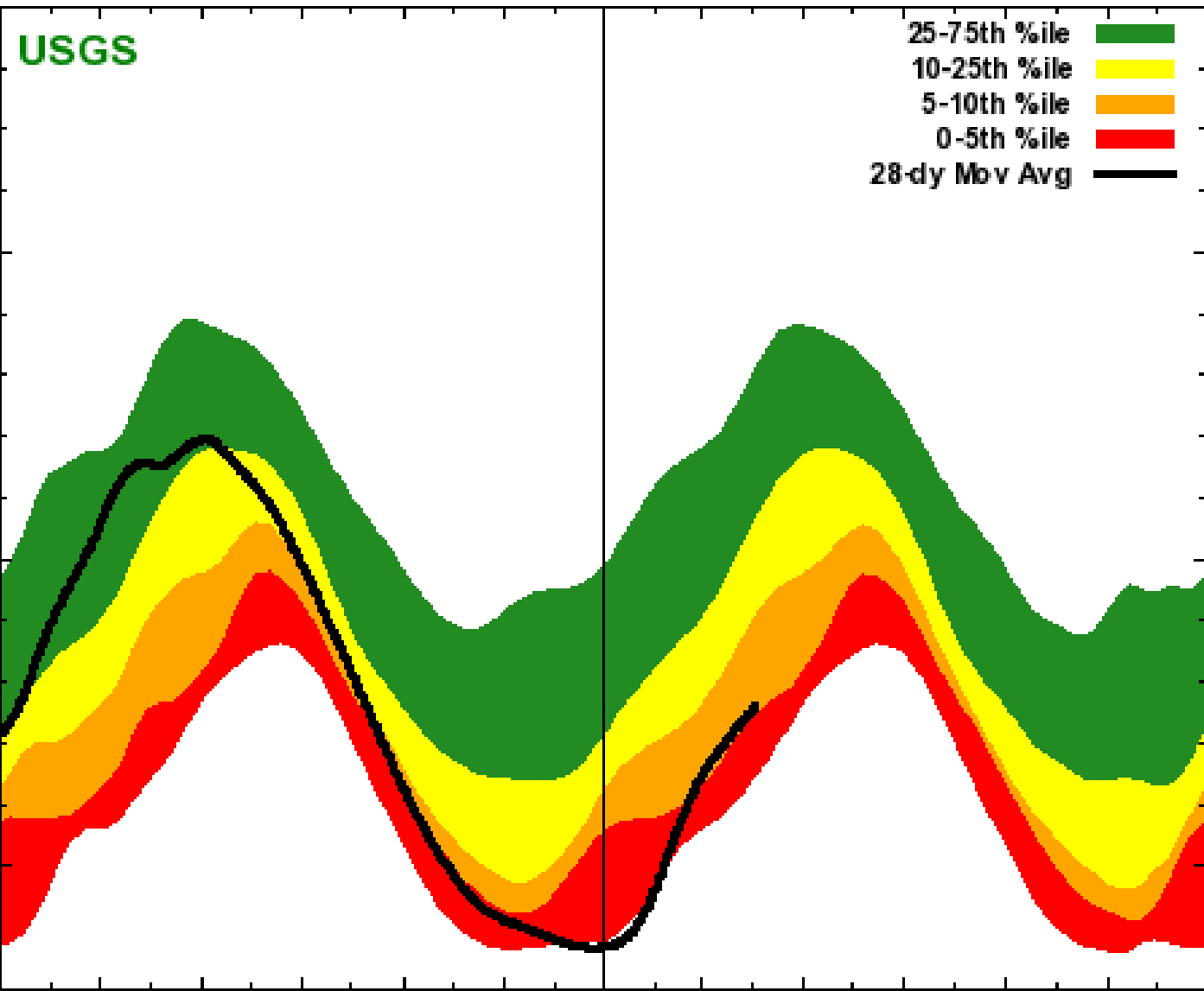


USGS

- 25-75th %ile
- 10-25th %ile
- 5-10th %ile
- 28-dy Mov Avg



28-Day Moving Average Daily Depth to water level, feet below land surface



USGS

- 25-75th %ile
- 10-25th %ile
- 5-10th %ile
- 0-5th %ile
- 28-dy Mov Avg

