Northeast U.S. Streamflow and Groundwater Levels

A Drought Update
February 28, 2017

William Coon, Hydrologist

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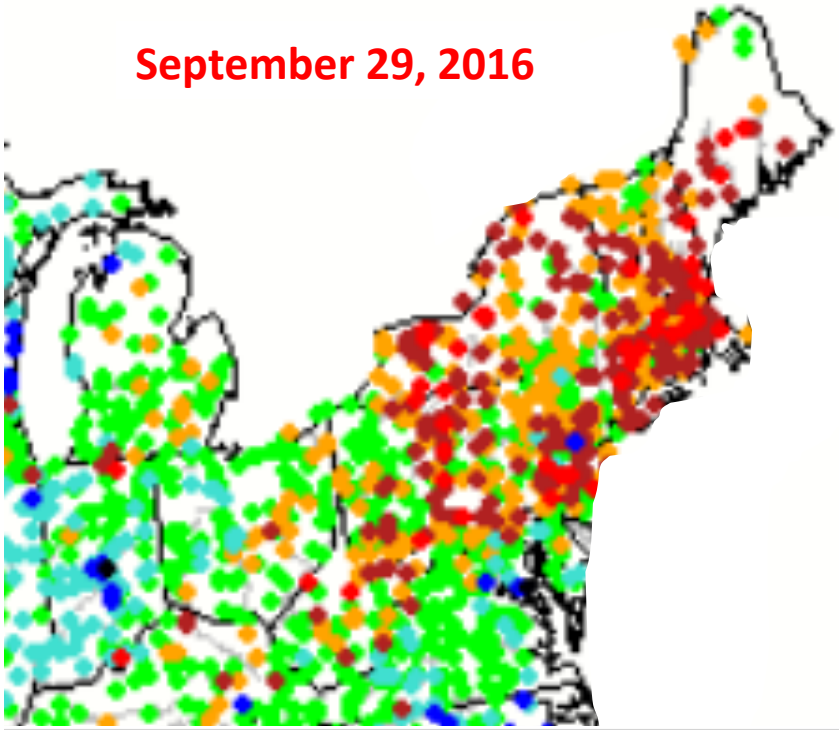
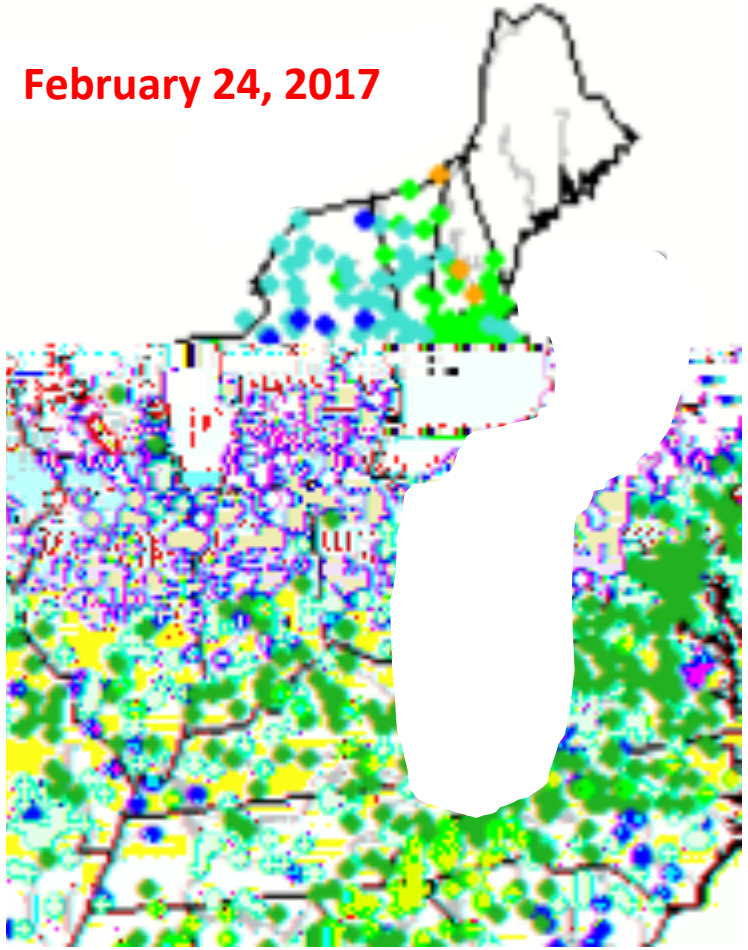
Daily Streamflow – Compared to Historical Streamflow

September 29, 2016



February 24, 2017

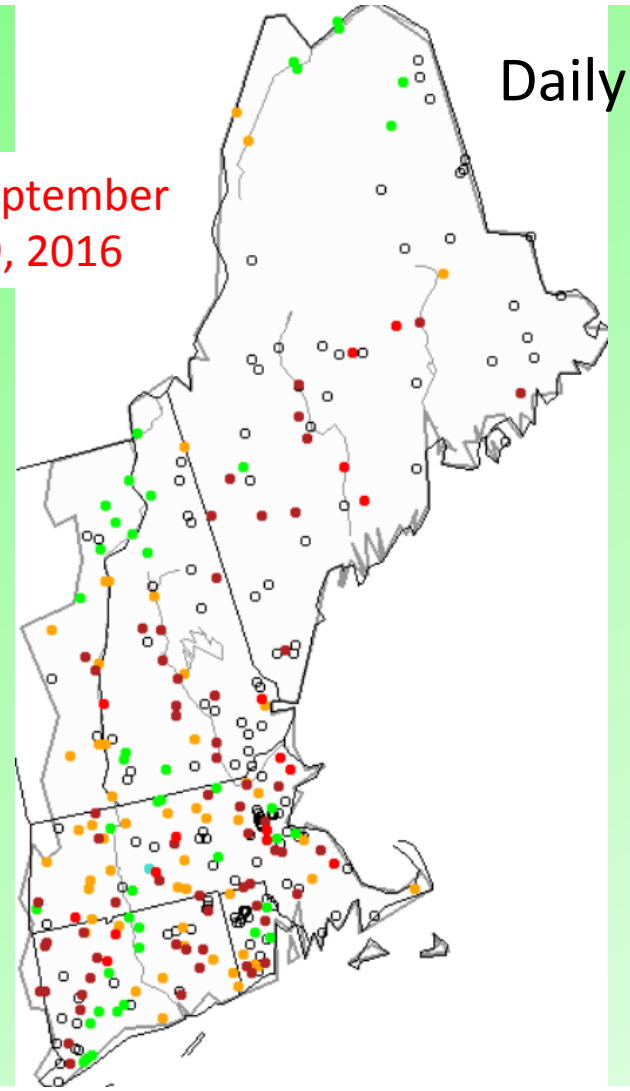


Explanation - Percentile classes

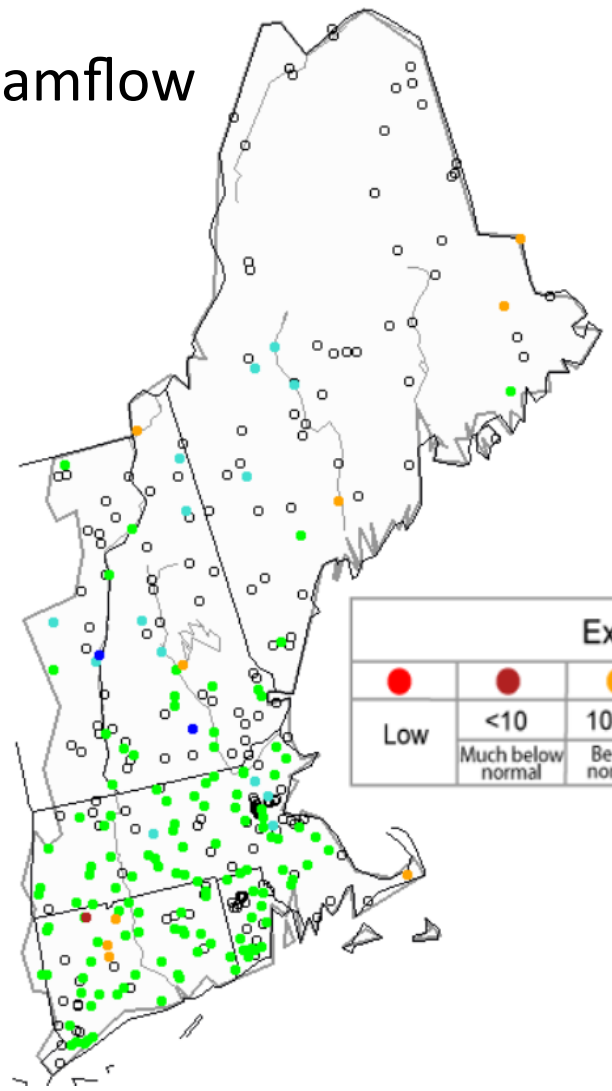
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Daily Streamflow

September
29, 2016



February
24, 2017



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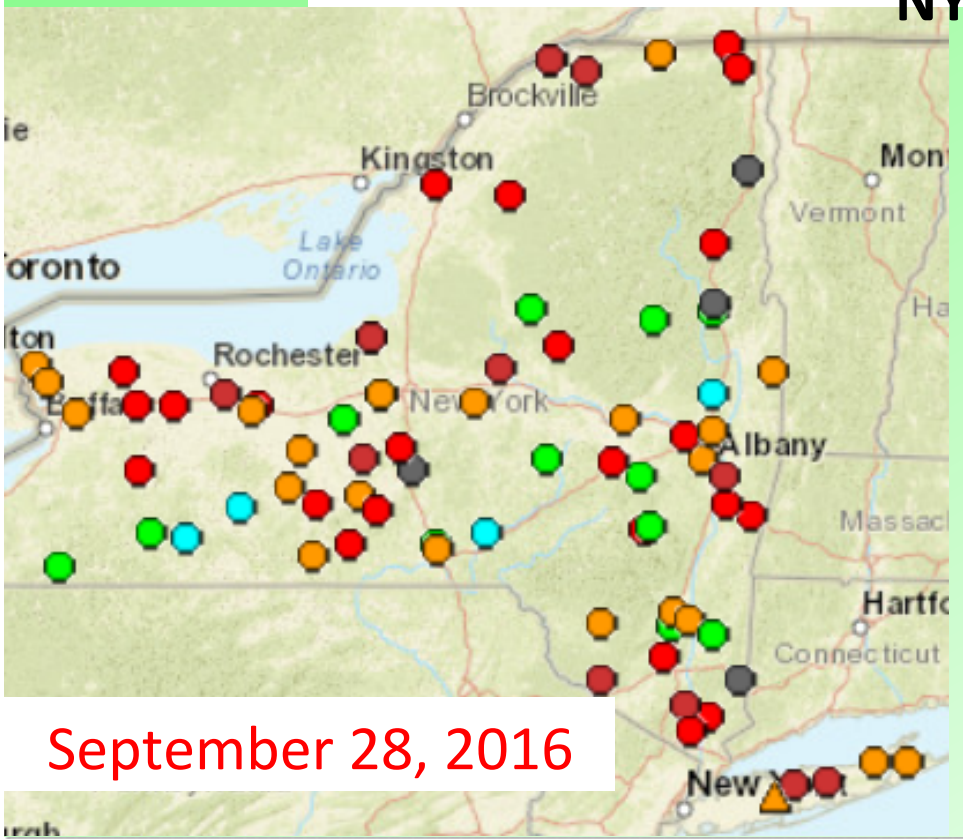
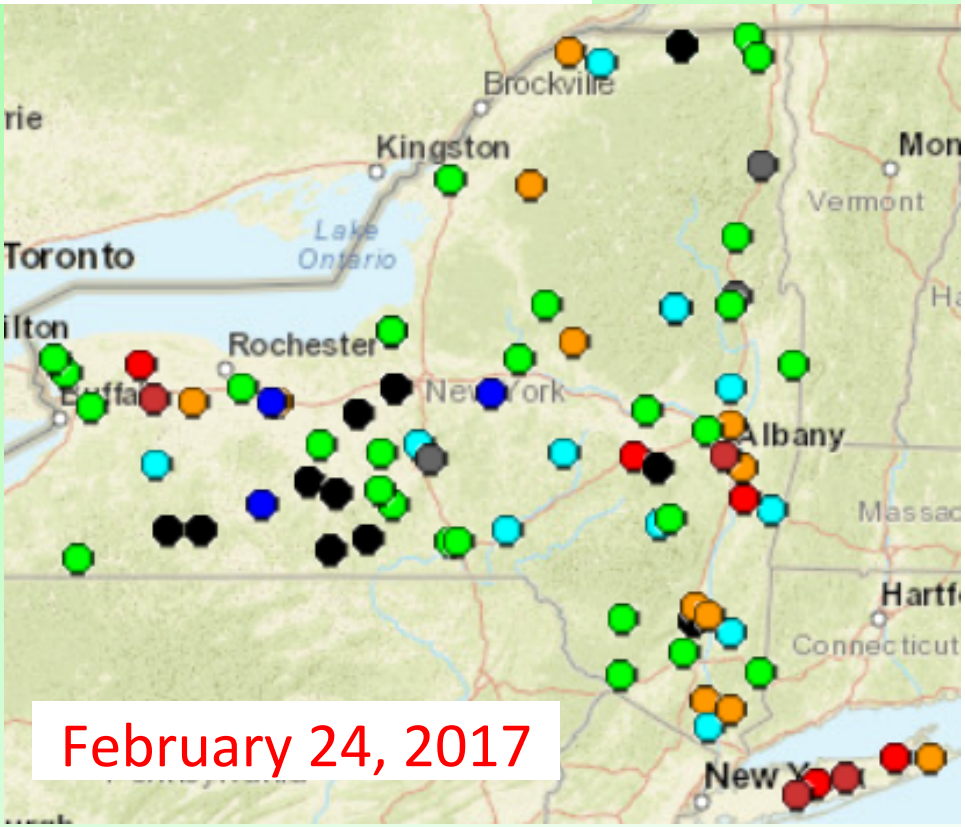
Groundwater Climate Response Network - NY



September 28, 2016



February 24, 2017

Explanation - Percentile classes (symbol color based on most recent measurement)							
Low	<10 Much Below Normal	10-24 Below Normal	25-75 Normal	76-90 Above Normal	>90 Much Above Normal	High	Not Ranked

