Introductions

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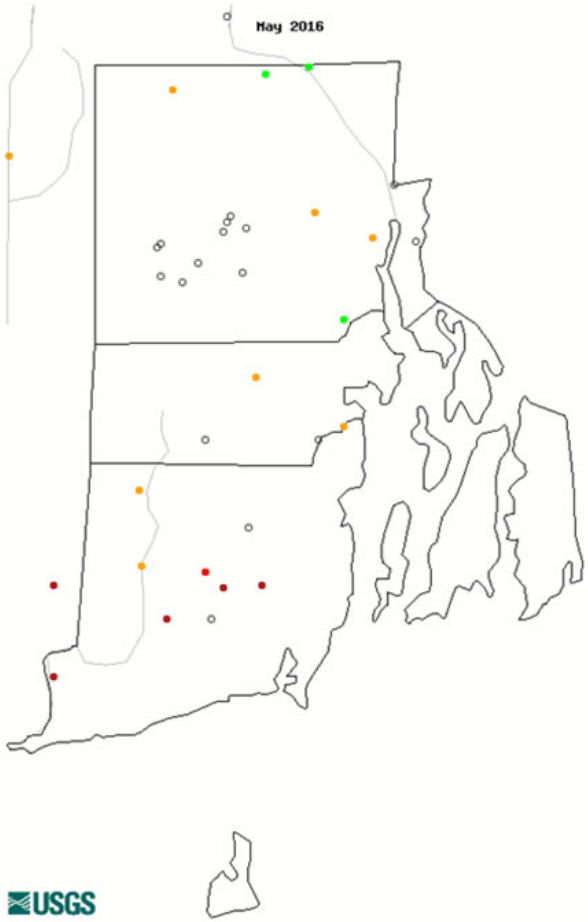
Rhode Island Streamflow and Groundwater Conditions During May, June, July 2016

May 2016

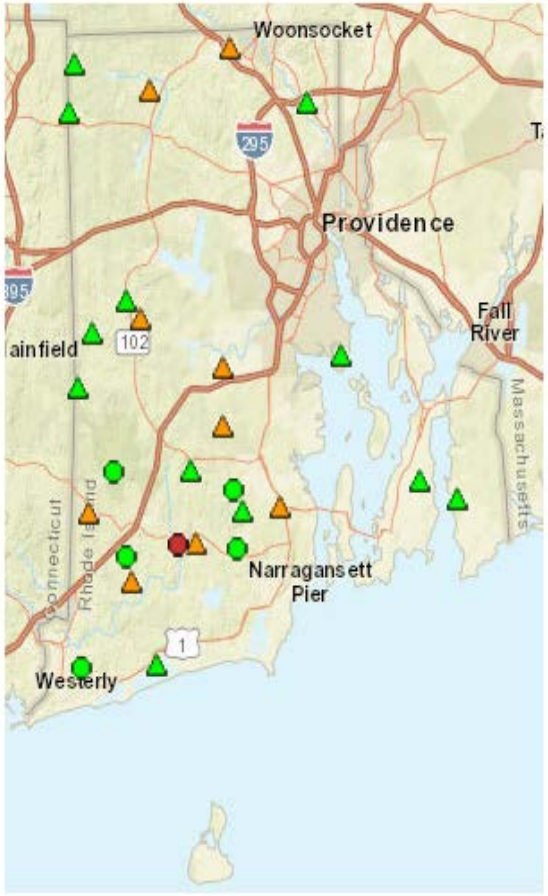
Rhode Island Surface-Water Conditions

Map of monthly streamflow compared to historical streamflow for the month 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	

