

# July Recap & Northeast DEWS Discussion

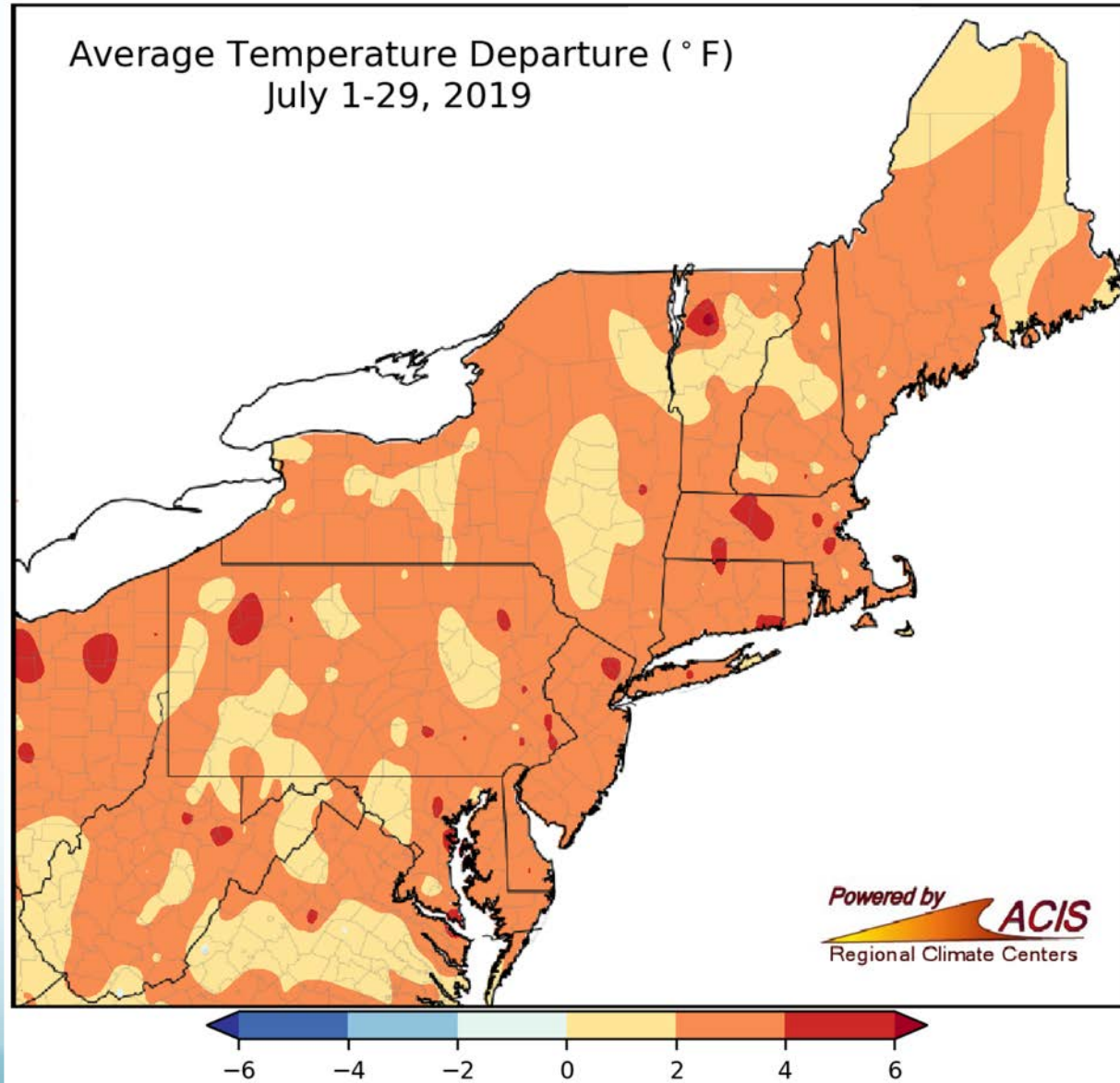
By: Samantha Borisoff, Climatologist  
Northeast Regional Climate Center



Northeast Regional  
Climate Center



# July Temperatures



From near normal to 6°F above normal

# July Temperatures

## Time Series Summary for Hartford Area, CT (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Rank	Year-Month	Number of Days Max Temperature $\geq 90$	Missing Count
1	2019-07	17	2
-	2016-07	17	0
3	1966-07	16	0
-	1955-07	16	0
5	2010-07	15	0
6	2002-08	14	0
-	1999-07	14	0
-	1988-08	14	0
-	1977-07	14	0
-	1952-07	14	0