Wells	Springs
Real-Time	
Continuous	
Periodic Measurements	

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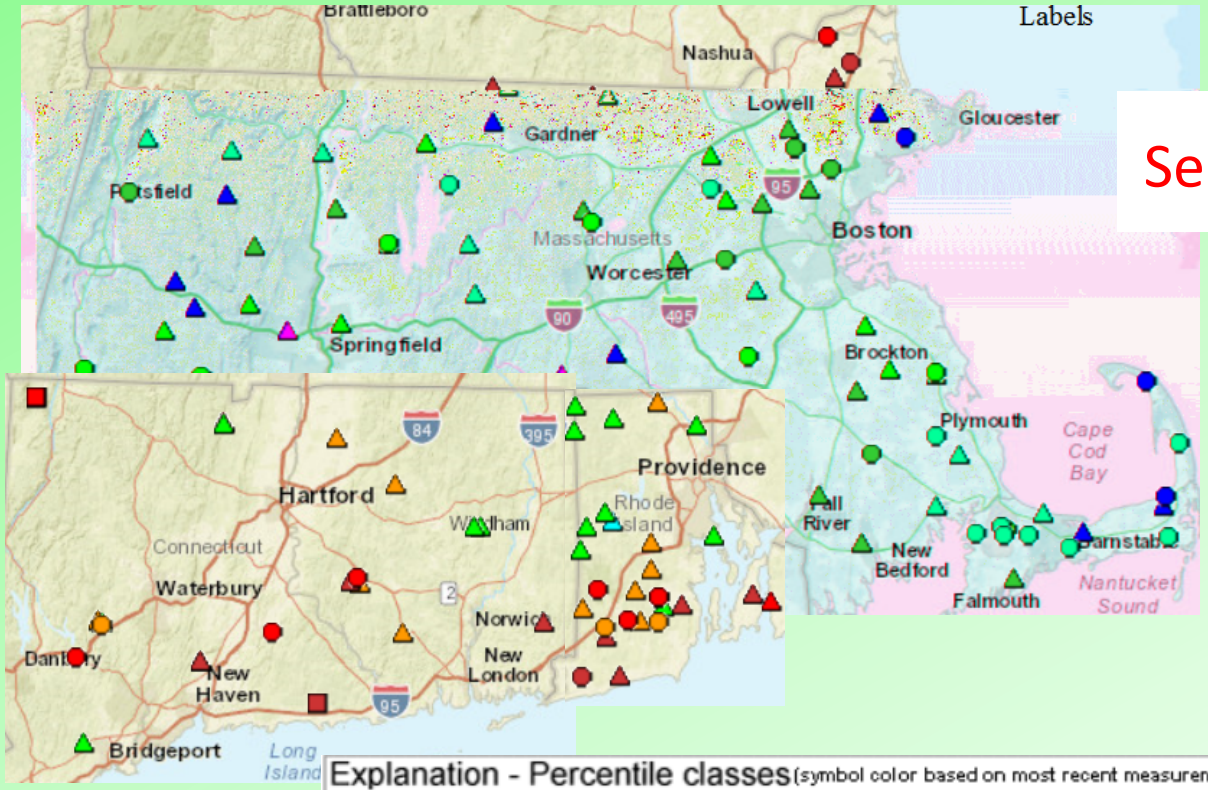
Groundwater Climate Response Network – MA, CT, RI



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

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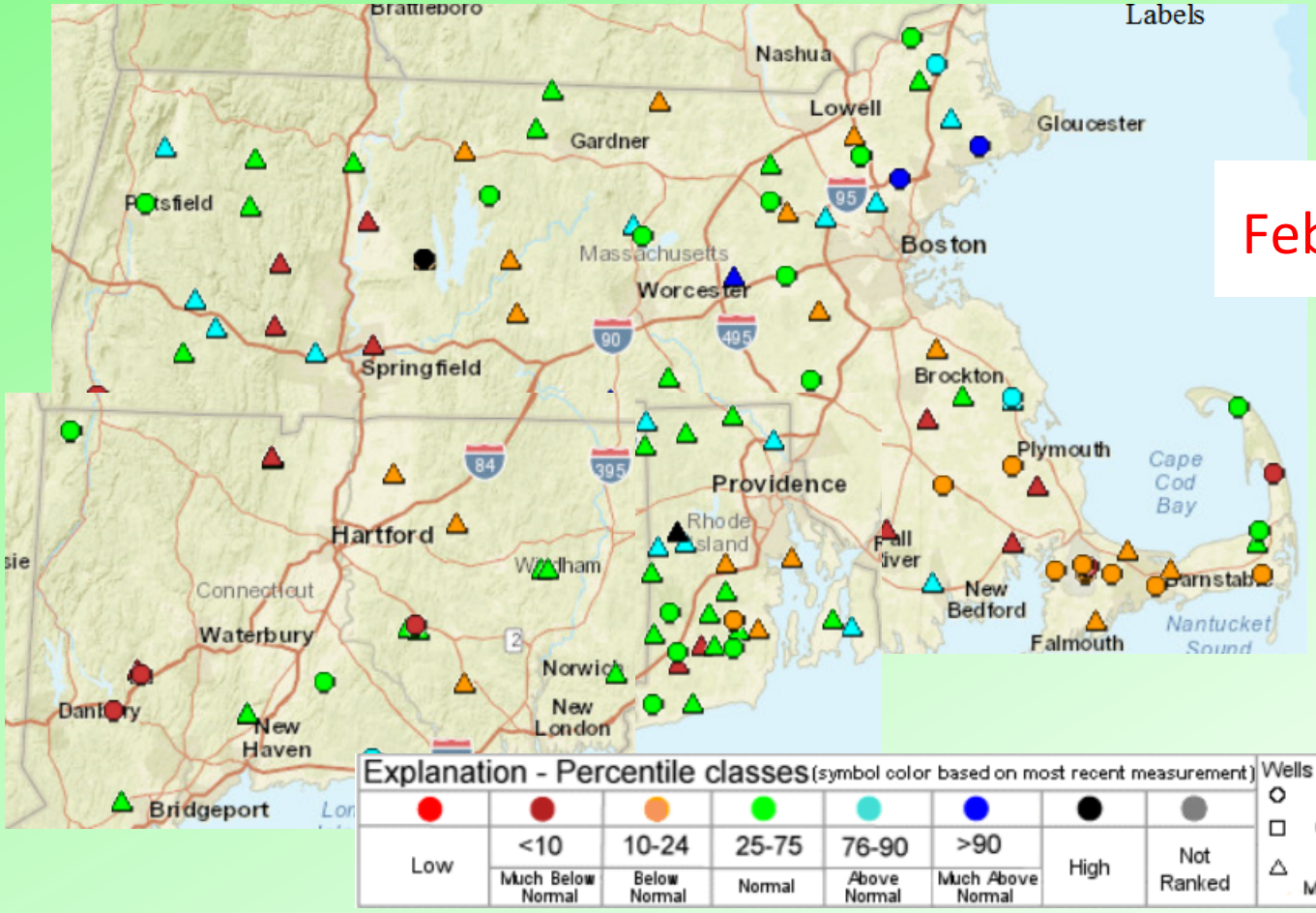

February 24, 2017

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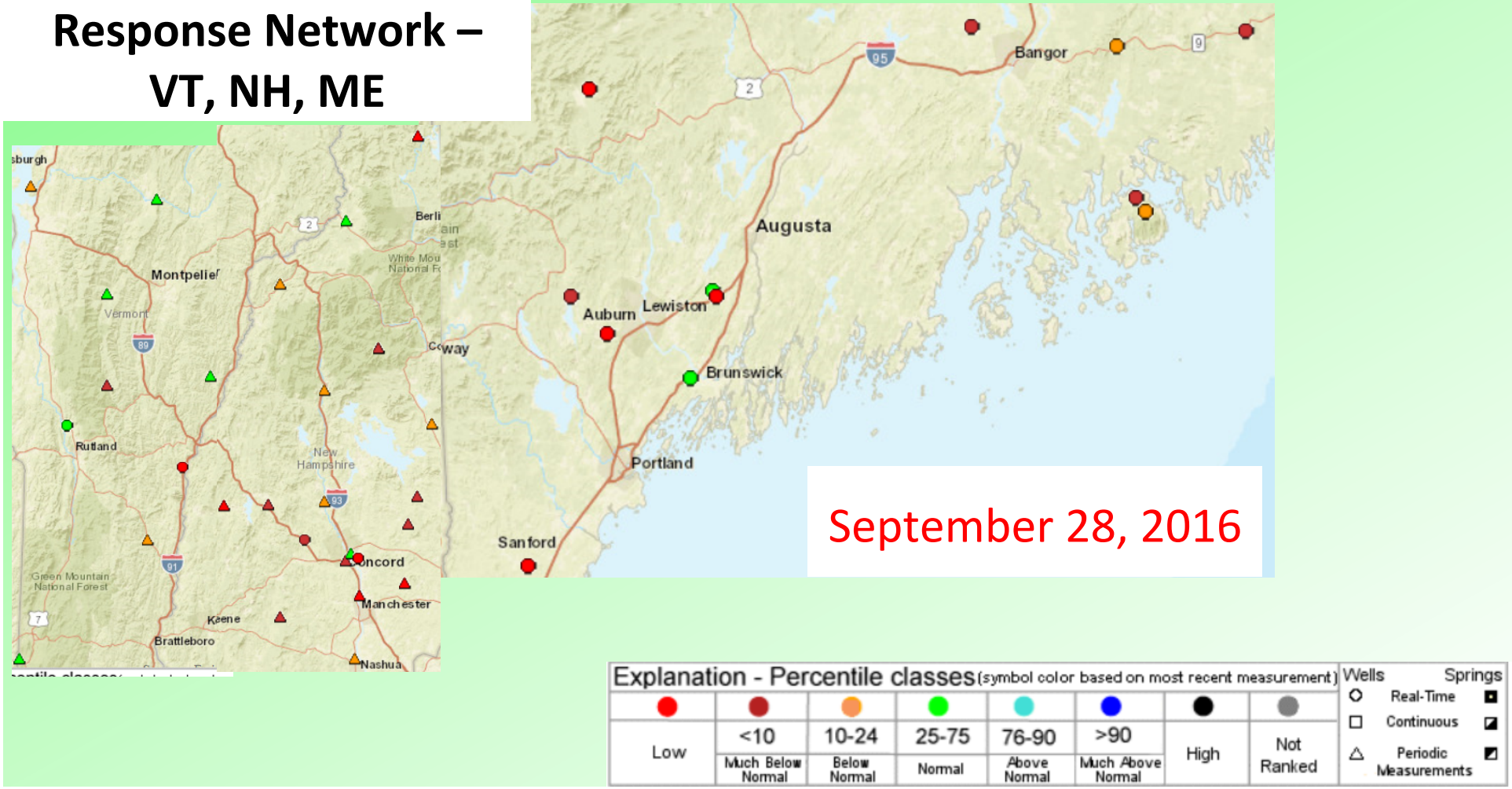
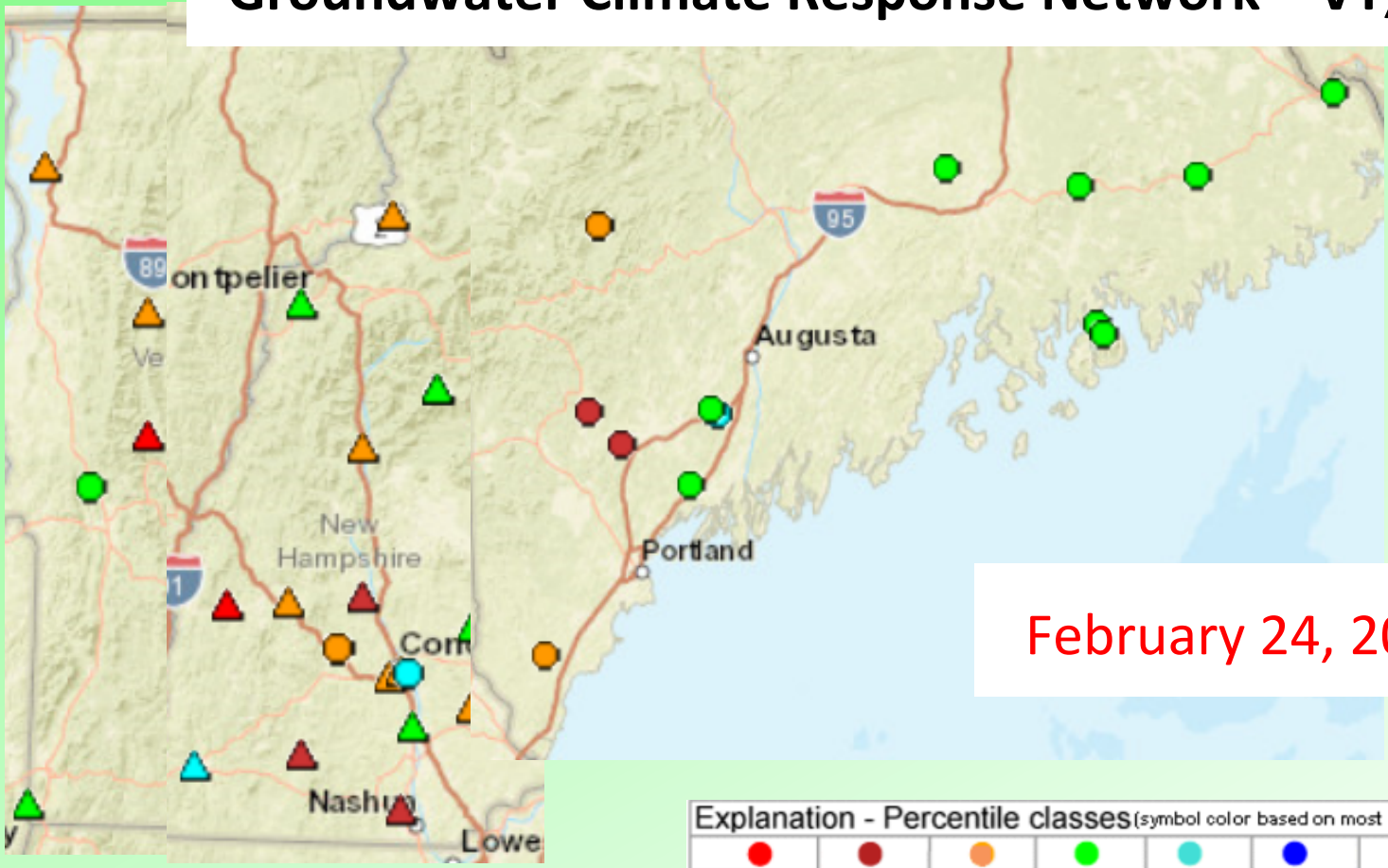
Groundwater Climate Response Network – VT, NH, ME