Rhode Island Groundwater Conditions

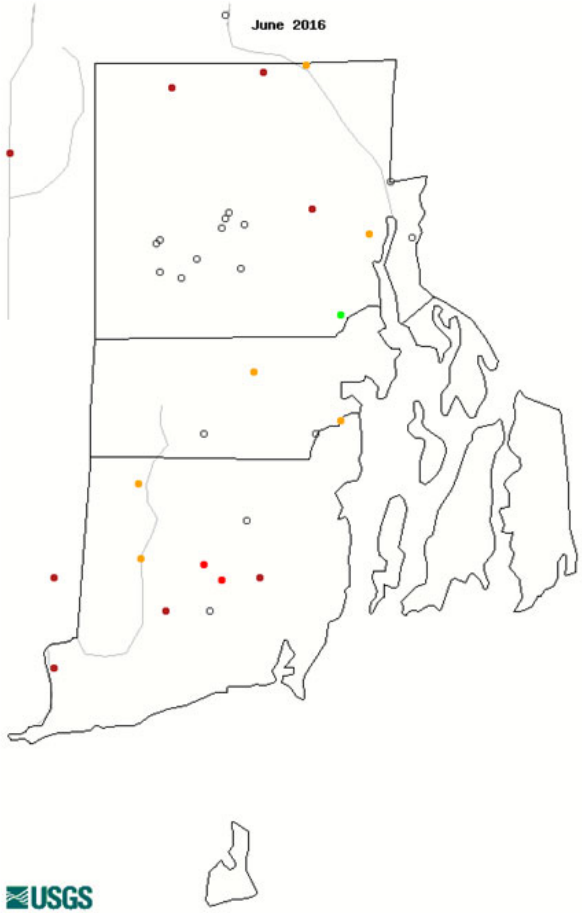


Explanation - Percentile classes								
New Low	<10	10-24	25-75	76-90	>90	New High	Not Ranked	Real Time Continuous Periodic Measurements
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal			

June 2016

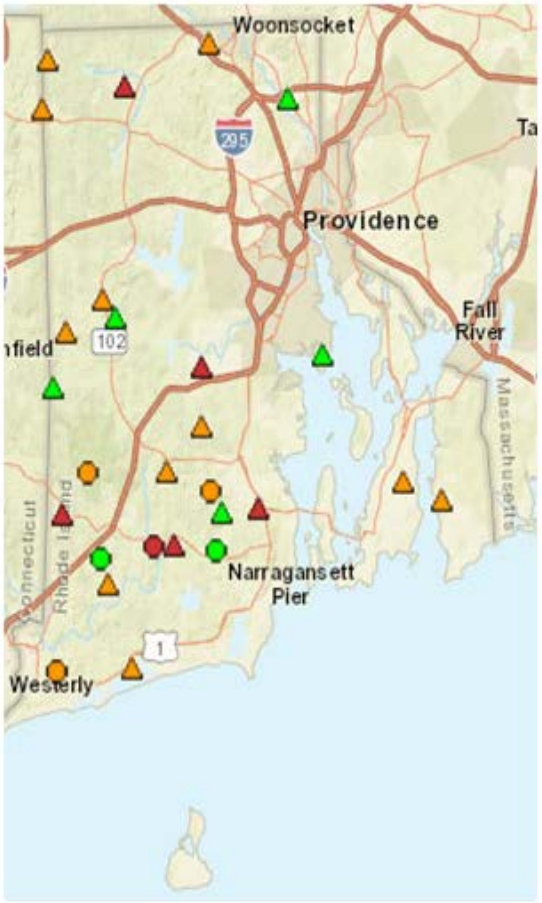
Rhode Island Surface-Water Conditions

Map of monthly streamflow compared to historical streamflow for the month 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	

Rhode Island Groundwater Conditions

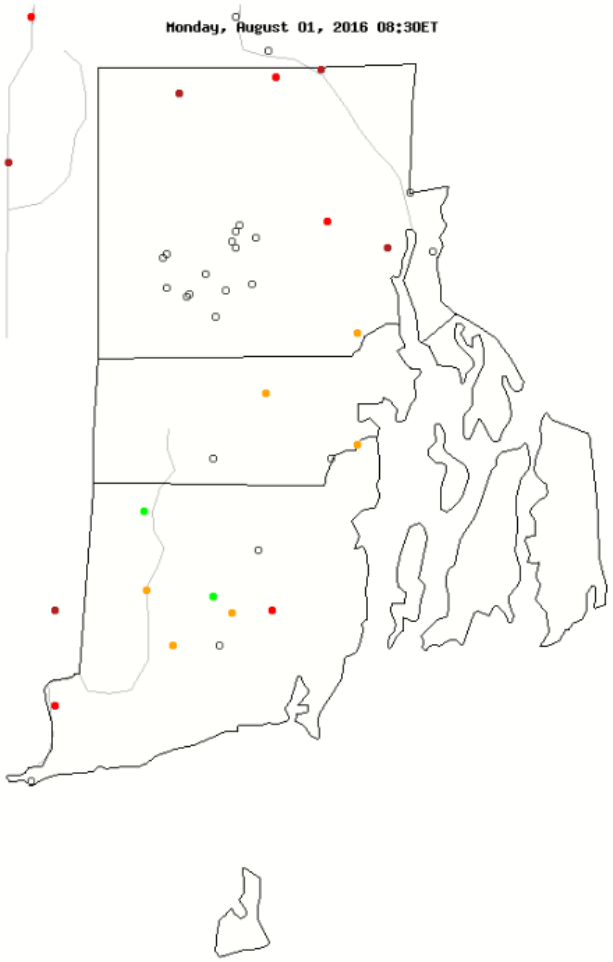


Explanation - Percentile classes								
								Real Time
New Low	<10	10-24	25-75	76-90	>90	New High	Not Ranked	Continuous
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal			Periodic Measurements