# July Heat Wave

July 19-22:

- Max temps reached ~100°F
- High humidity levels
- Felt like it was 114°F in some places
  - Excessive Heat Warnings

## Maximum 1-Day Mean Min Temperature for Boston Area, MA (ThreadEx)

[Click column heading to sort ascending, click again to sort descending.](#)

Rank	Value	Ending Date
1	83.0	2019-07-21
-	83.0	1975-08-02
3	81.0	2018-08-29
-	81.0	2011-07-22
-	81.0	1999-07-05
-	81.0	1991-07-21
7	80.0	2019-07-20
-	80.0	2012-06-21
-	80.0	2002-07-03
-	80.0	1977-07-20

Last value also occurred in one or more previous years.  
 Period of record: 1872-03-01 to 2019-07-21

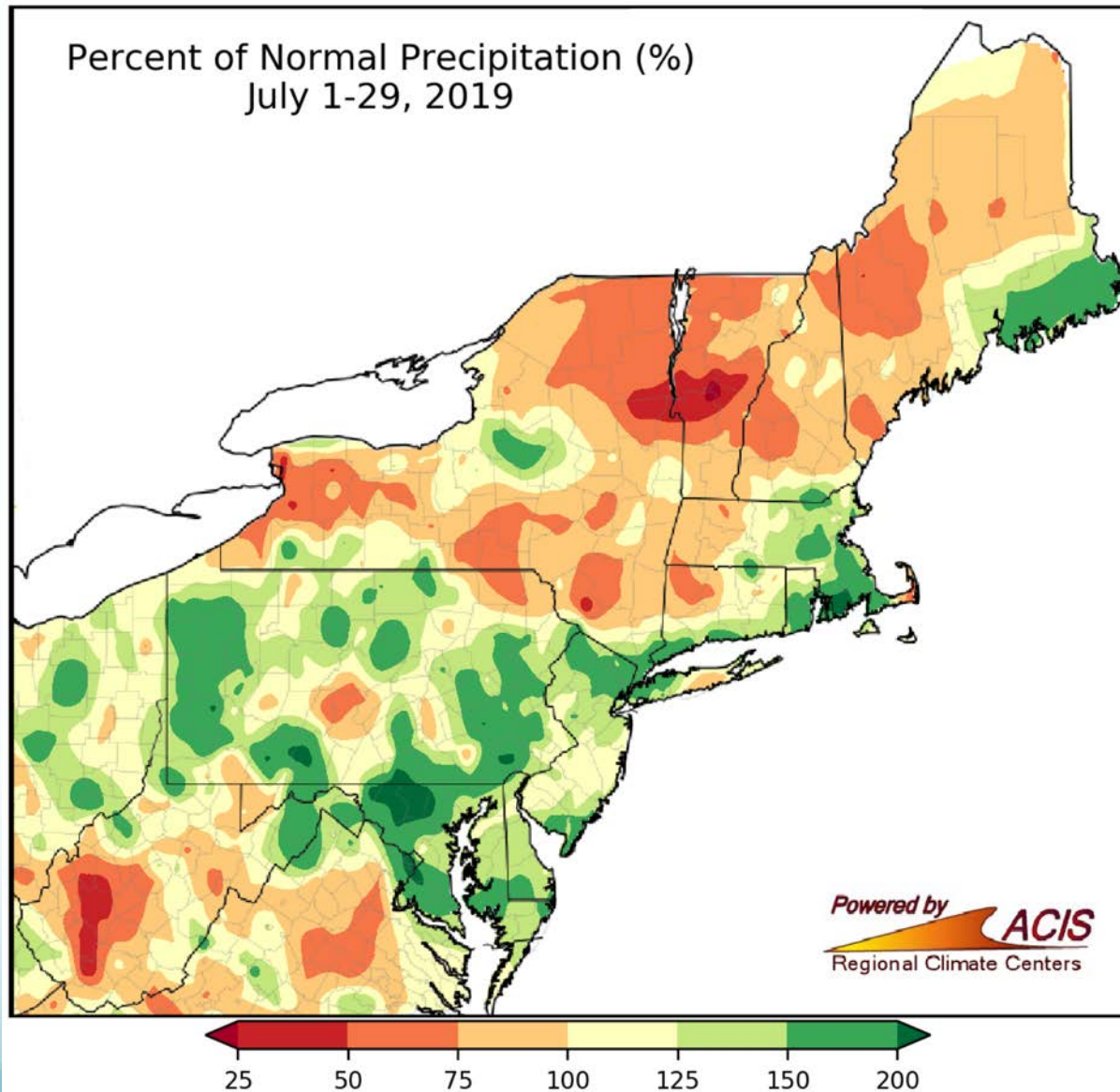
Station	July Highest Min Temp (°F)	July 19-21, 2019 Highest Min Temp (°F)	Rank for July (warmest)	Rank for Any Month (warmest)
Boston, MA	81	83	1	1
LaGuardia Airport, NY	86	83	7	
Atlantic City, NJ	84	82	3	4
Central Park, NY	84	82	7	9
Philadelphia, PA	83	81	7	
Washington National, DC	84	81	10	
Kennedy Airport, NY	82	80	3	6
Erie, PA	82	79	7	
Harrisburg, PA	81	79	6	8
Islip, NY	81	79	2	3
Providence, RI	78	78	1	2
Syracuse, NY	81	78	8	9
Bridgeport, CT	80	77	6	9
Hartford, CT	80	77	3	5
Allentown, PA	79	76	5	7
Portland, ME	79	76	2	2
Worcester, MA	80	75	9	