Groundwater Climate Response Network – VT, NH, ME



February 24, 2017

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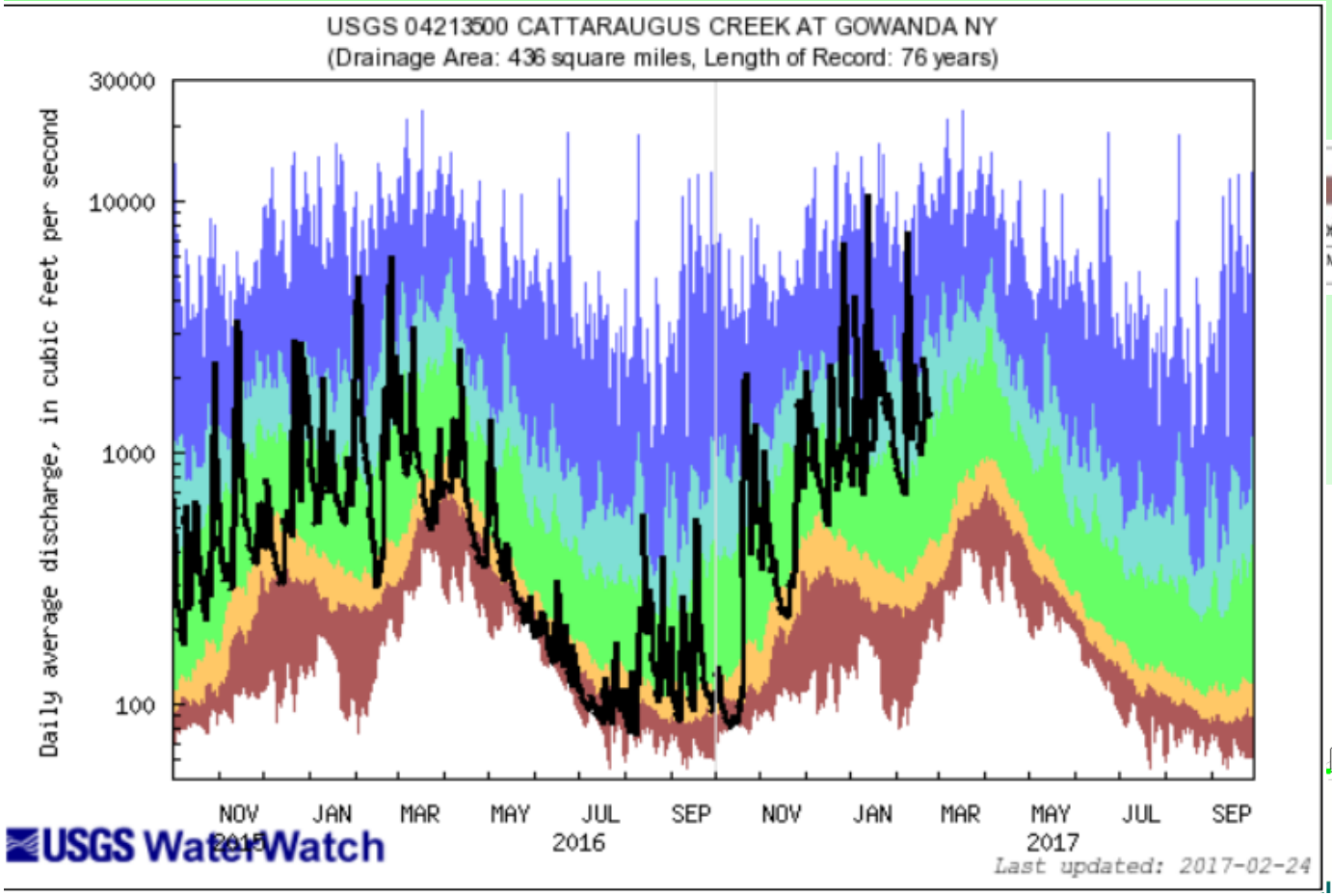
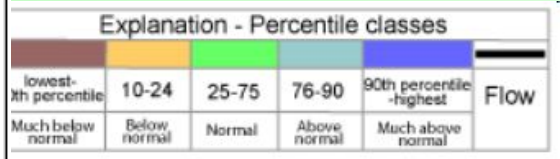
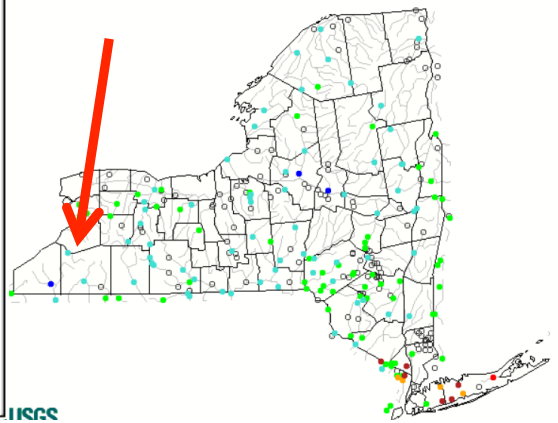
Wells	Springs
Real-Time	
Continuous	
Periodic Measurements	

Cattaraugus Creek at Gowanda, NY – 76 years of record

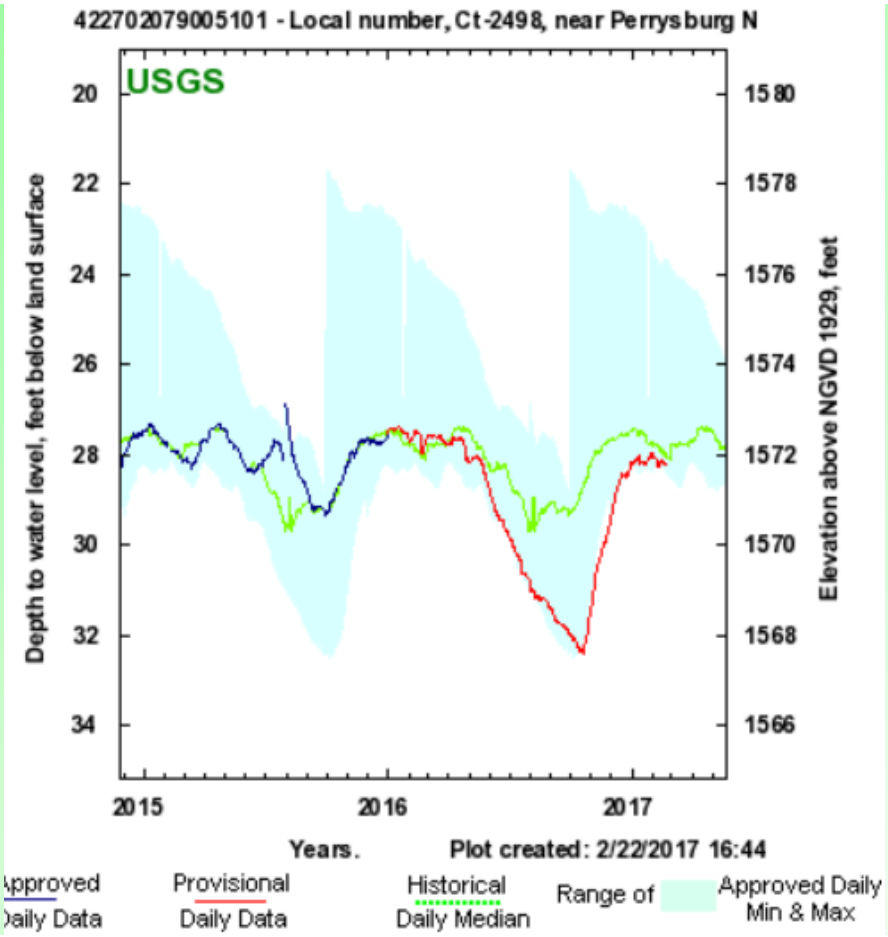






Cattaraugus County, NY

Bedrock aquifer, 8 years



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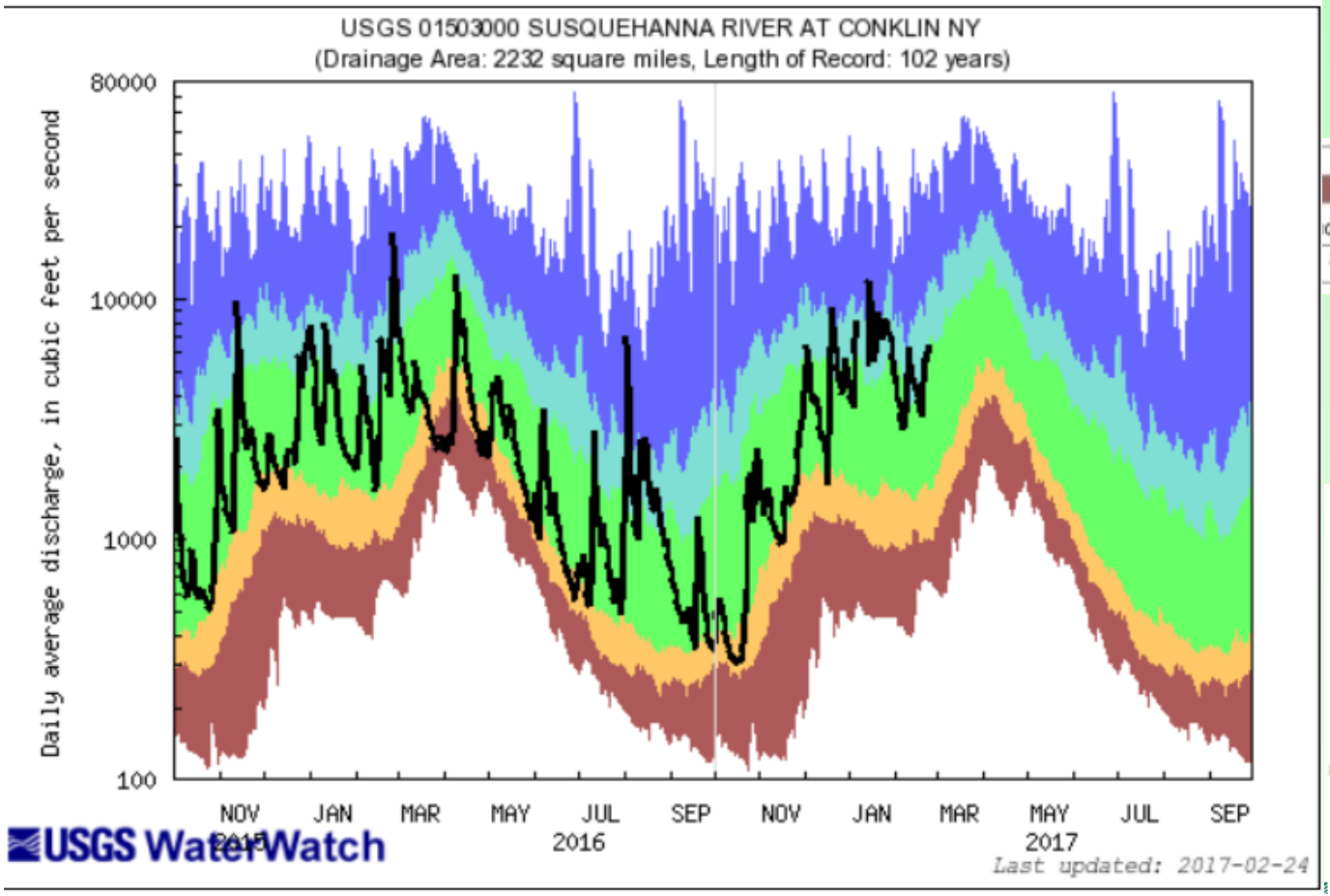
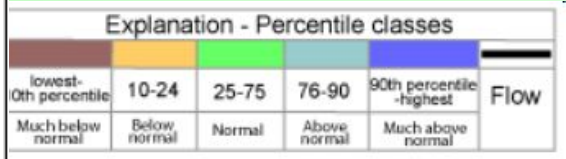
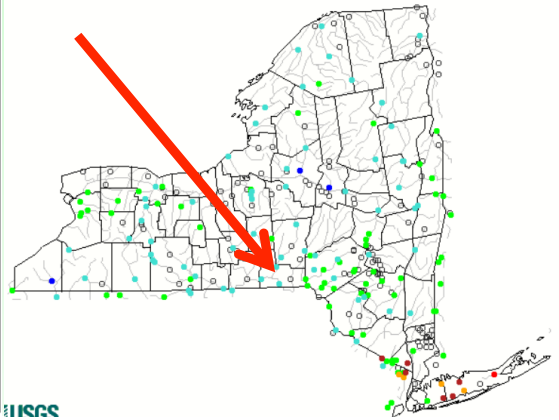
Susquehanna River at Conklin, NY – 102 years of record