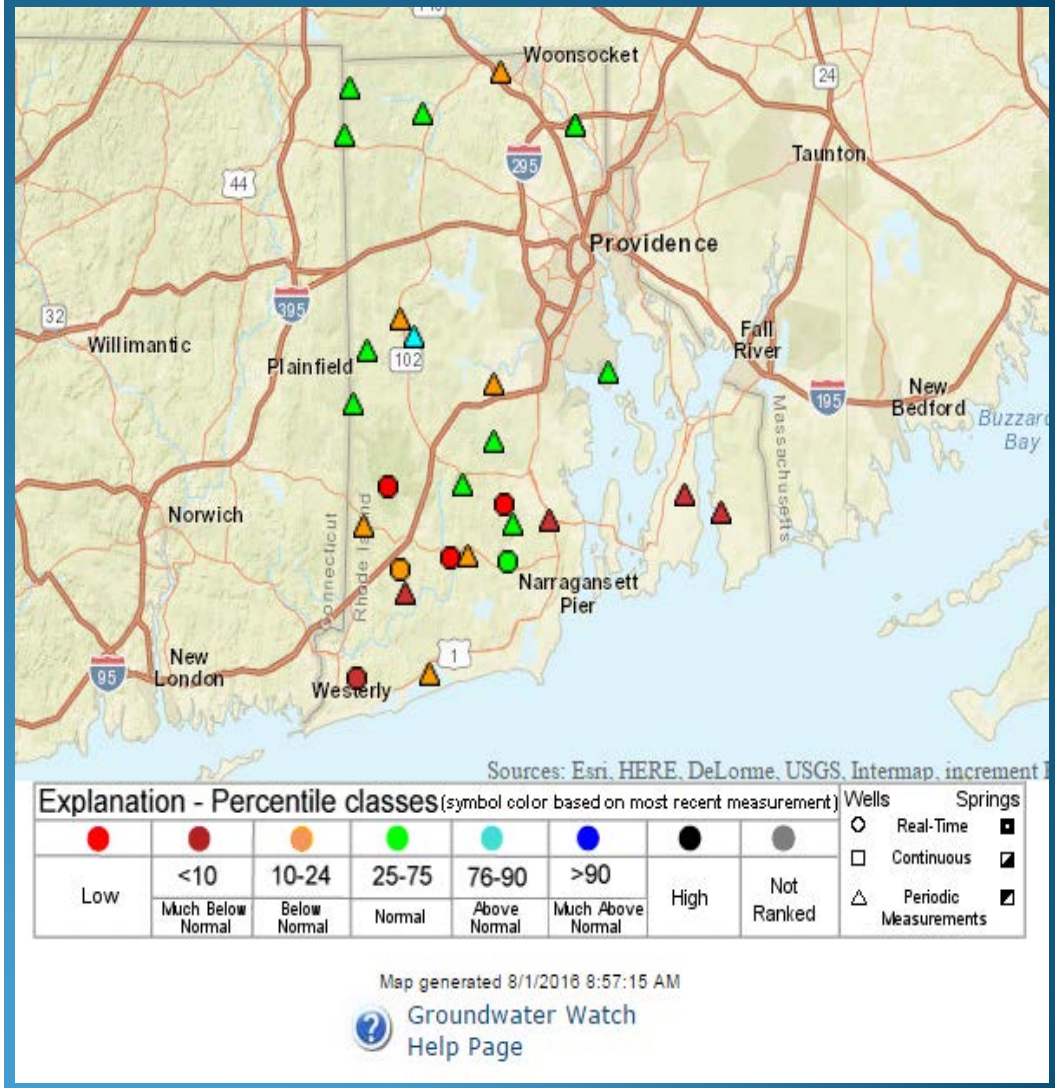
July 2016

Map of real-time streamflow compared to historical streamflow for the day of the year (Rhode Island)

