



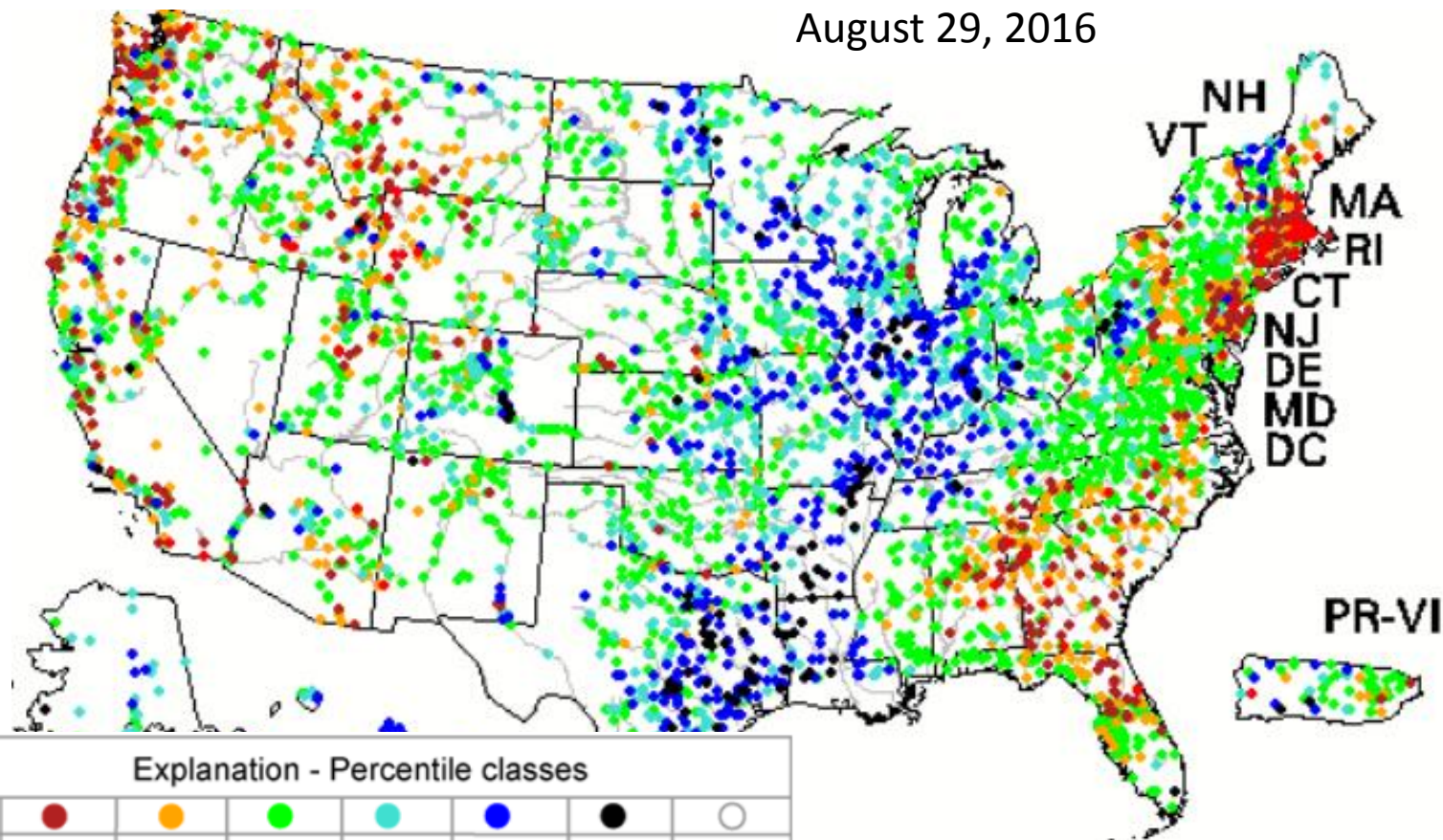
# **Northeast U.S. Drought Conditions August 30, 2016**