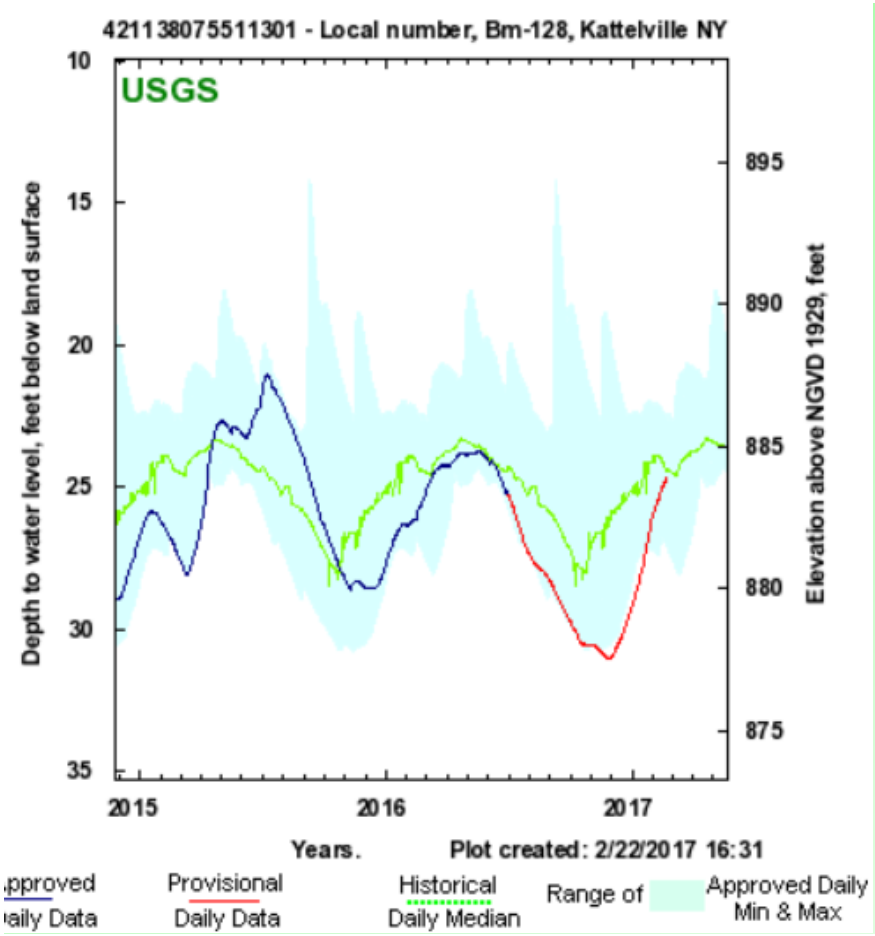




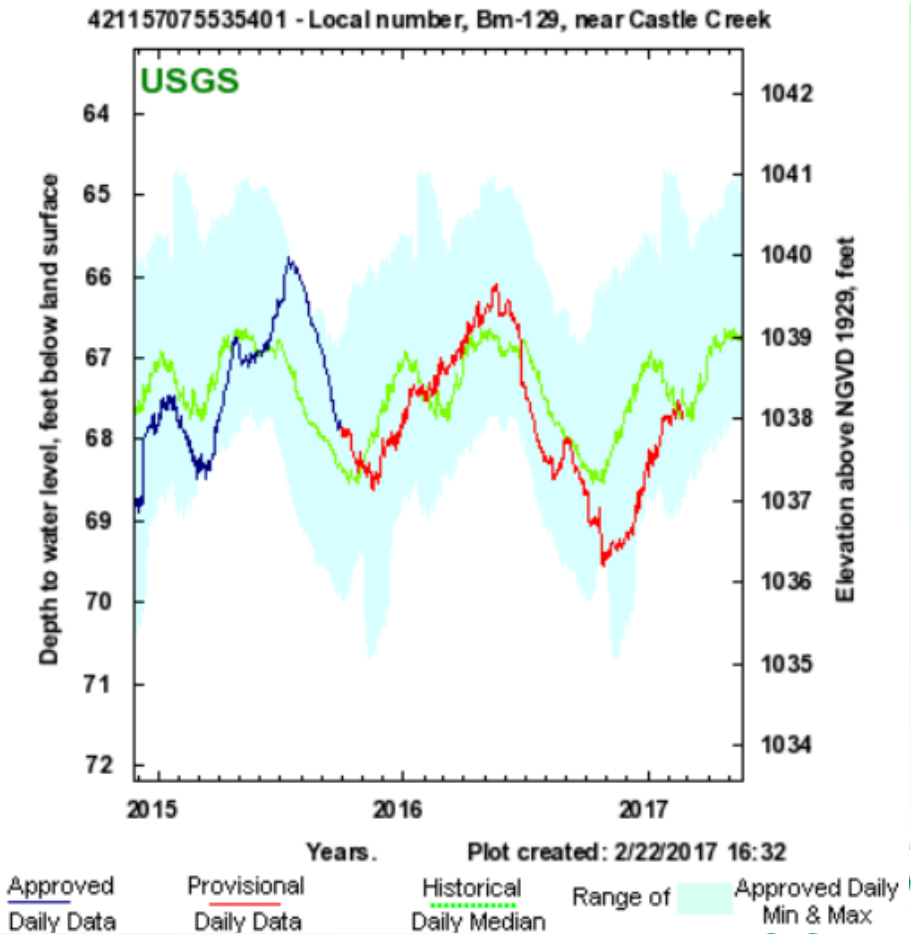


Broome County, NY

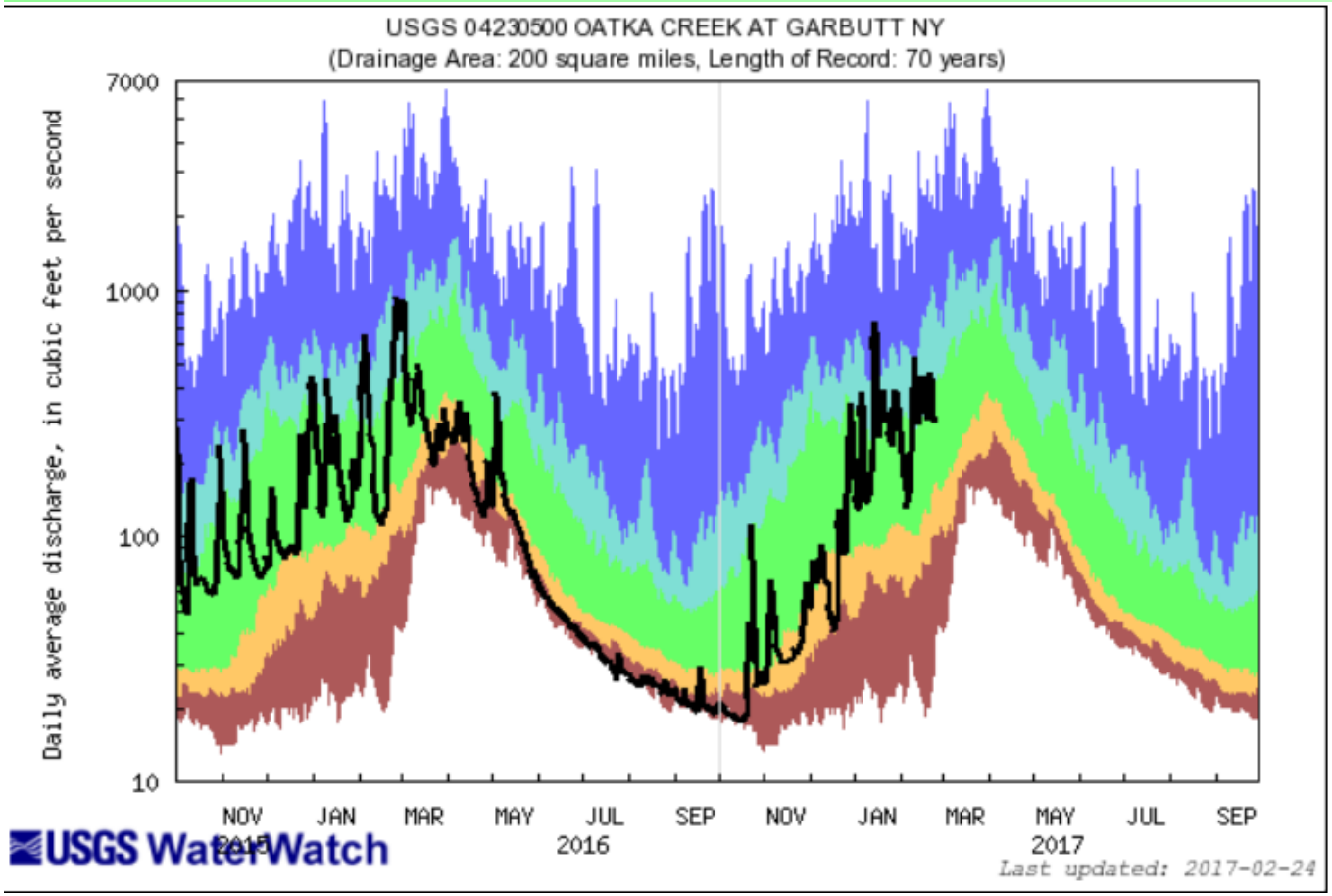
Sand-gravel aquifer, 36 yrs

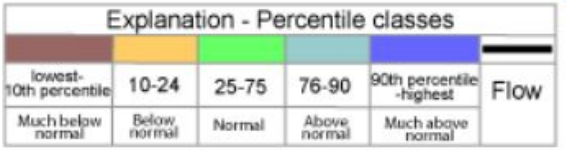


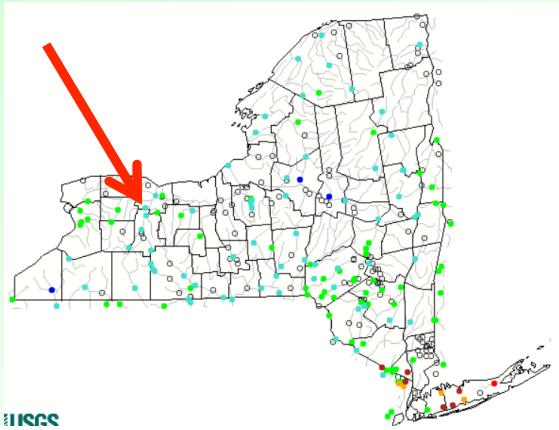
Bedrock aquifer, 31 yrs



Oatka Creek at Garbutt, NY – 70 years of record