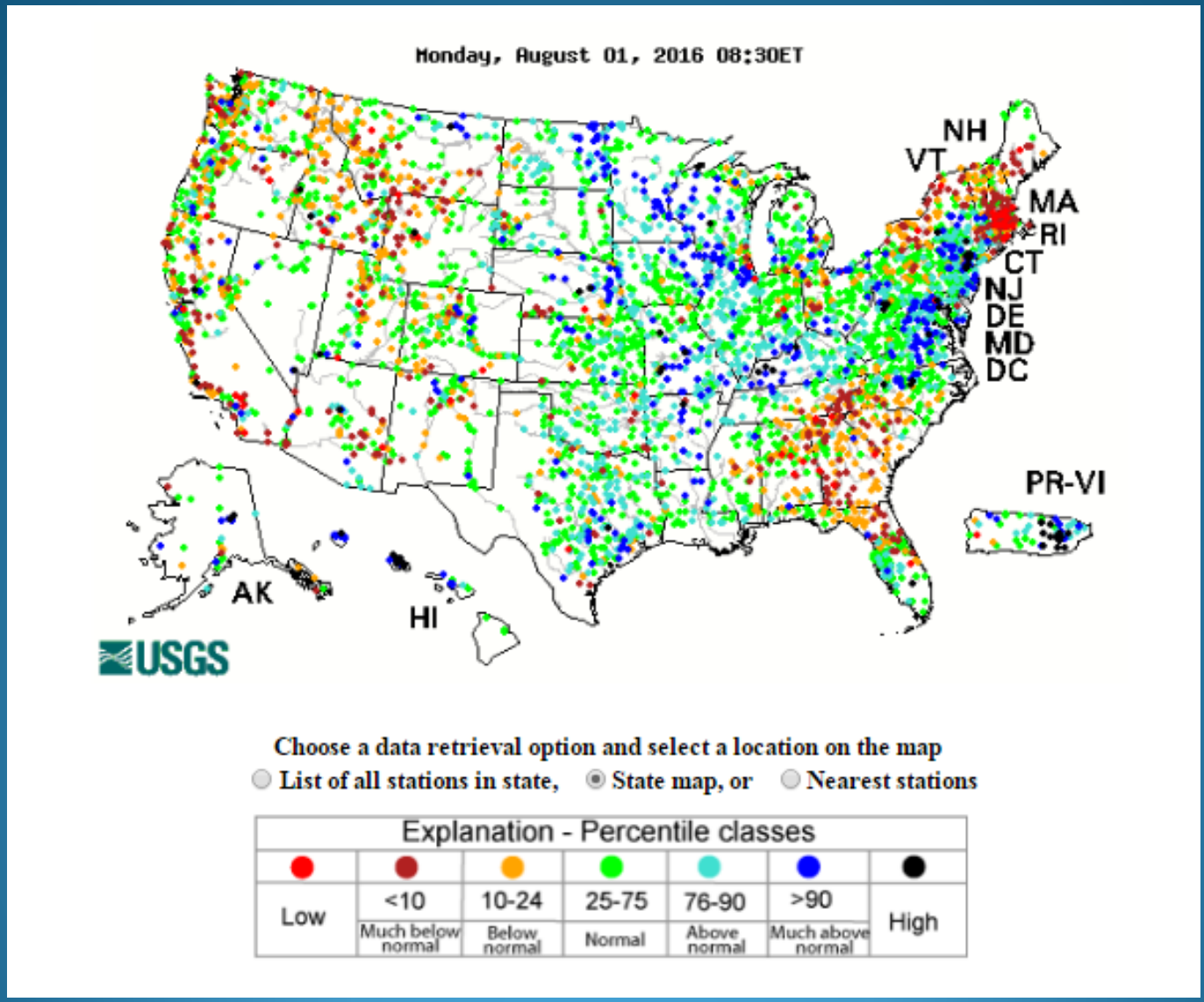
Rhode Island ▾ or Water-Resources Regions ▾