## **Streamflow and Groundwater Levels**

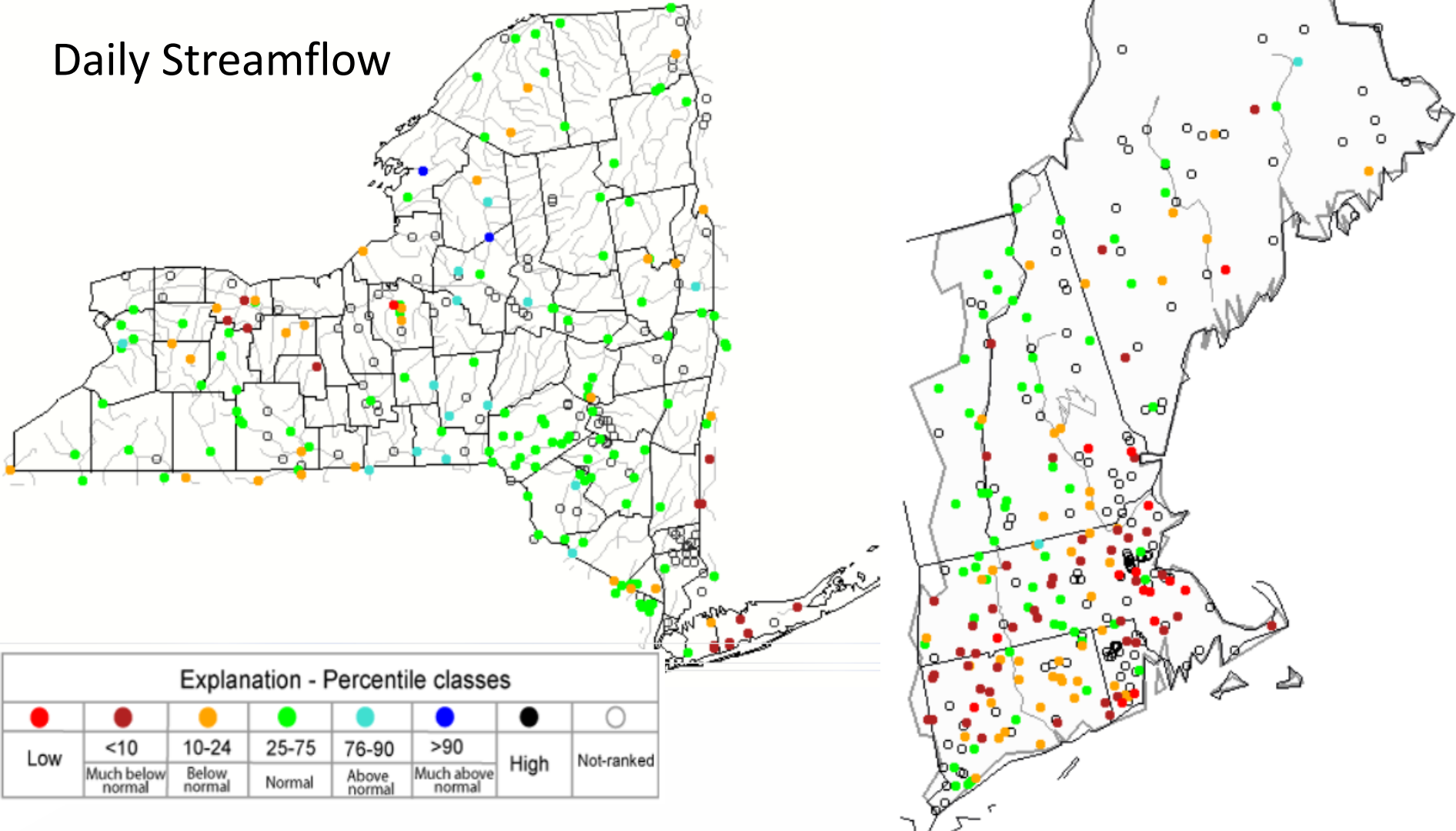
William Coon, Hydrologist

# Daily Streamflow – Compared to Historical Streamflow

August 29, 2016