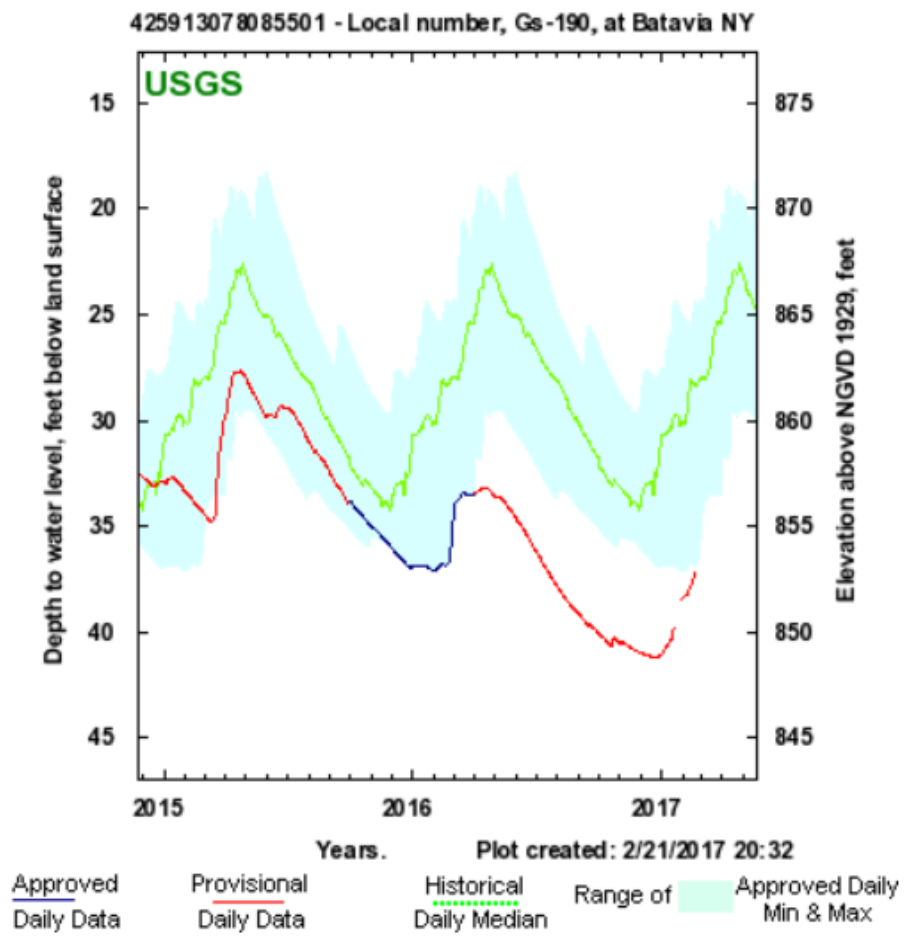




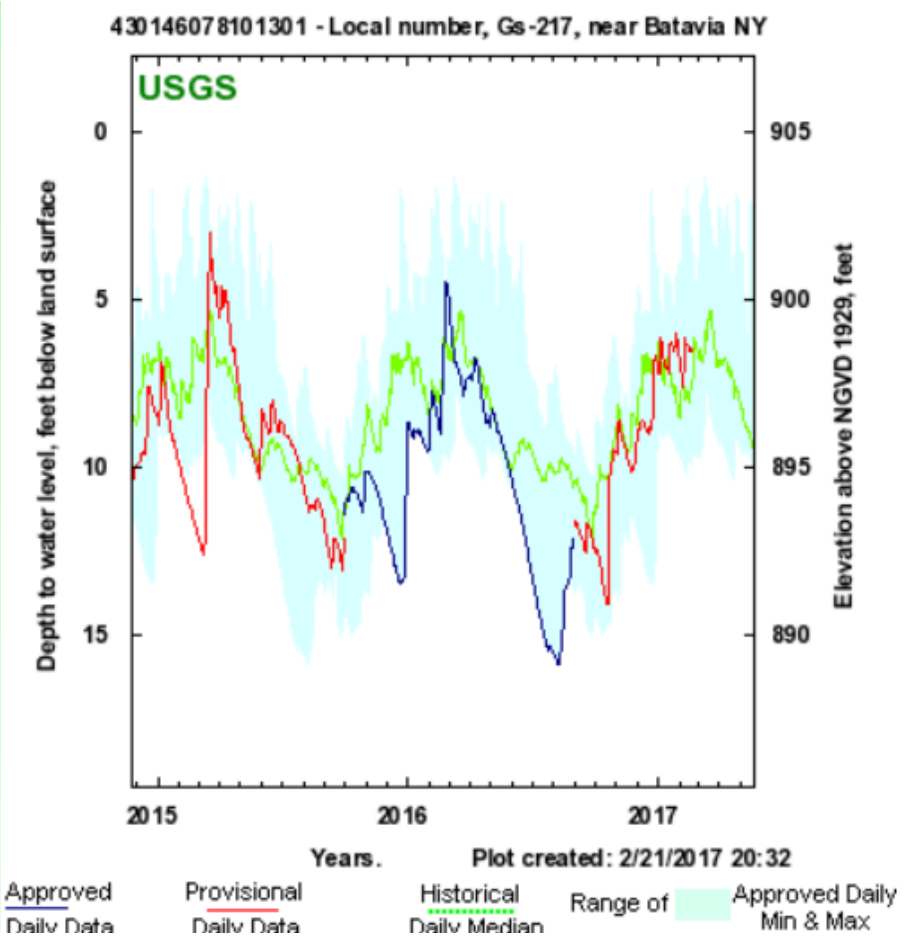


Genesee County, NY

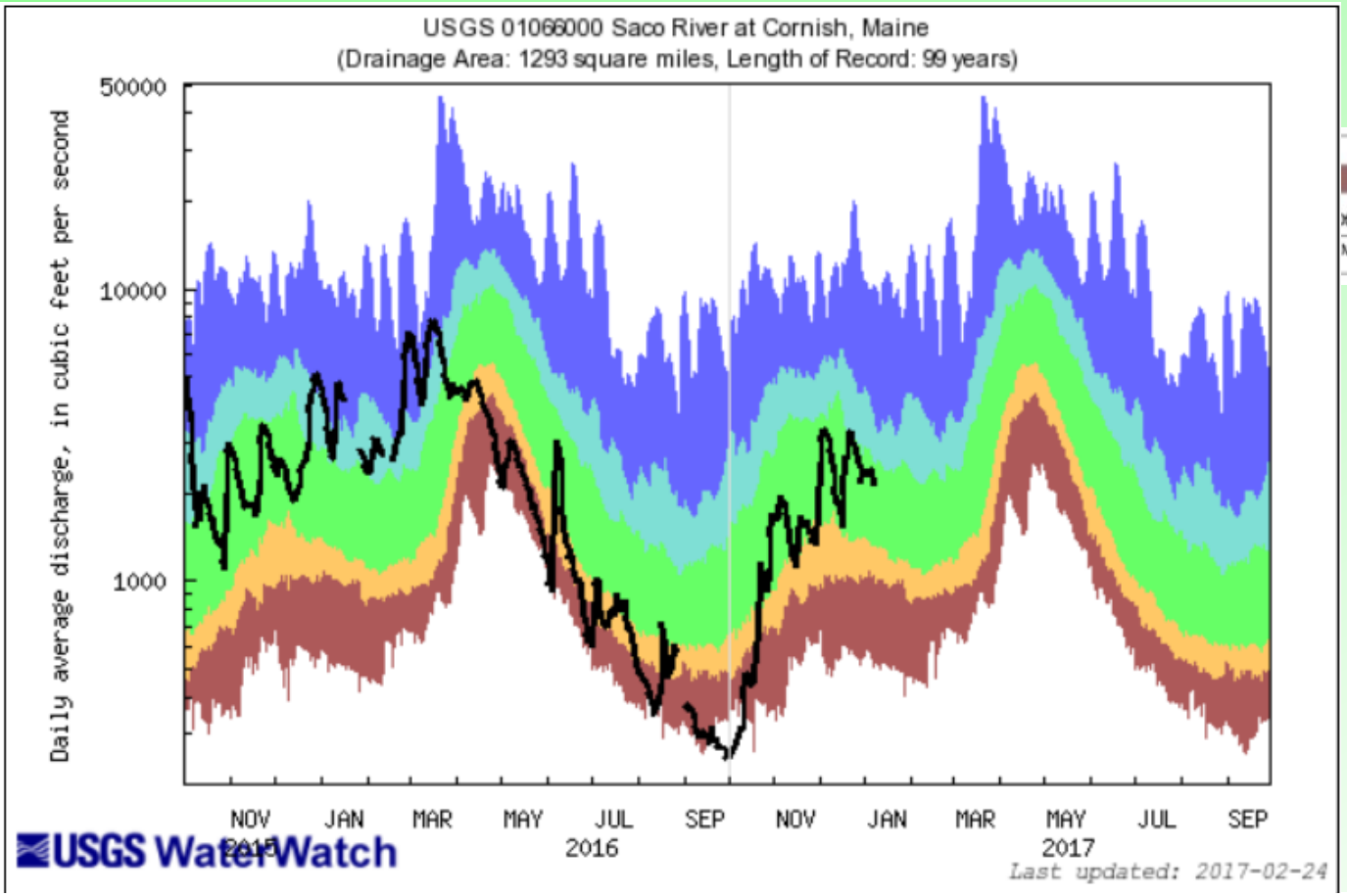
Sand-gravel aquifer, 18 yrs

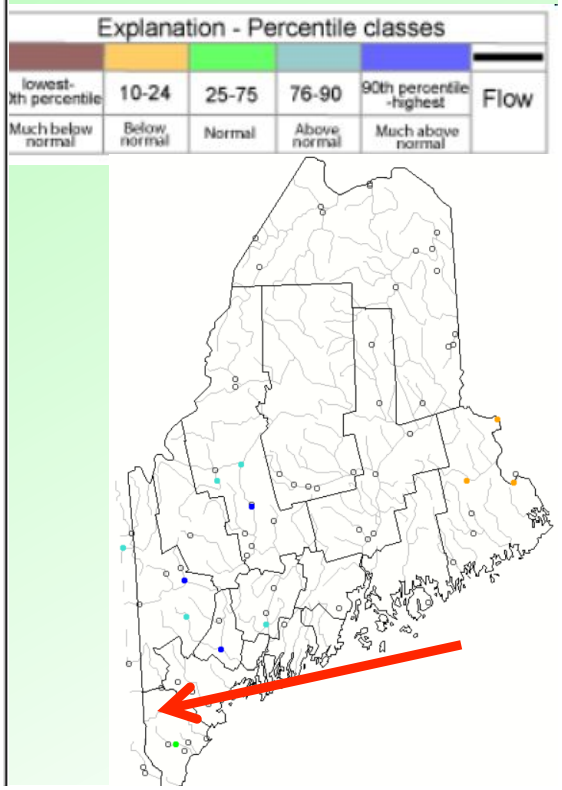


Bedrock aquifer, 18 yrs



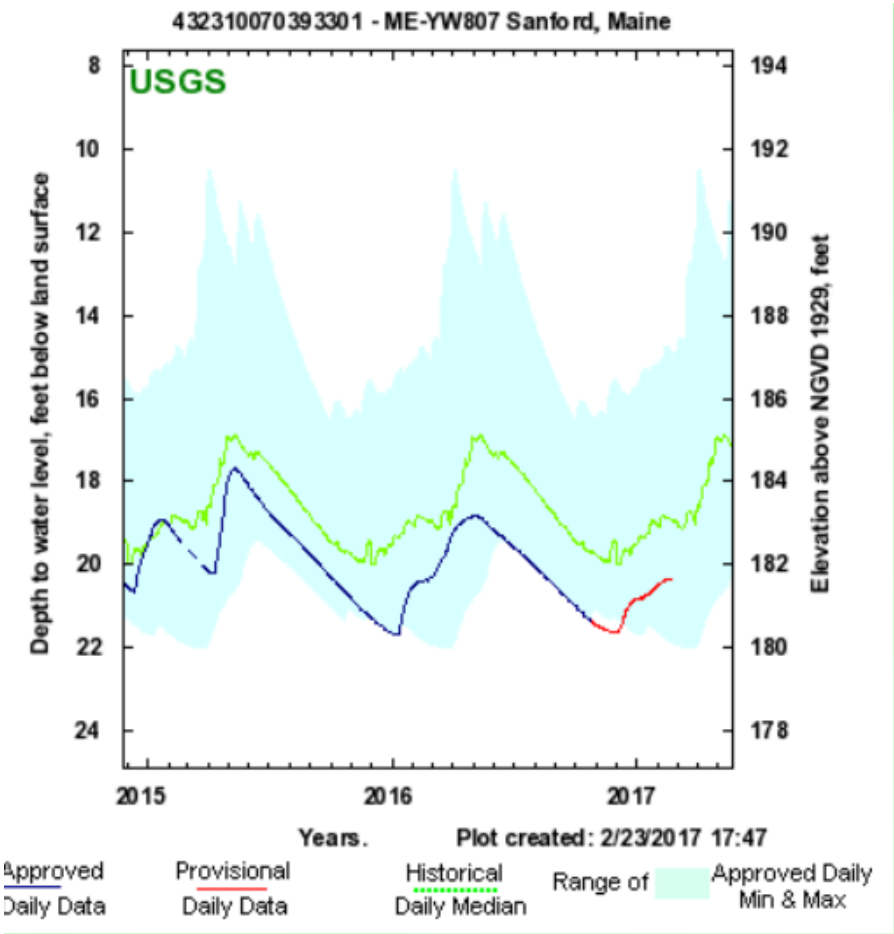
Saco River at Cornish, ME – 99 years of record