## Min Temps:

- Tied all-time warmest on record (since 1872) for Boston and warmest for July for Providence (since 1904)
- Ranked among 10 all-time warmest for at least 12 sites
- Ranked among 10 warmest for July for at least 17 sites



# July Precipitation



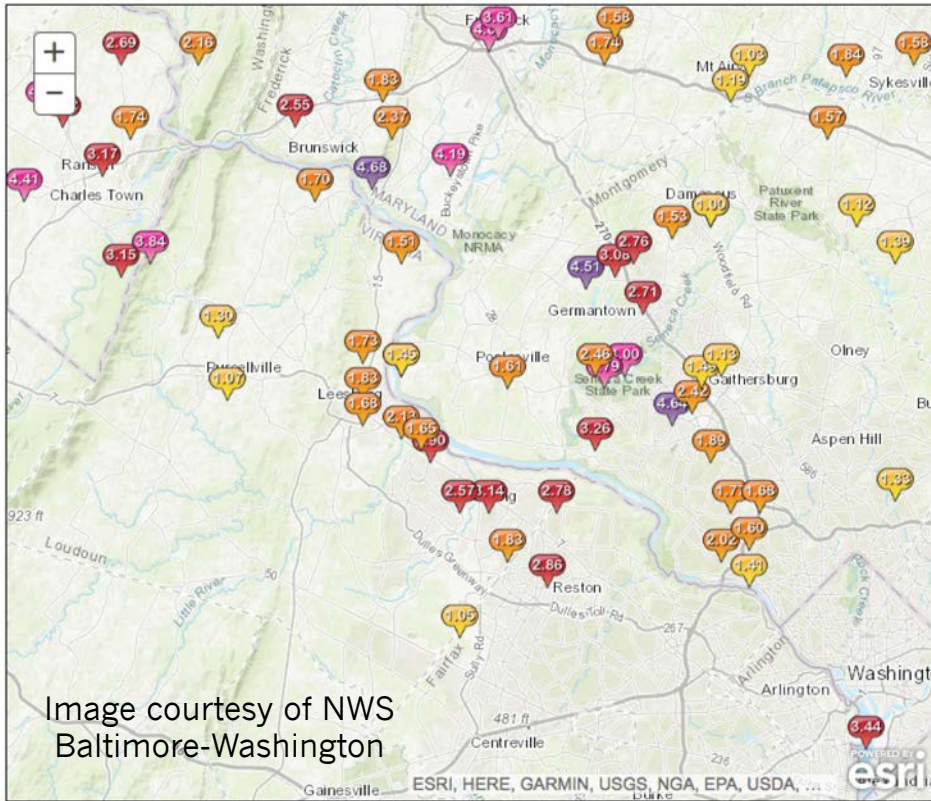
From 25% of normal to more than 200% of normal