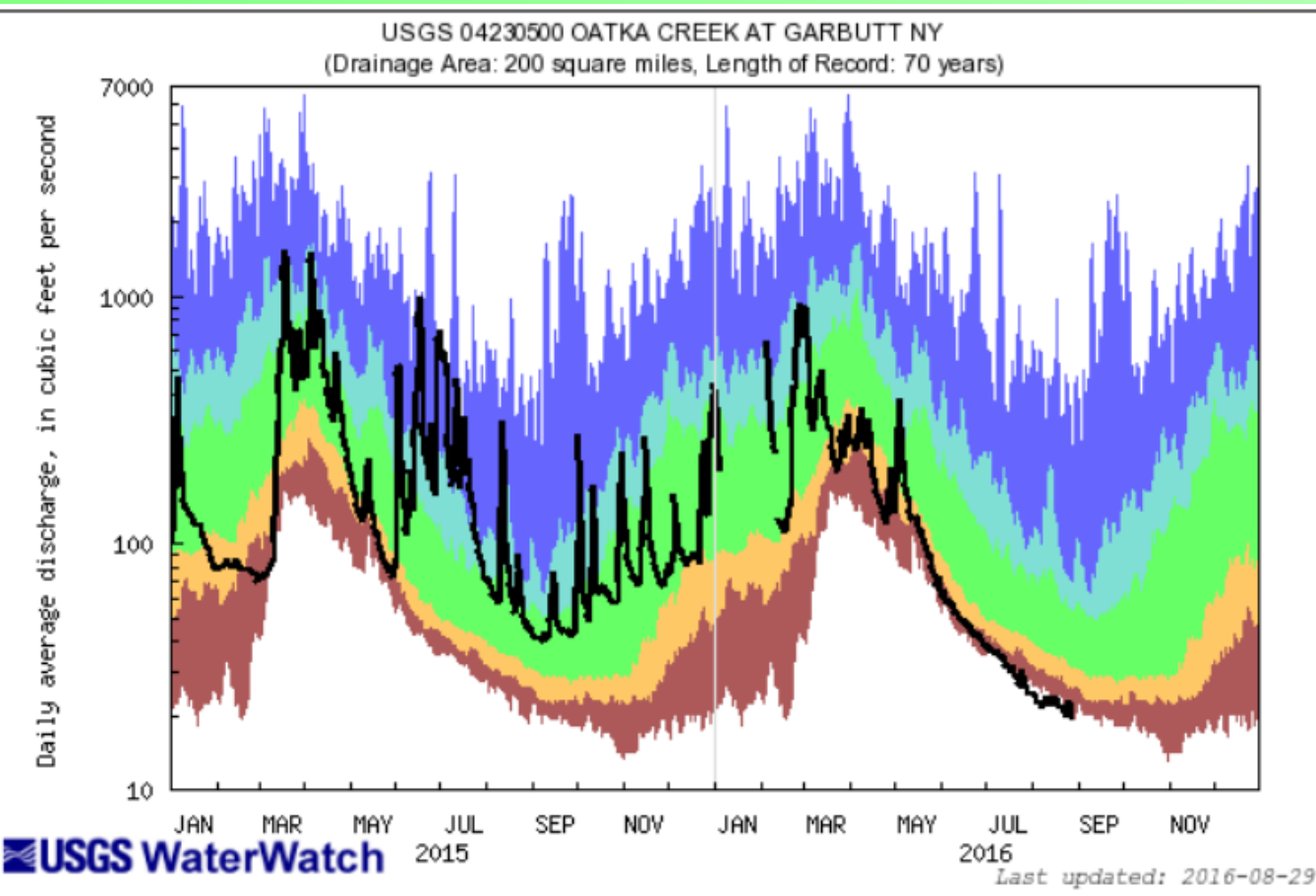


# Daily Streamflow



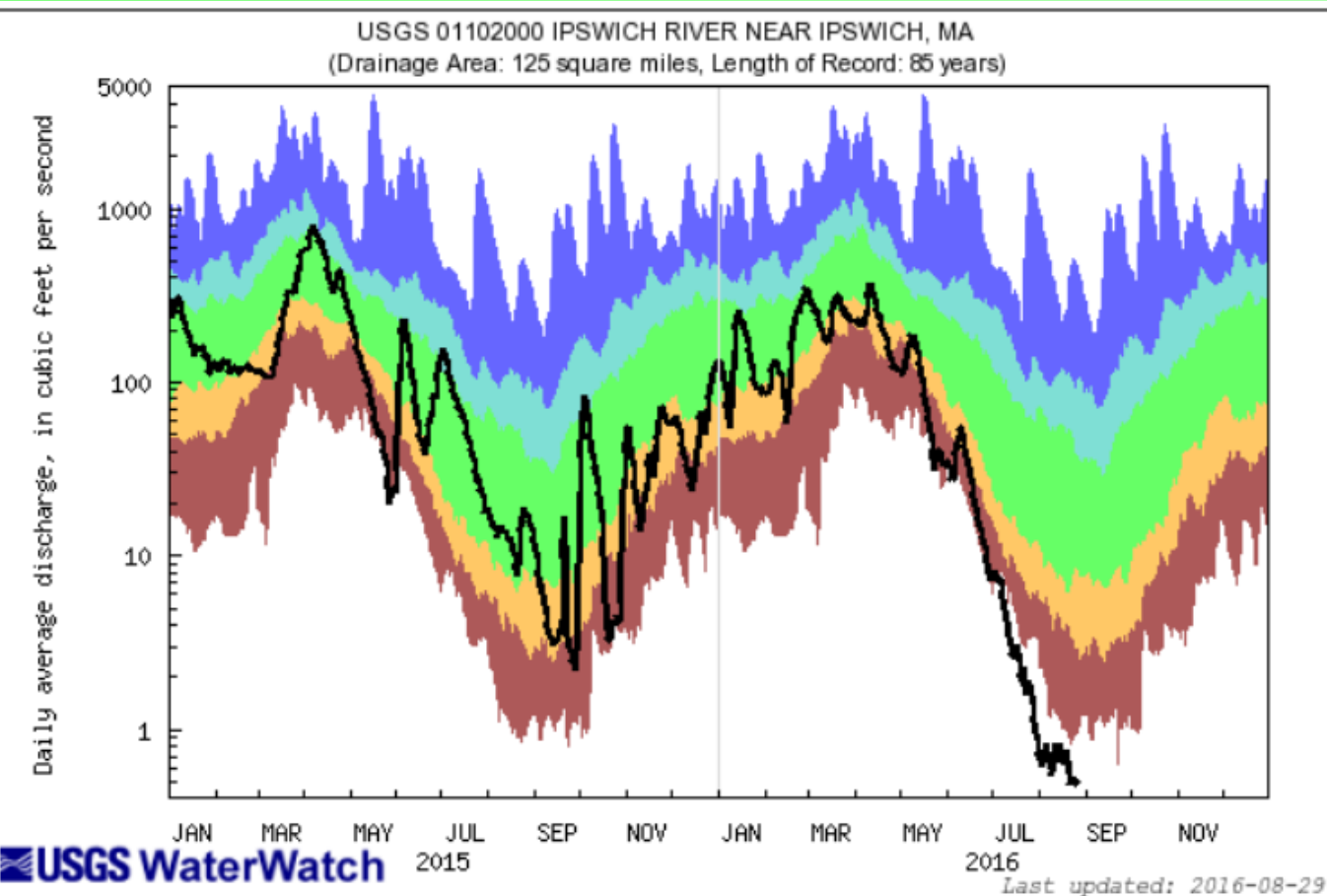


# Oatka Creek at Garbutt, NY – 70 years of record



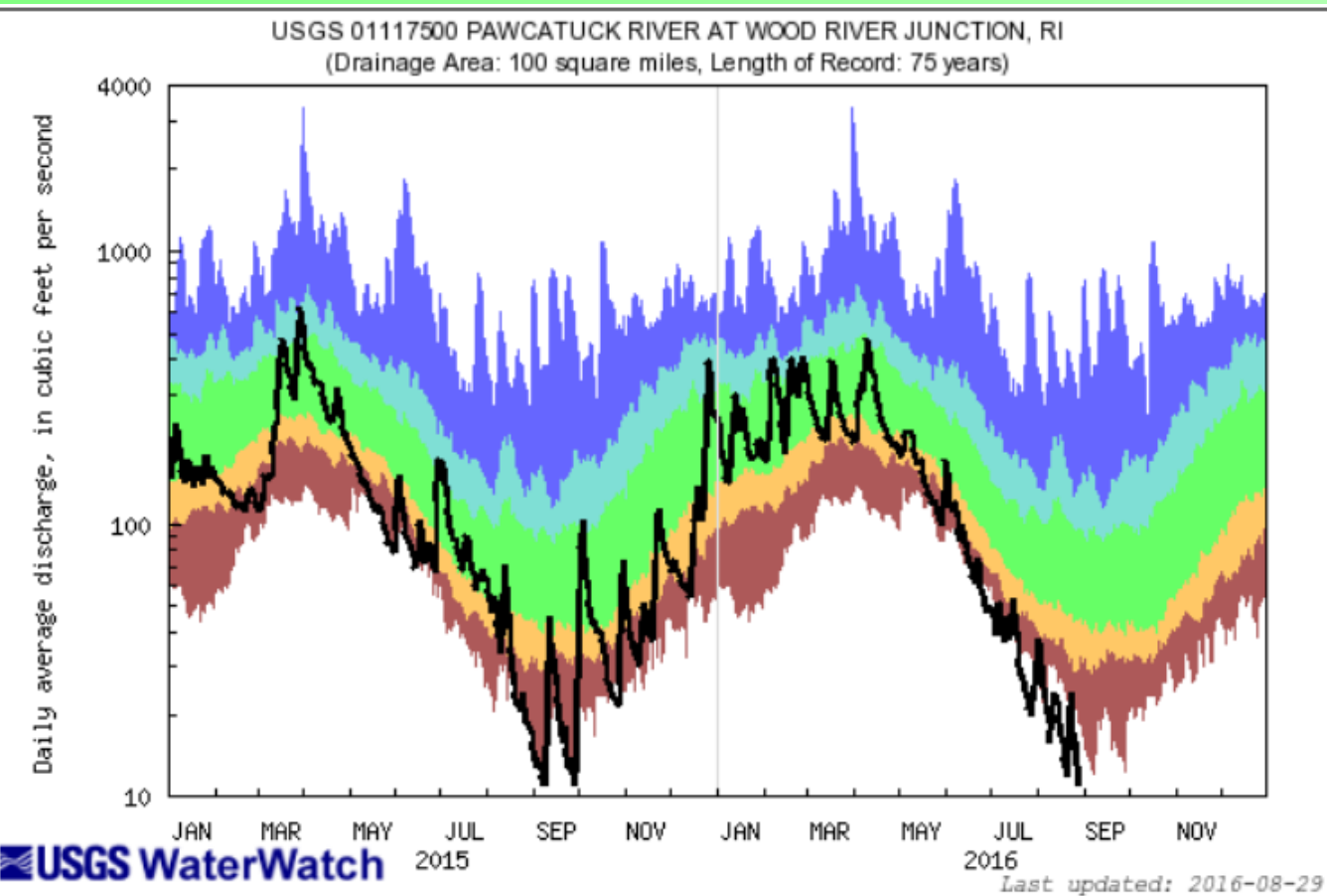
Explanation - Percentile classes					Flow
lowest-10th percentile	10-24	25-75	76-90	90th percentile-highest	
Much below normal	Below normal	Normal	Above normal	Much above normal	