USGS

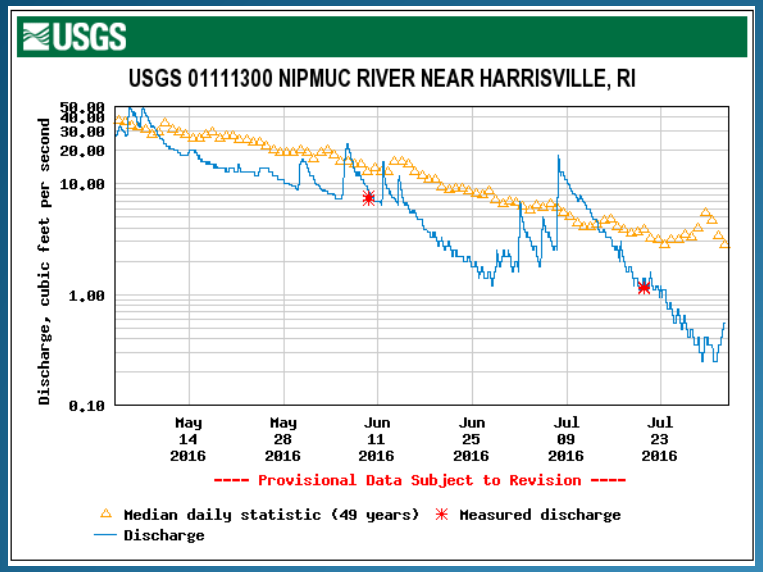


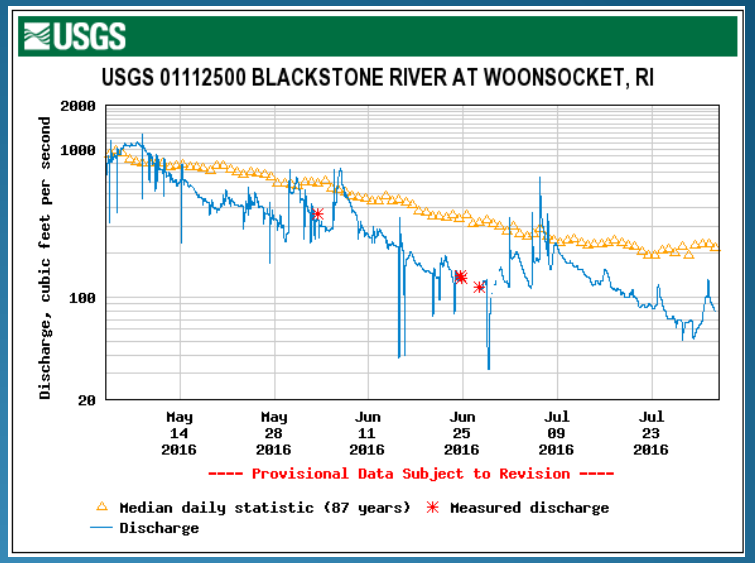
National Streamflow Conditions During July 2016

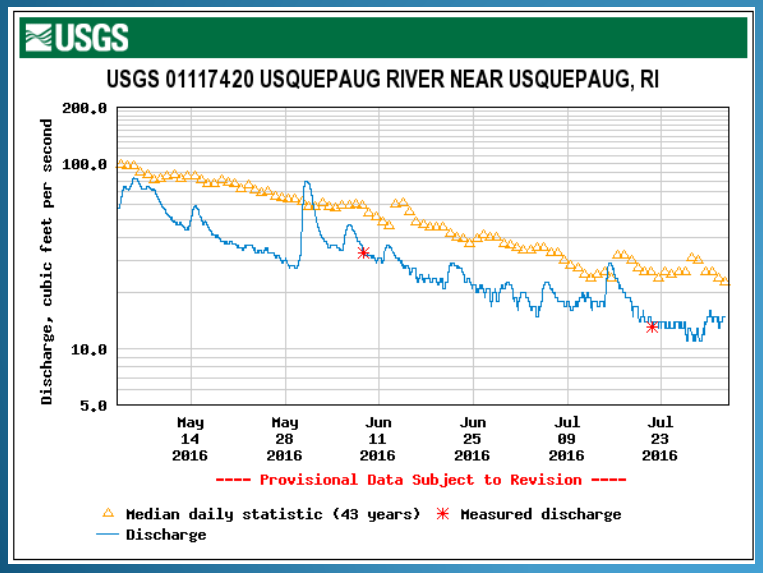


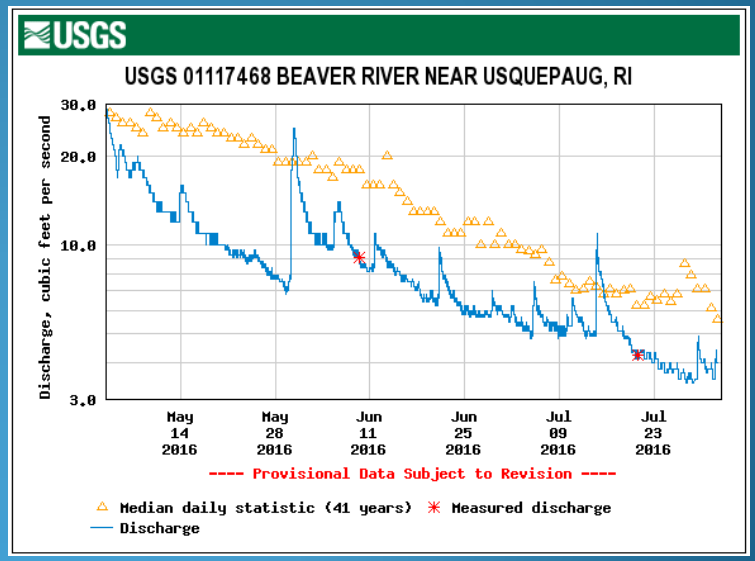
http://waterwatch.usgs.gov/index.php?m=wwmaps

Discharge Measurements Are Made at Streamgages to Check or Adjust Stage-Discharge Ratings at Various Flow Rates