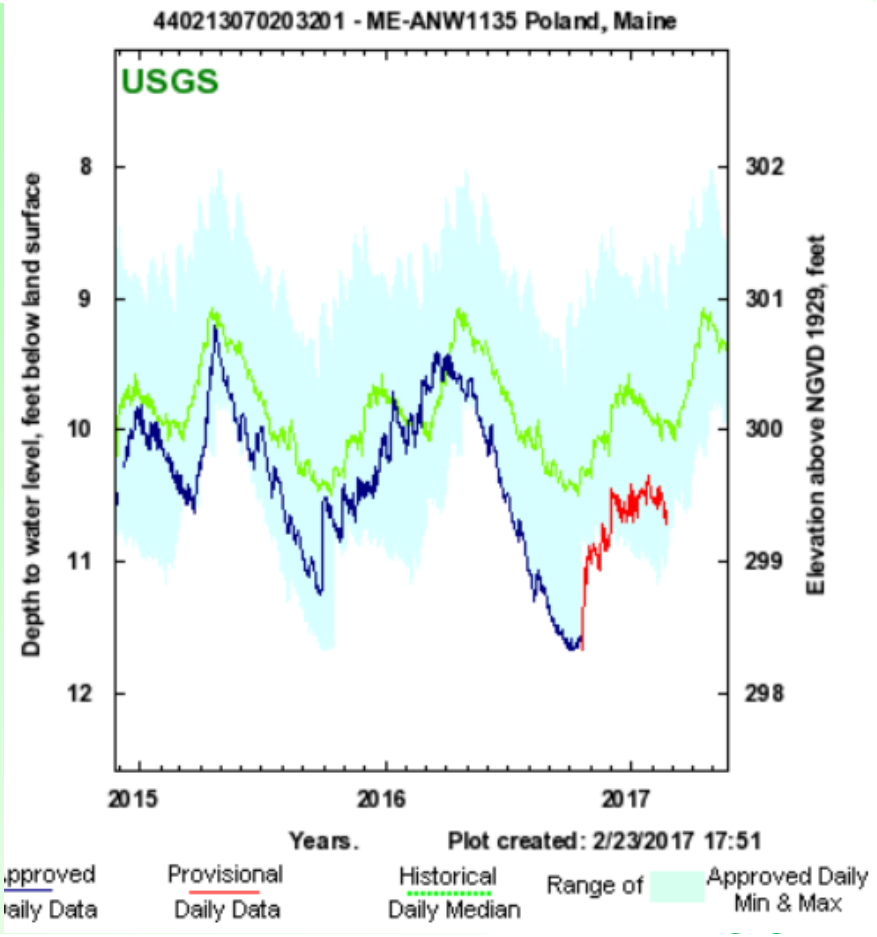


York and Androscoggin Counties, ME

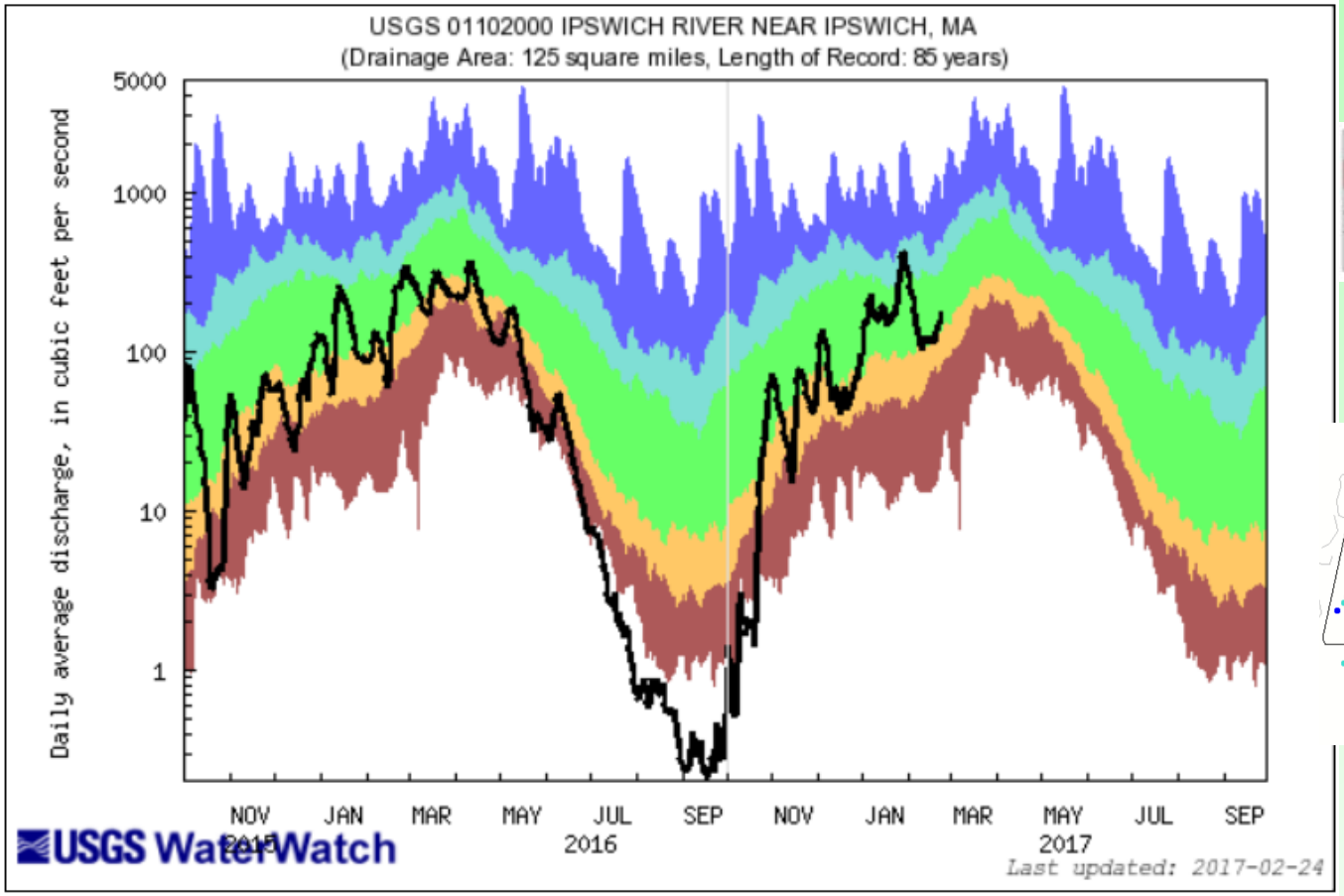
Sand-gravel aquifer, 27 yrs

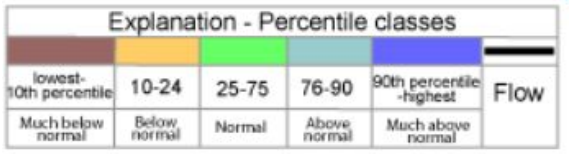


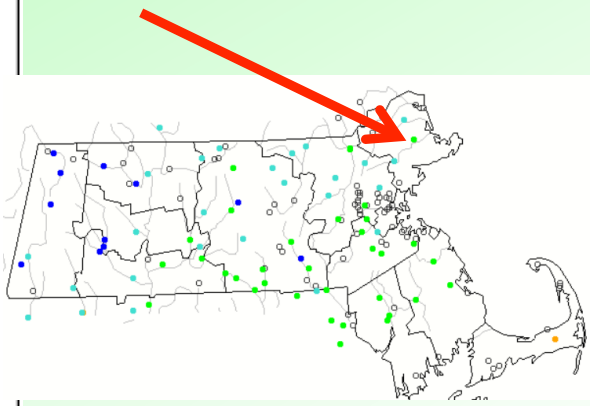
Bedrock aquifer, 16 yrs



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







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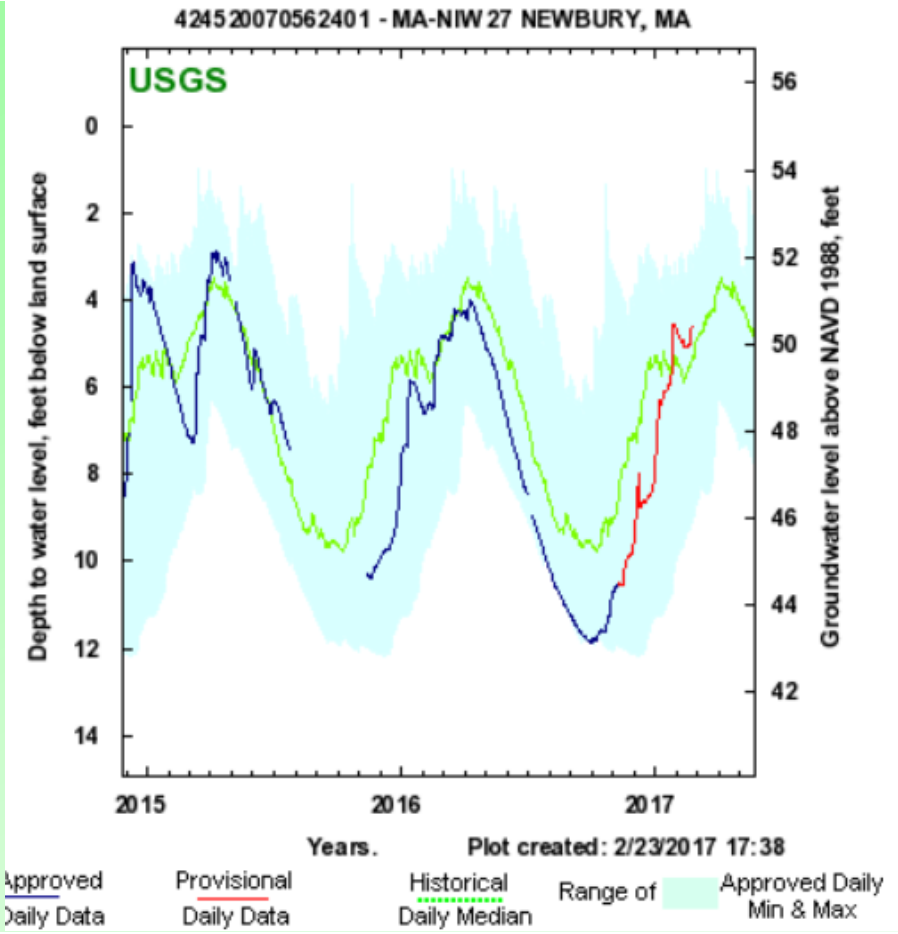
Essex County, MA

Sand-gravel aquifer, 52 yrs



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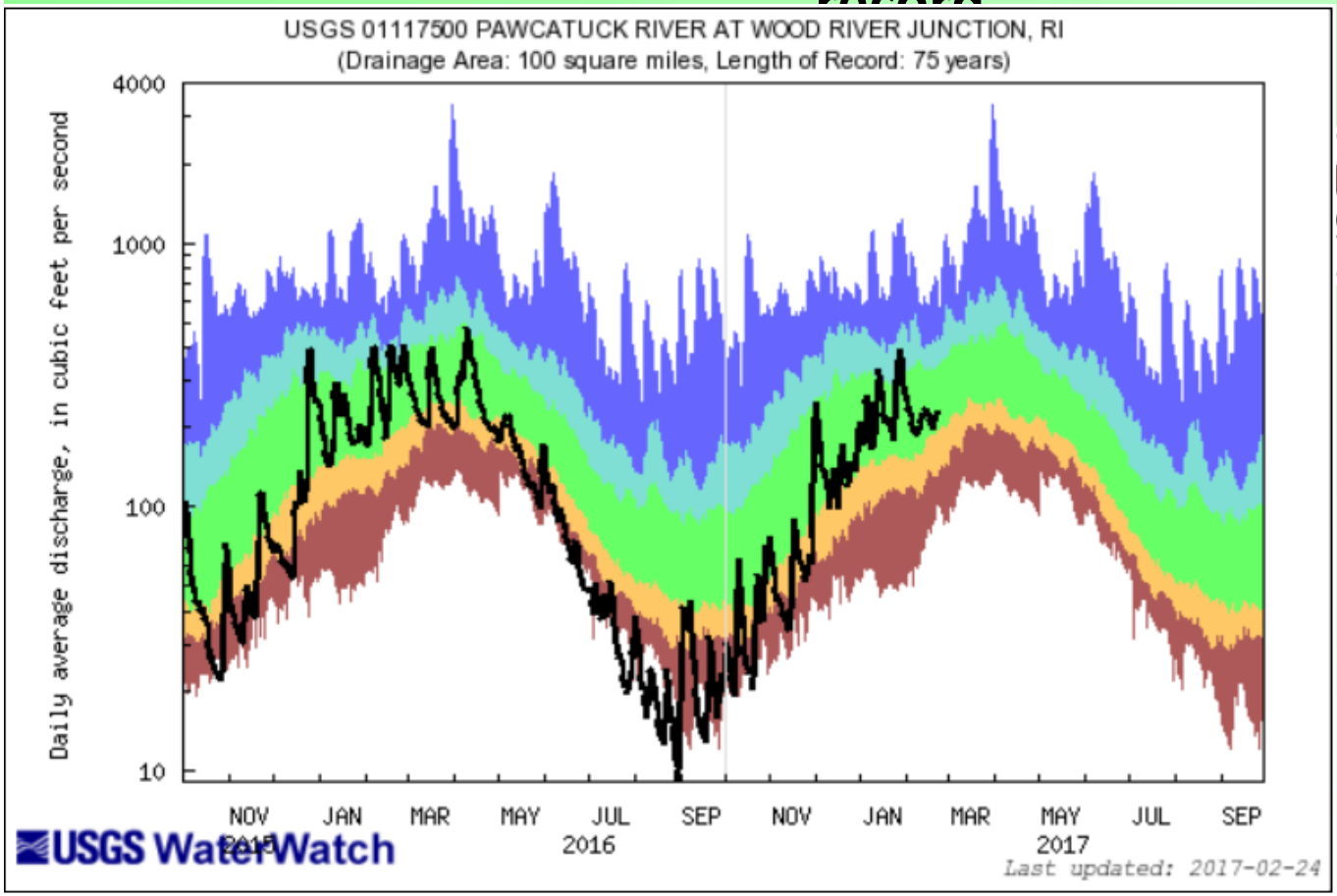
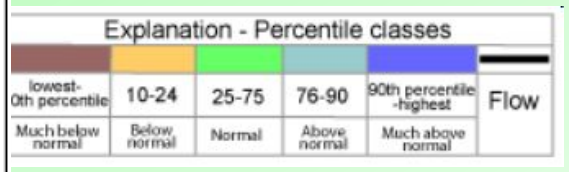
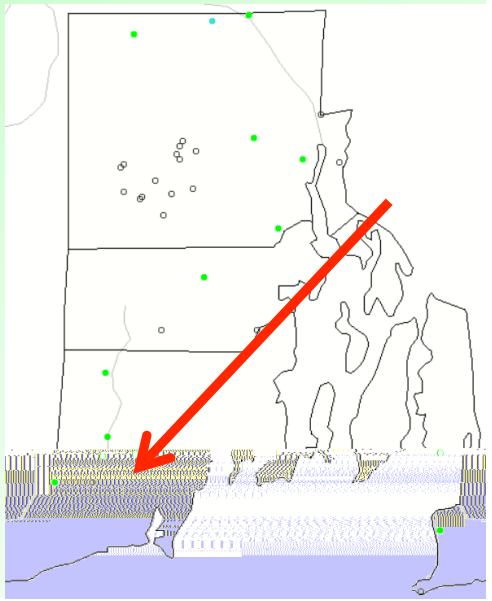
Pawcatuck River at Wood River Junction, RI – 75 years of record