# Ipswich River near Ipswich, MA – 85 years of record (affected by withdrawals and regulation)



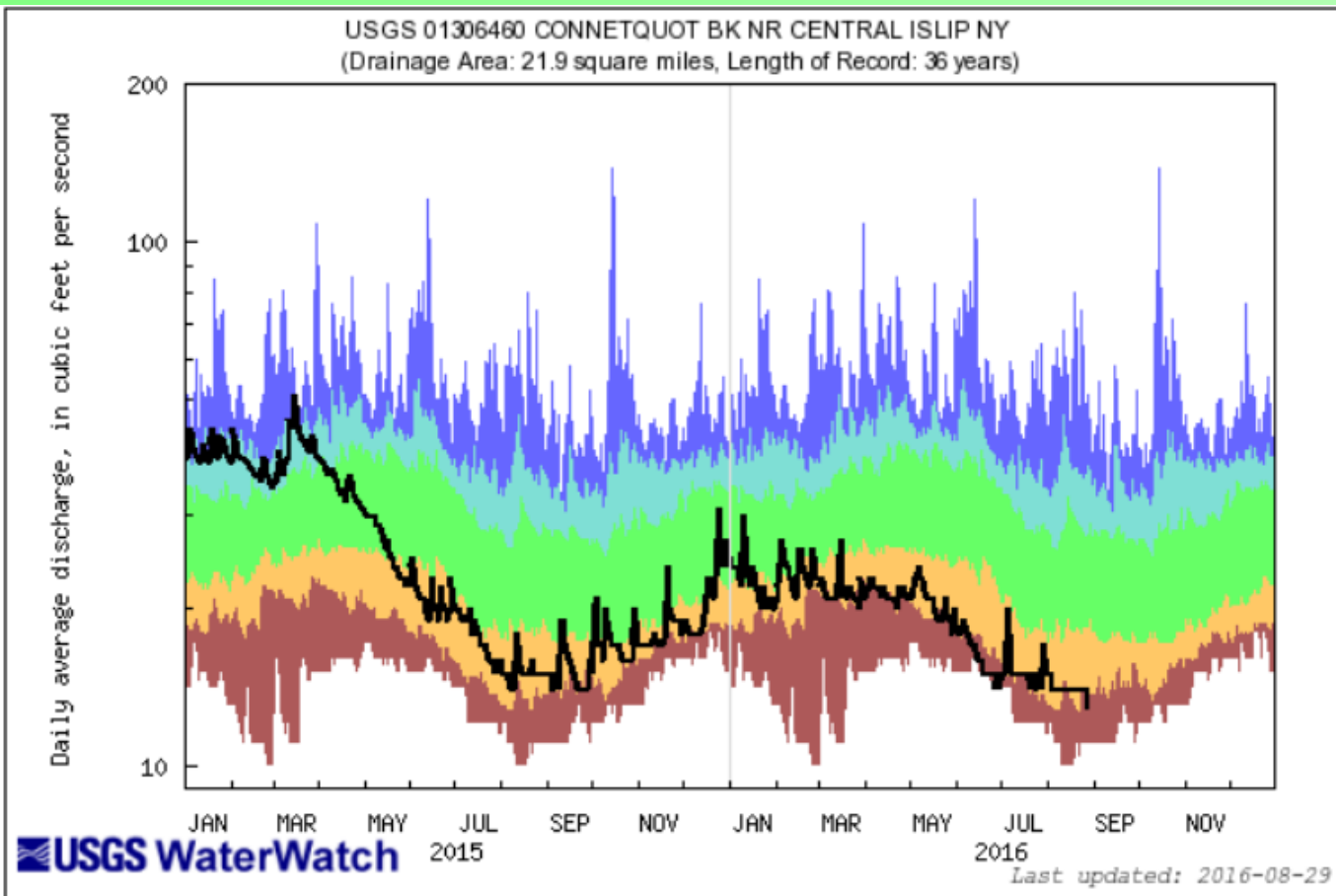
Explanation - Percentile classes					Flow
lowest-10th percentile	10-24	25-75	76-90	90th percentile-highest	
Much below normal	Below normal	Normal	Above normal	Much above normal	

# Pawcatuck River at Wood River Junction, RI – 75 years of record



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

# Connetquot Brook near Central Islip, NY – 36 years of record



Explanation - Percentile classes					Flow
lowest-2th percentile	10-24	25-75	76-90	90th percentile - highest	
Much below normal	Below normal	Normal	Above normal	Much above normal	