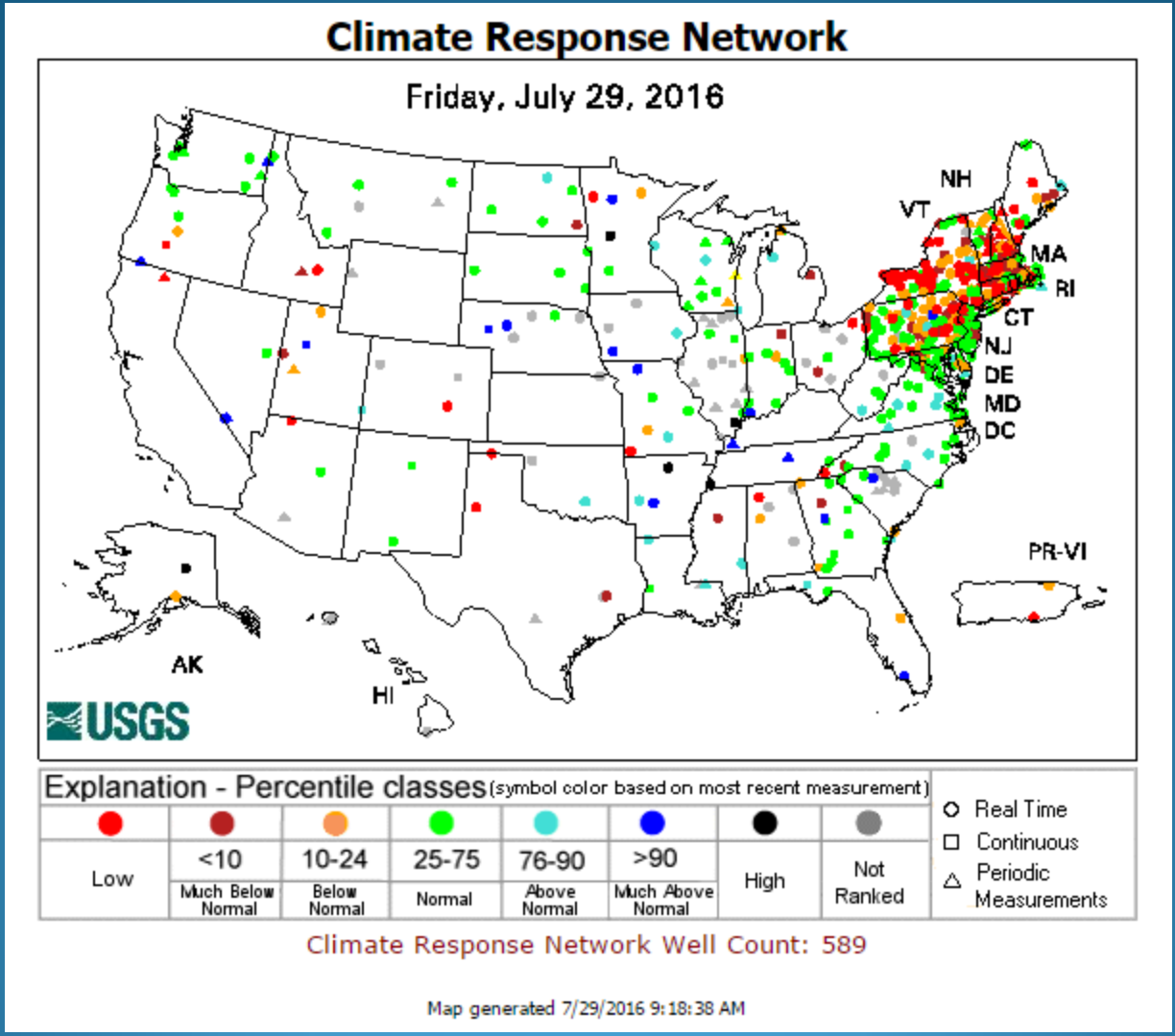




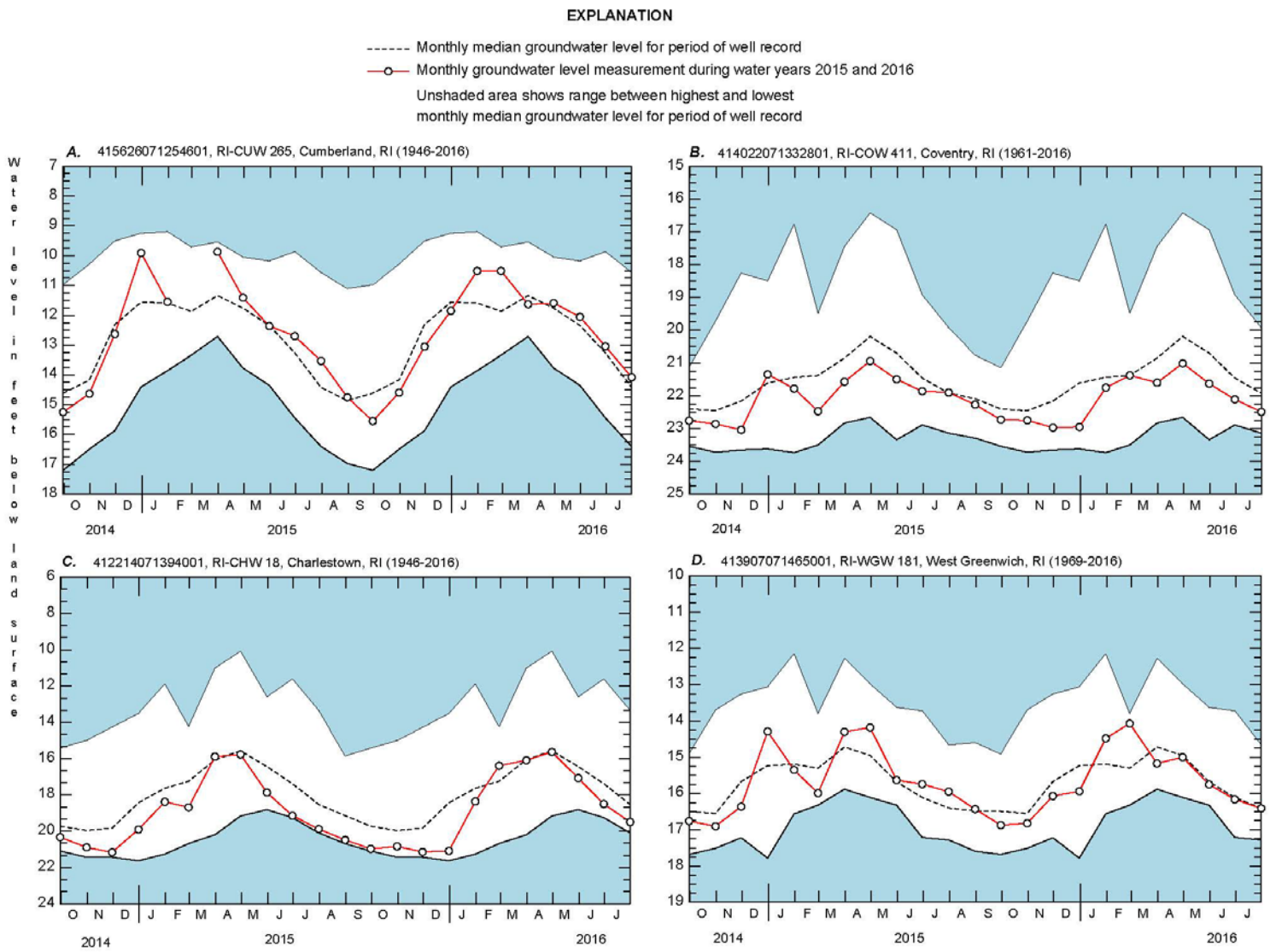