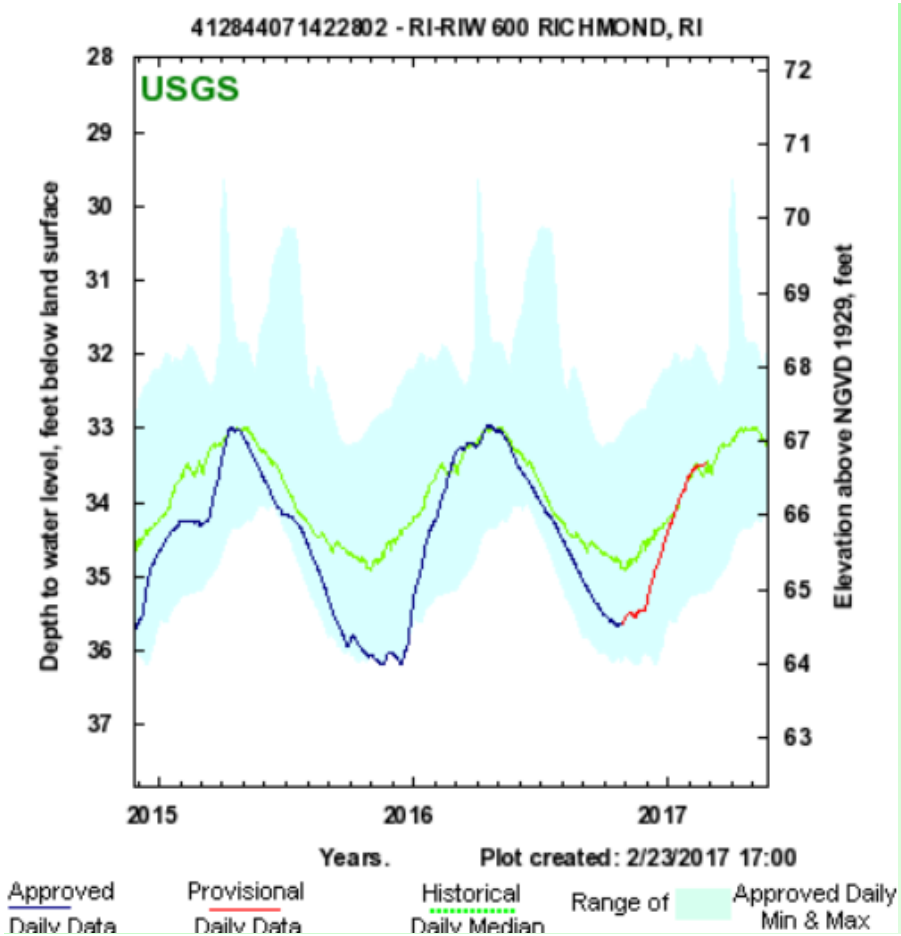




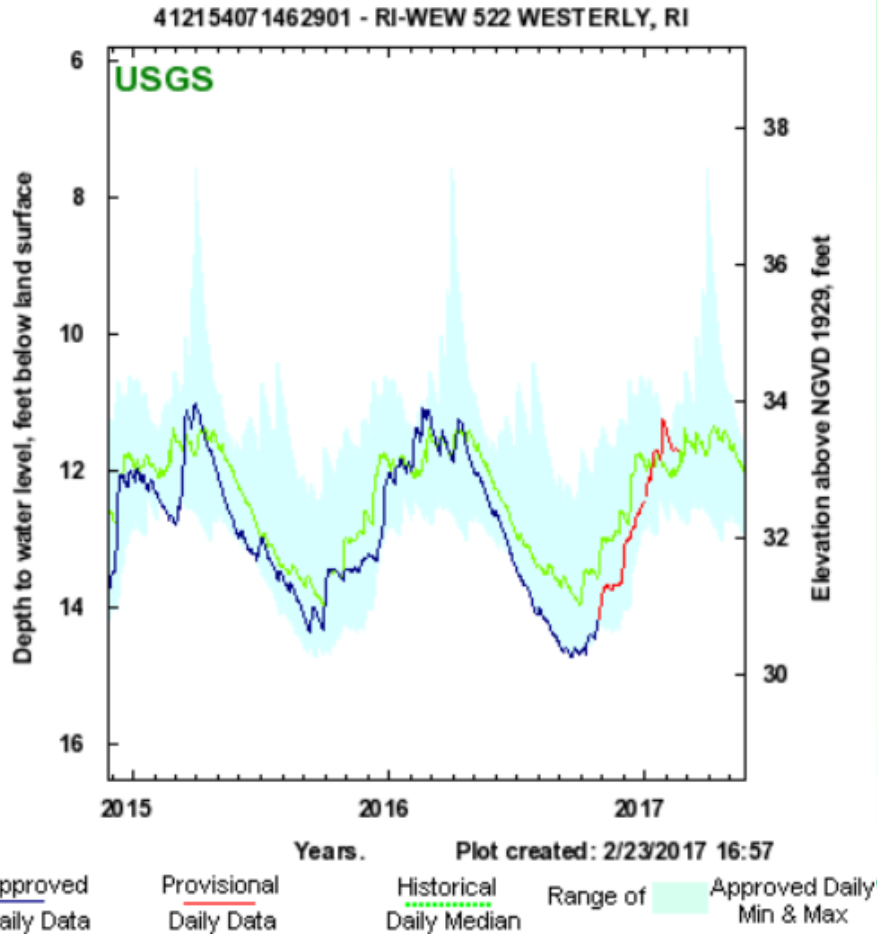


Washington County, RI

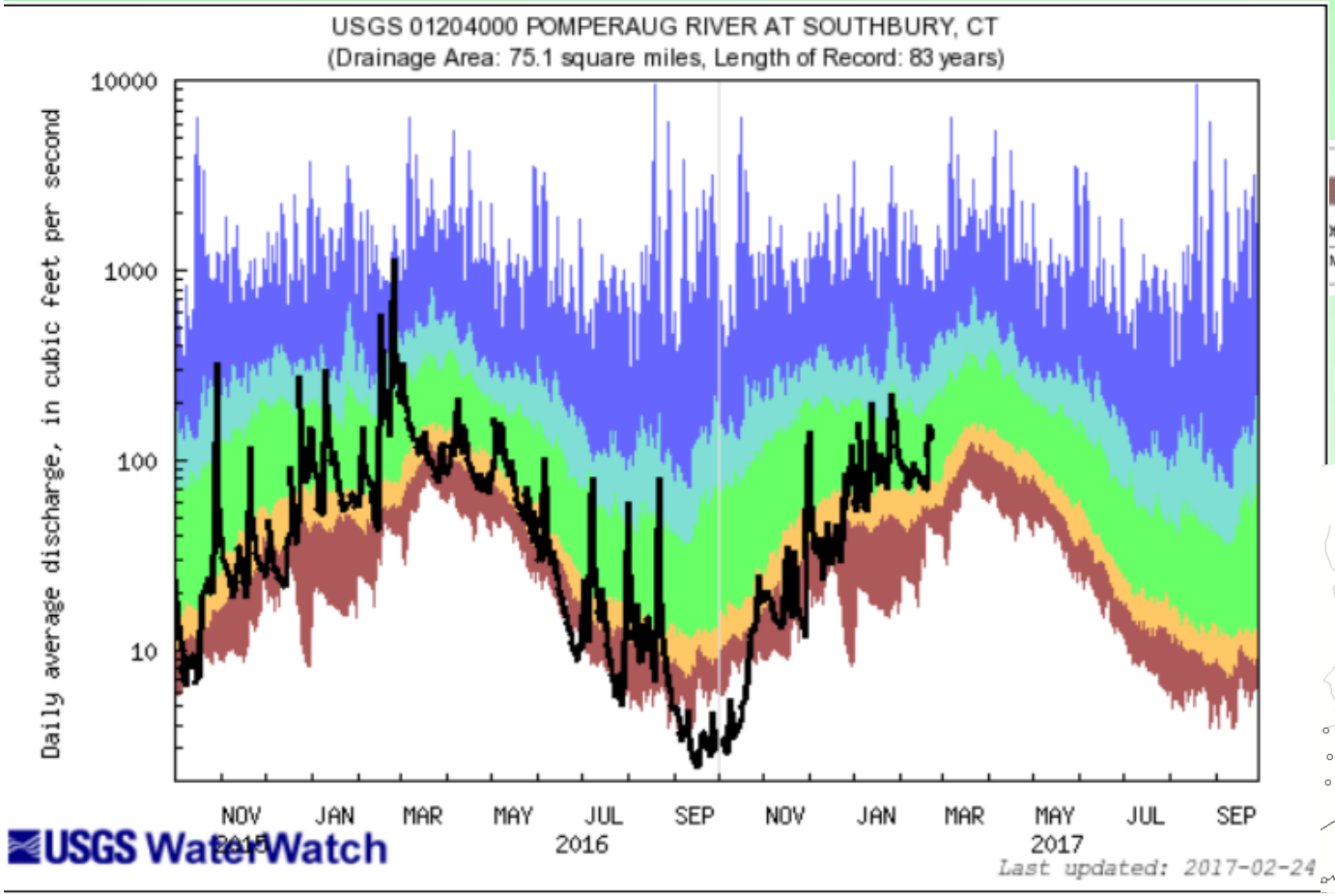
Sand-gravel aquifer, 39 yrs

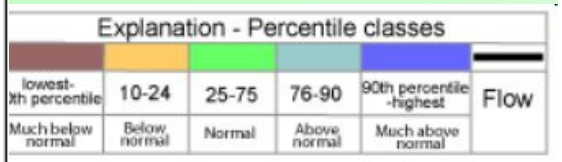


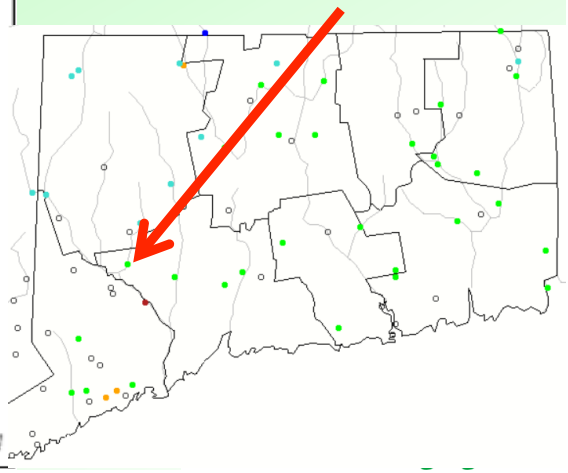
Sand-gravel aquifer, 50 yrs



Pomperaugh River at Southbury, CT – 83 years of record

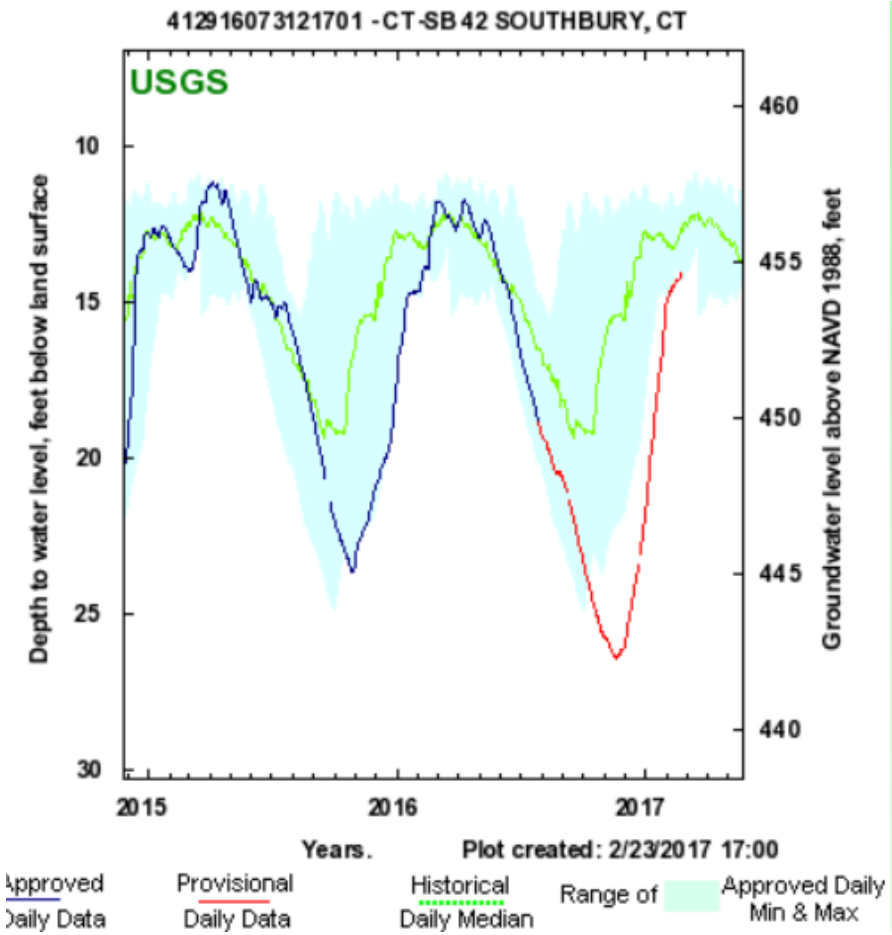




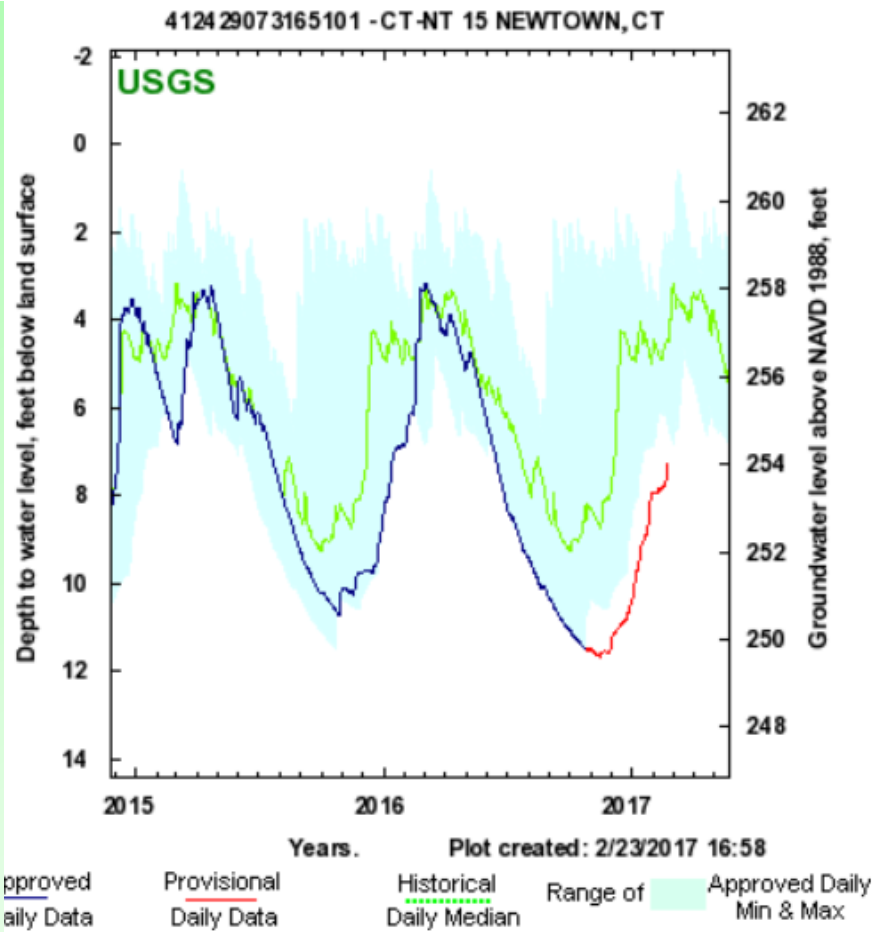


New Haven and Fairfield Counties, CT

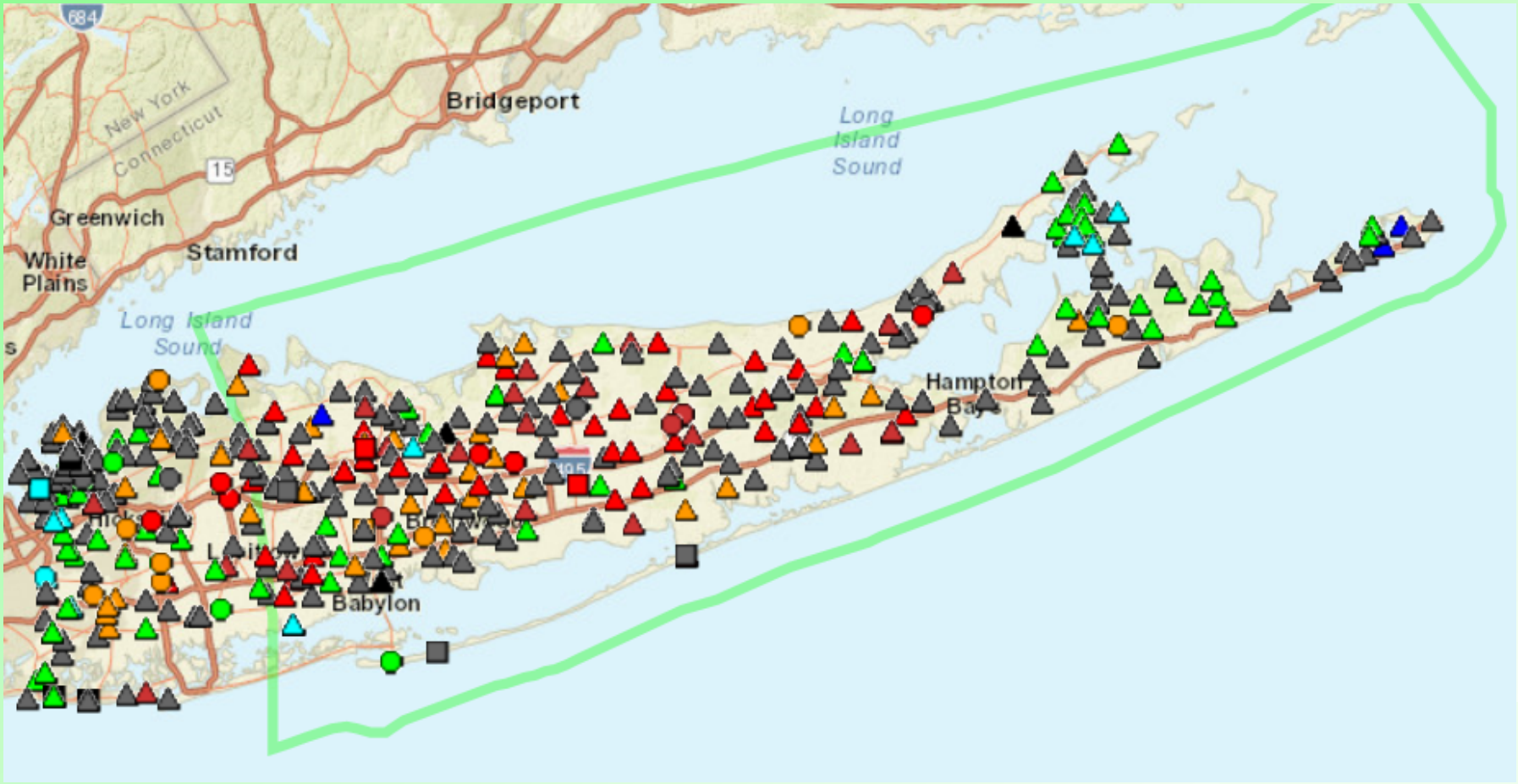
“Till” aquifer, 24 yrs



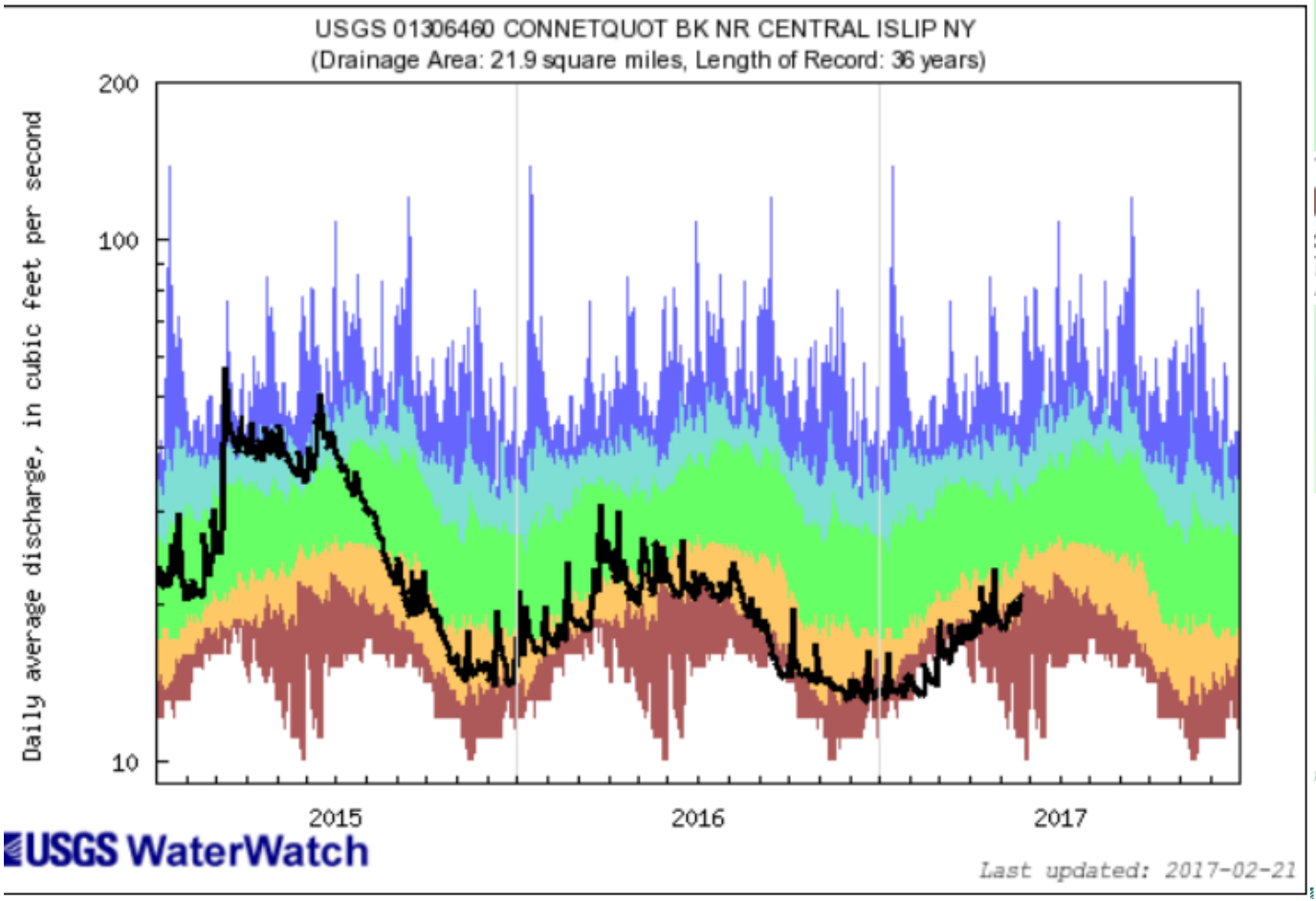
Sand-gravel aquifer, 50 yrs

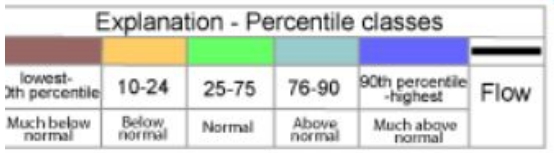


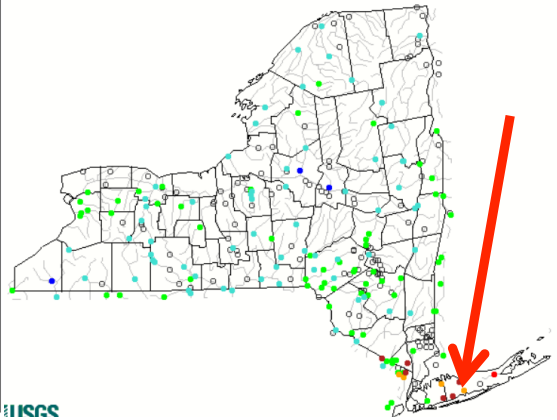
Groundwater Conditions, Suffolk County, February 2017



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

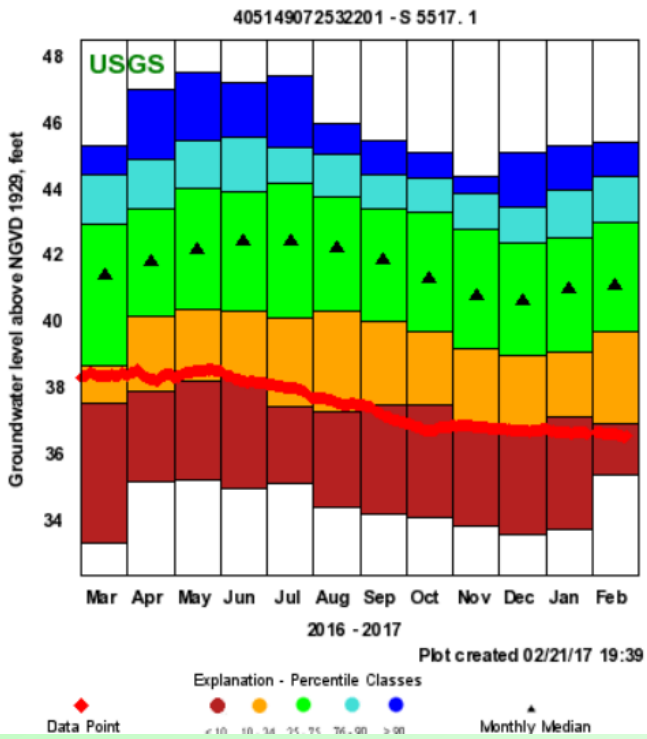


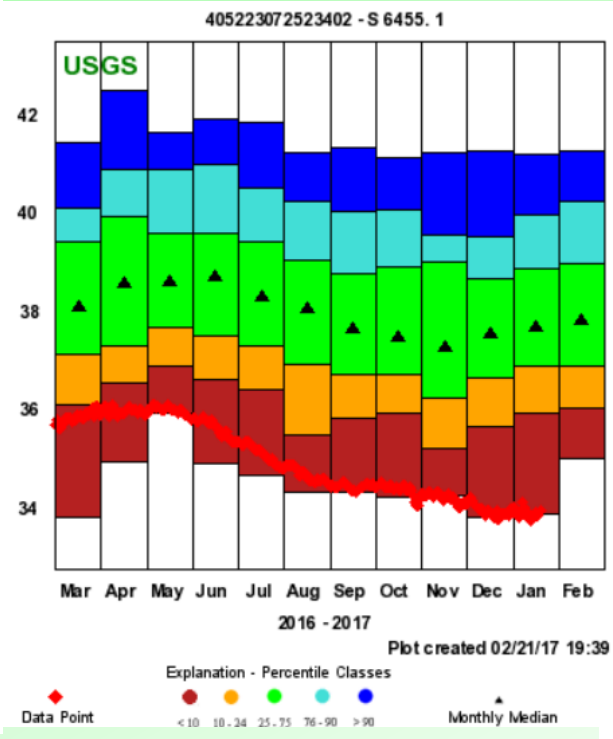


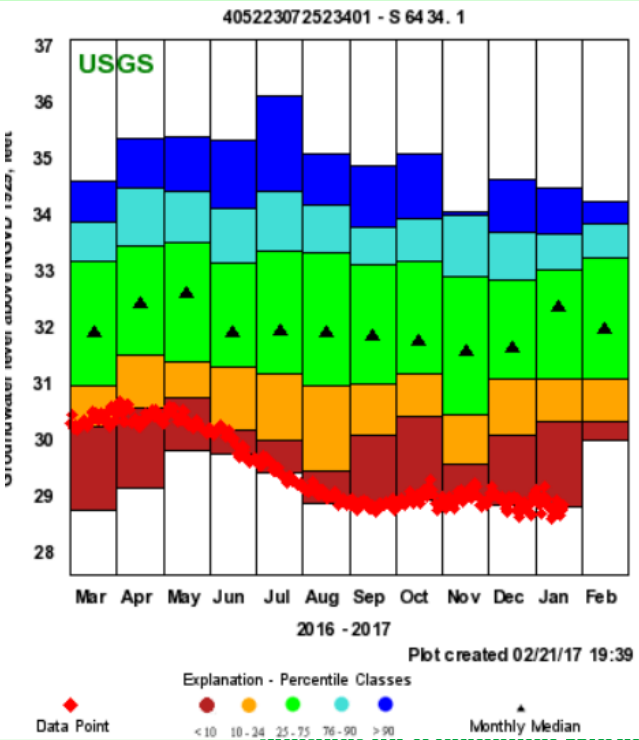


Suffolk County, NY

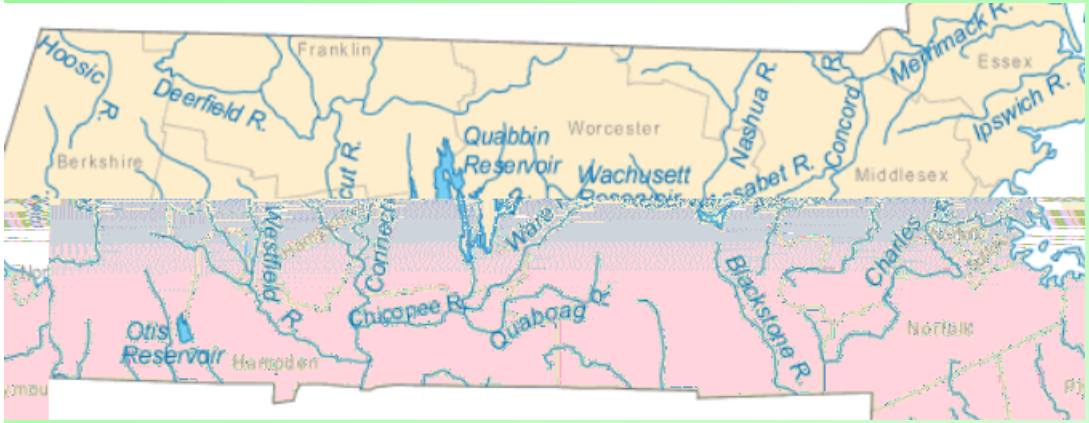
Depth:	91 ft	962 ft	1395 ft
Aquifer:	Upper Glacial	Magothy	Lloyd
Record:	68 yr	66 yr	66 yr







Massachusetts Reservoirs



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

Quabbin Reservoir

Sept. 1, 2016 – 85.1% of capacity

Feb. 1, 2017 – 79.9% of capacity

Wachusett Reservoir

Sept. 1, 2016 – 91.0 % of capacity

Feb. 1, 2017 – 91.3% of capacity

Overall Status "Below Normal"

Source: Massachusetts Water Resources Authority

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New York City Reservoirs

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

Percent of Capacity

Sept. 28, 2016 – 70.7%

(Normal – 76.0%)

Feb. 27, 2017 – 87.1%

(Normal – 87.2%)

Source: New York City Environmental Protection

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Summary

Streamflows in the Northeast are generally in normal or above-normal flow ranges, except for parts of CT and southeastern NY (Long Island), where they are below normal.

GW levels in New York are generally in normal or above-normal ranges, however, below-normal water levels can be found scattered across the State, especially on Long Island.

GW levels in New England States are a “mix” with many wells still reporting below-normal levels throughout the six-State area.

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