# Groundwater Climate Response Network

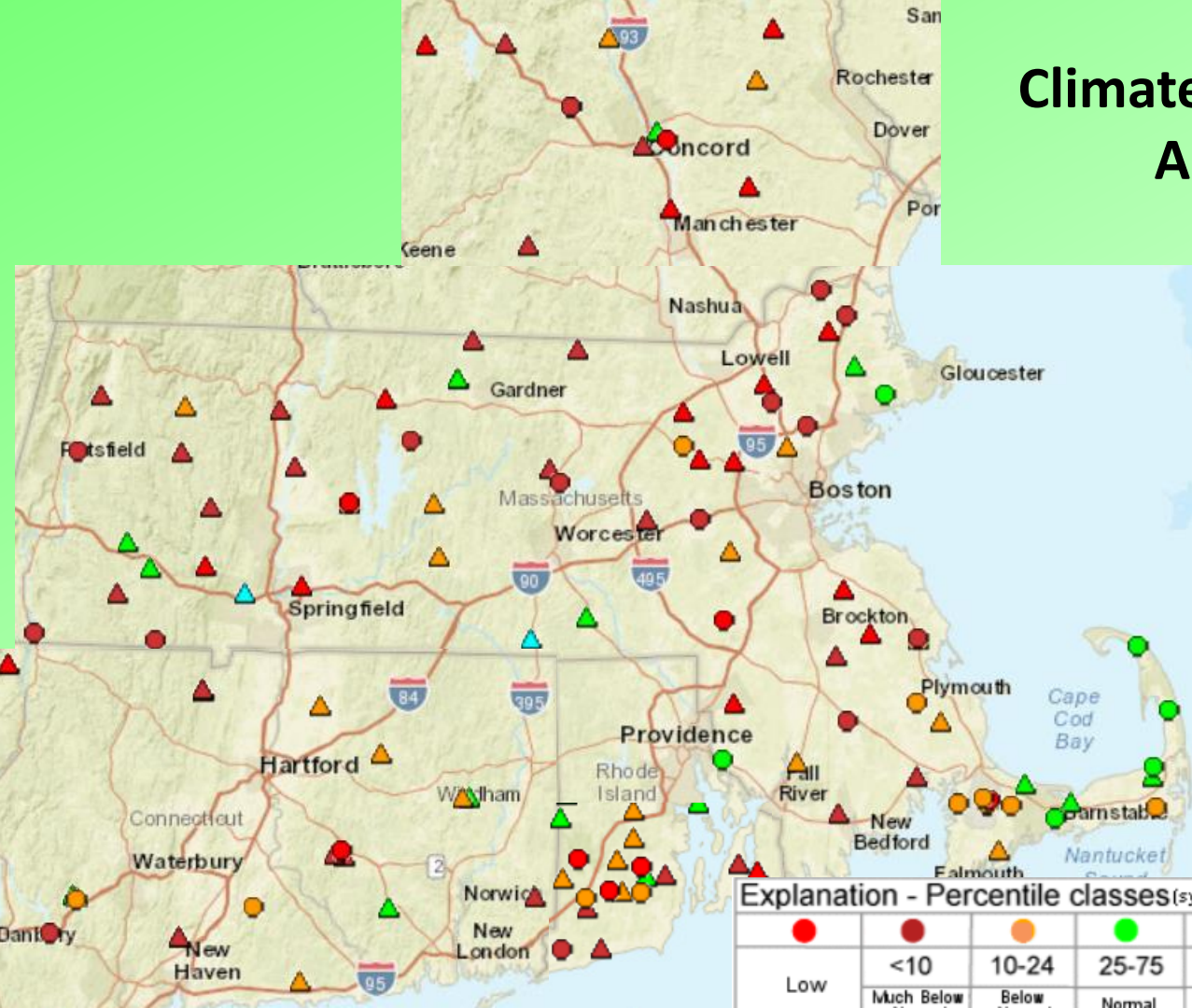
Includes wells:

- Located in aquifers that respond to climatic fluctuations
- Minimally affected by pumpage
- Essentially unaffected by sources of artificial recharge (from irrigation, canals, etc.)
- Have never gone dry or are not susceptible to going dry