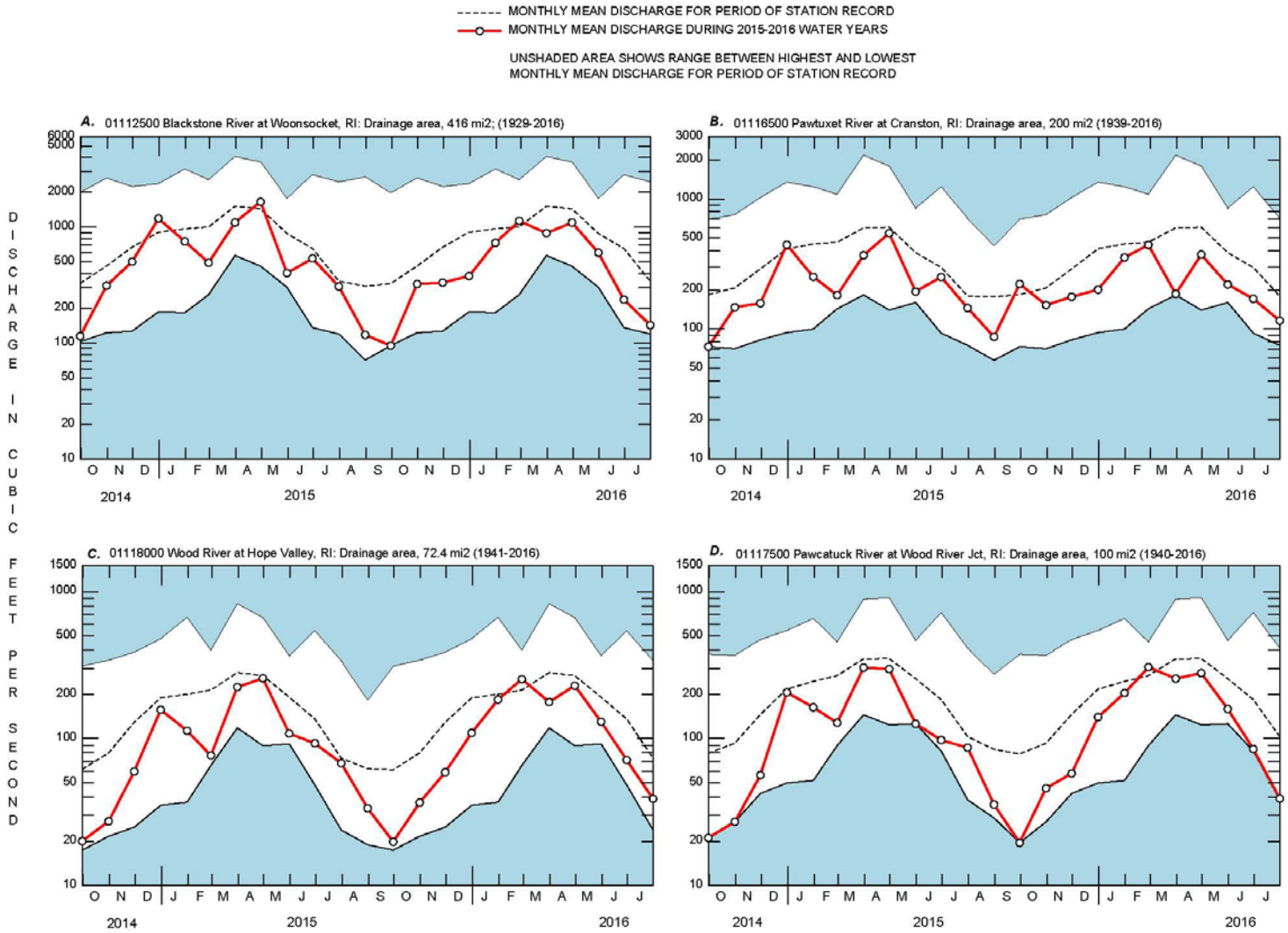
National Groundwater Conditions, July 29, 2016



Monthly Groundwater Levels at Selected USGS Observation Wells in Rhode Island October 2014 to July 2016



Monthly Streamflow Conditions at Selected USGS Streamgages in Rhode Island
October 2014 to July 2016



Rhode Island Rivers (30 years or more record) With New Record Low Monthly Mean Discharges During May, June, or July 2016

- Moshassuck River at Providence (01114000)—8.06 cfs, July (previous low, 8.07 cfs, July 1999)
- Usquepaug River near Usquepaug (01117420)—29.5 cfs, June (previous low, 30.4 cfs, June 1994)
- Beaver River near Usquepaug (01117468)—8.28 cfs, June (previous low, 9.02 cfs, June 1994)
- Pawcatuck River at Wood River Jct (01117500)—36.0 cfs, July (previous low, 38.2 cfs July 1957)

Rhode Island Drought Indices

Drought Phase	Palmer Drought Index +	Crop Moisture Index	Precipitation +	Ground Water** +	Stream flow +	Reservoirs**
Normal	-1.0 to -1.99	0.0 to -1.0	Slightly Dry	1 month below normal 1 month below normal	2 consecutive months below normal	Reservoir levels at or near normal for the time of year
Advisory	-2.0 to -2.99	-1.0 to –1.9 Abnormally Dry	2 month cumulative below 65% of normal	At least 2 out of 3 months below normal	3 consecutive months below normal	Small index Reservoirs below normal
Watch	-3.0 to -3.99	-2.0 to –2.9 Excessively Dry	1 of the following criteria met: 3 month cum. <65% or 6 month cum. <70% or 12 month cum. <70%	4-5 consecutive months below normal	At least 4 out of 5 consecutive months below normal	Medium index Reservoirs below normal
Warning	-4.0 and below	> -2.9 Severely Dry	2 out of 3 of the above criteria met: 3 month cum. <65% and 6 month cum. <65% or 6 month cum. <65% and 12 month cum. <65% or 3 month cum. <65% and 12 month cum. <65%	6-7 consecutive months below normal observation wells recording monthly record lows	At least 6 out of 7 consecutive months below normal	Large index reservoirs below normal
Emergency	-4.0 and below	> -2.9 Severely dry	Same criteria as Warning and Previous month was Warning or Emergency	>7 months below normal Observation wells recording monthly record lows	>7 months below normal	Continuation of previous month's conditions

+ Major Hydrologic Indicators.

** Local triggers from the water system supply management plans will also be considered in a assessing drought phases on a regional basis. The WRB staff will review local plans and work with suppliers to coordinate regarding drought phases and to collect, review and report surface reservoir and ground water data.

"Normal" is defined as the statistical average of the data for the period of record. Percentages for precipitation are relative to normal.

Based on the drought indices…

- Groundwater
  - May-About normal
  - June-Below normal
  - July-Some recovery, but still mostly below normal
    - **Two out of three months below normal**
- Surface water
  - May-Below normal
  - June-Below normal
  - July-Below normal
    - **Three consecutive months below normal**

Questions??