# Climate Response Network

## August 29, 2016

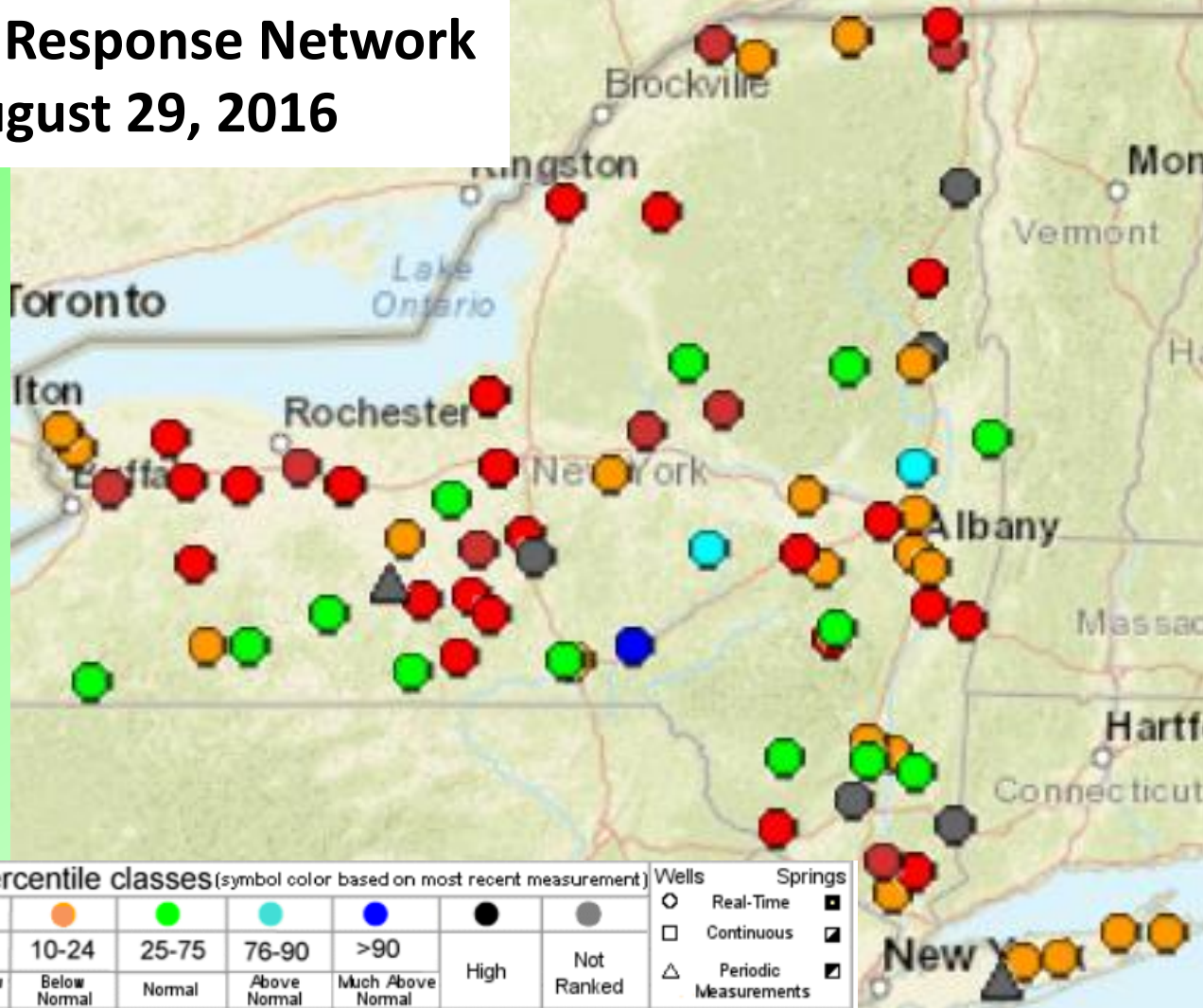


Explanation - Percentile classes (symbol color based on most recent measurement)						
Low	<10	10-24	25-75	76-90	>90	High
	Much Below	Below	Normal	Above	Much Above	

Wells	Springs
Real-Time	Real-Time
Continuous	Continuous
Periodic Measurements	Periodic Measurements

# Climate Response Network

## August 29, 2016



Explanation - Percentile classes (symbol color based on most recent measurement)

Low	<10	10-24	25-75	76-90	>90	High	Not Ranked
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal		

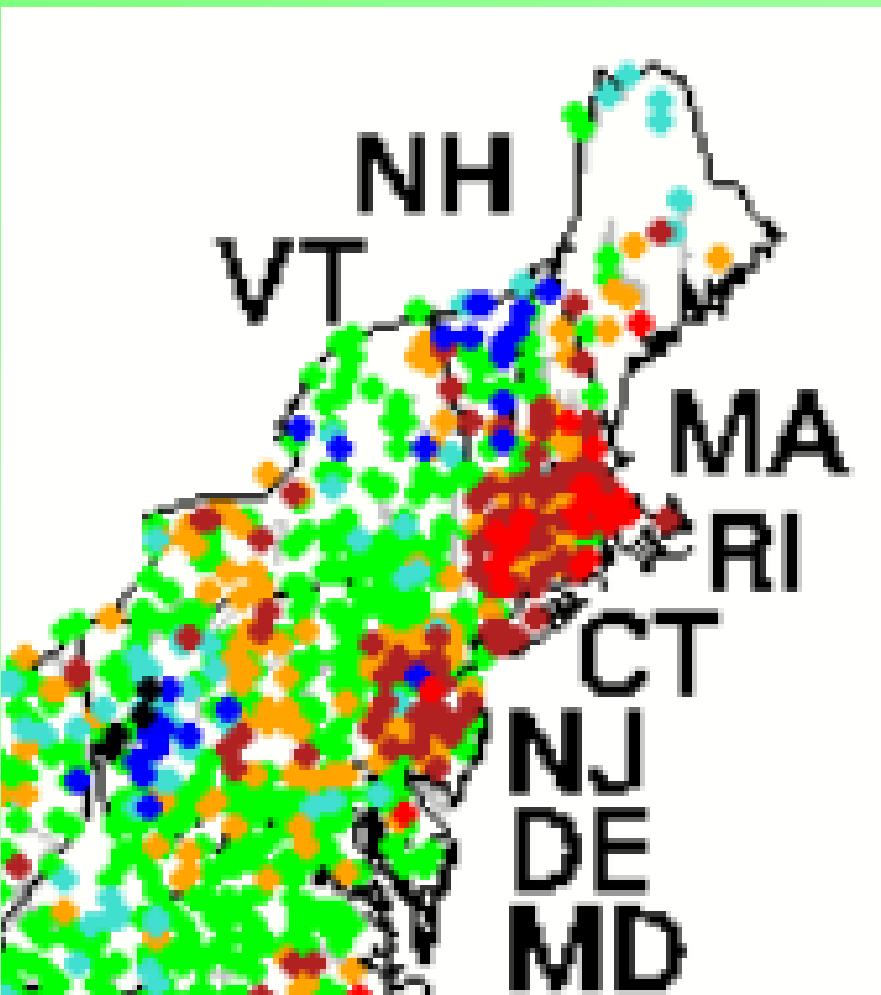
Wells

○	Real-Time
□	Continuous
△	Periodic Measurements

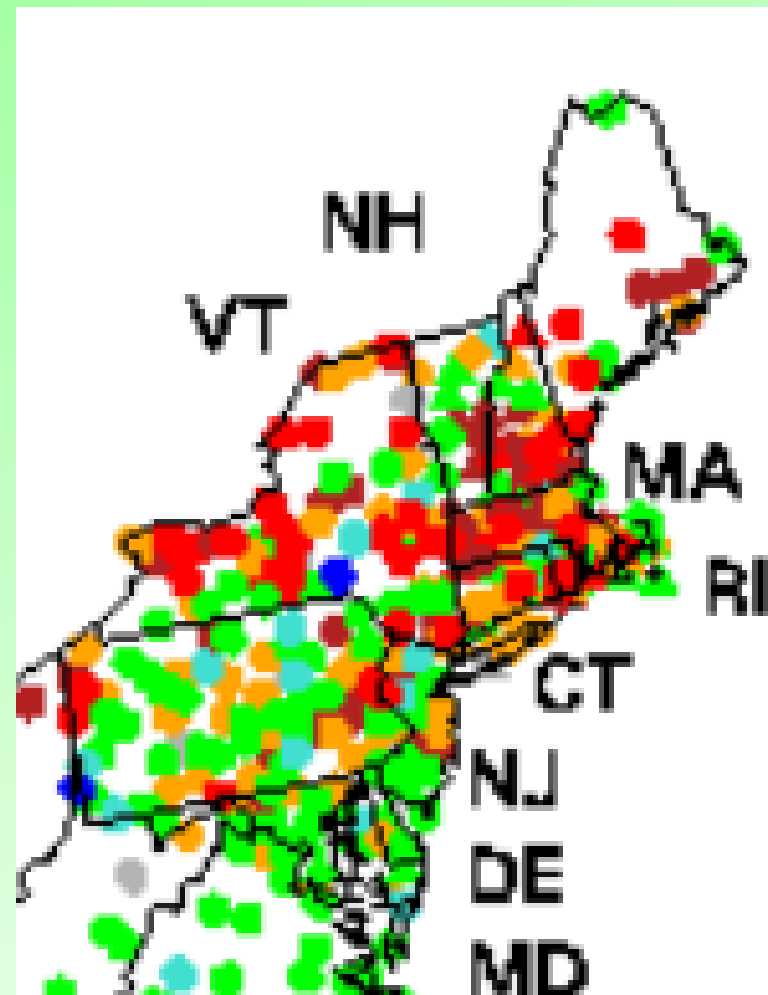
Springs

■	Real-Time
■	Continuous
■	Periodic Measurements

## Streamflow



## Groundwater Levels



# Massachusetts Reservoirs

(August 1, 2016)

Quabbin Reservoir

– 87.4% of capacity

Wachusett Reservoir

– 91.1 % of capacity

“Normal”



<http://geology.com/state-map/maps/massachusetts-rivers-map.gif>

Source: Massachusetts Water Resources Authority

# New York City Reservoirs

(August 26, 2016)



West of Hudson Reservoirs  
(collectively)

Current storage – 81.6%

Normal storage – 81.2 %

Source: New York City Environmental Protection

<http://www.dos.ny.gov/watershed/images/lgmap.jpg>





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