# July Flash Flooding

Several events during the month – two examples

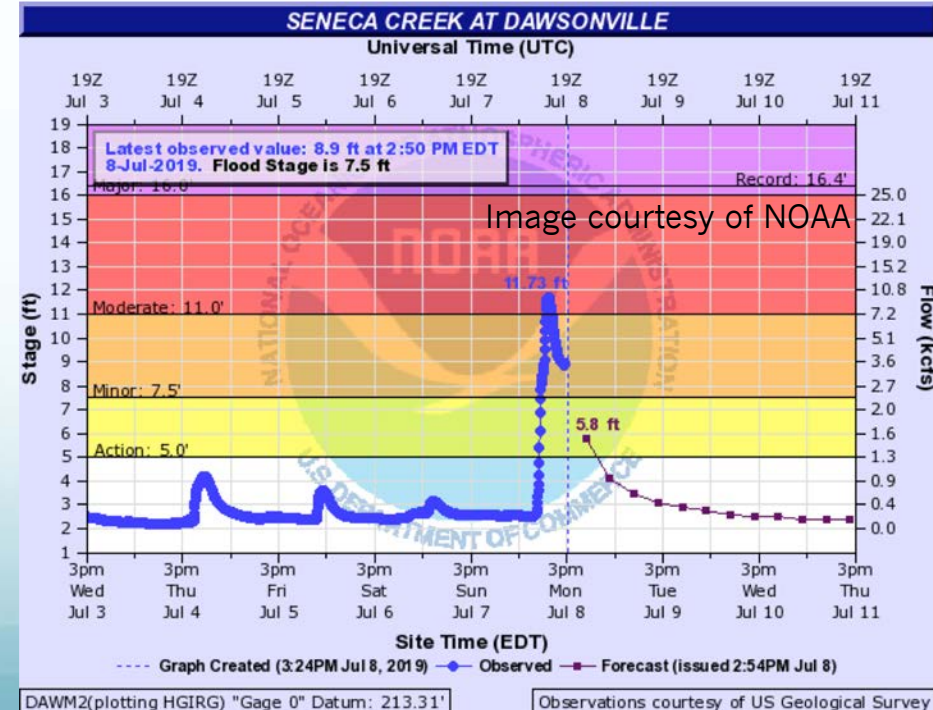
July 8:

- Washington, D.C., had 3.30” in 1 hour (almost a July’s worth)
- Seneca Creek (MD) rose more than 5 ft. in an hour (below)
- Flash Flood Emergency in D.C.



July 11:

- Reports of 2.50” in 1 hour in Pennsylvania
- Whitemarsh Run (MD) rose more than 6 ft. in 1 hour
- Flash Flood Emergency (Southeast Pennsylvania)





# July Severe Weather

Numerous days with thunderstorms but few tornadoes:

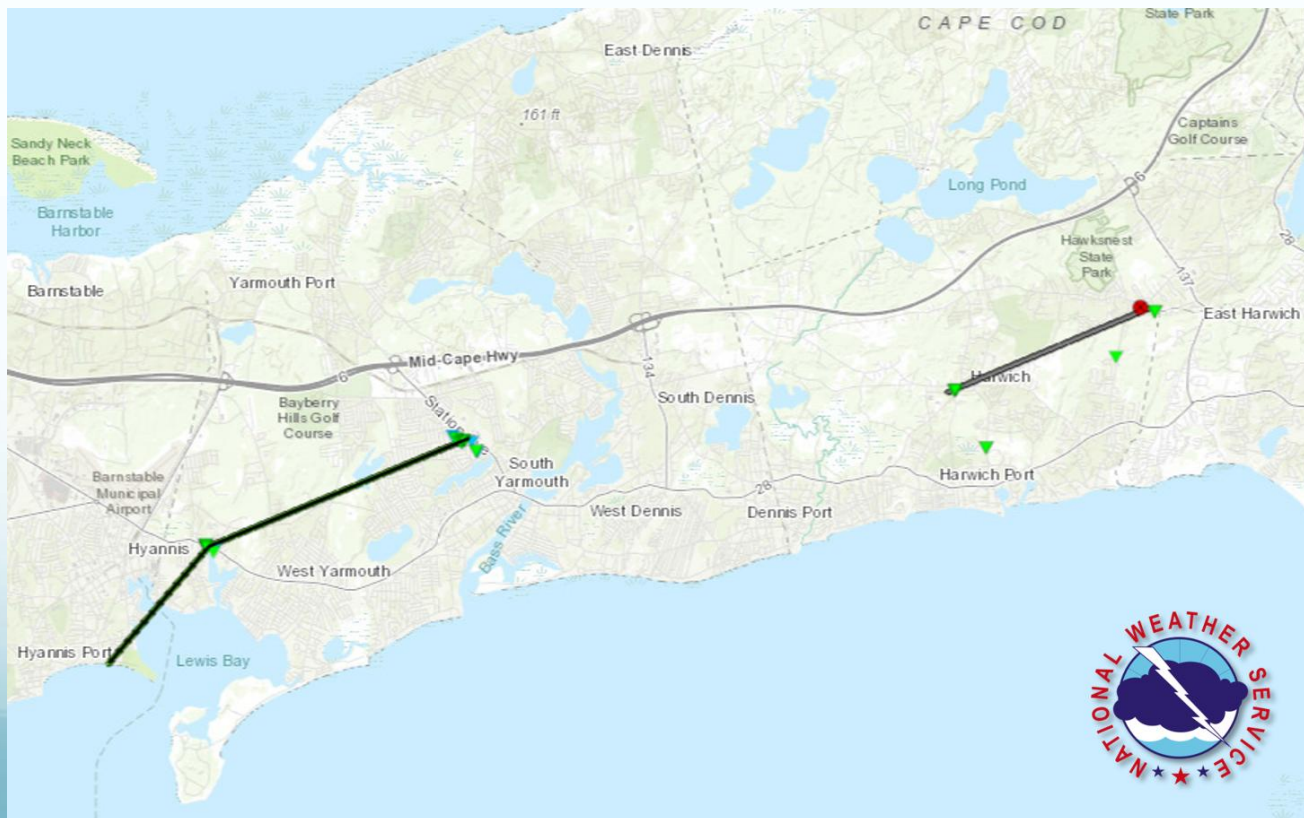
- Northeast's July average is 13
- July 2019 had 5

New Jersey:

- an EF-0 and EF-1

Massachusetts:

- three EF-1s on Cape Cod
- Only 3 other Cape Cod tornadoes since 1950

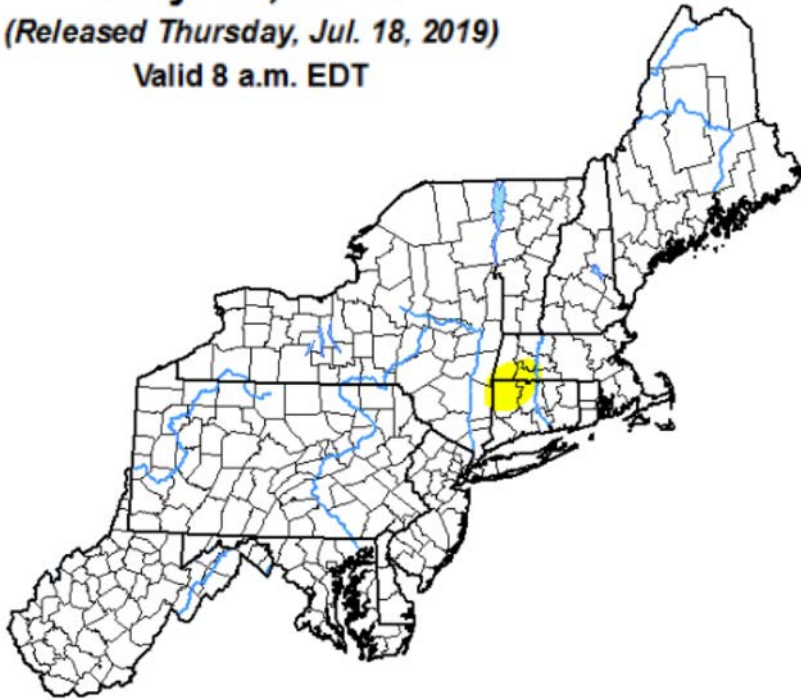


# Drought Monitor

**July 16, 2019**

*(Released Thursday, Jul. 18, 2019)*

Valid 8 a.m. EDT



Intensity:

 D0 Abnormally Dry

U.S. Drought Monitor Class Change - Northeast  
1 Week



July 23, 2019  
compared to  
July 16, 2019

droughtmonitor.unl.edu

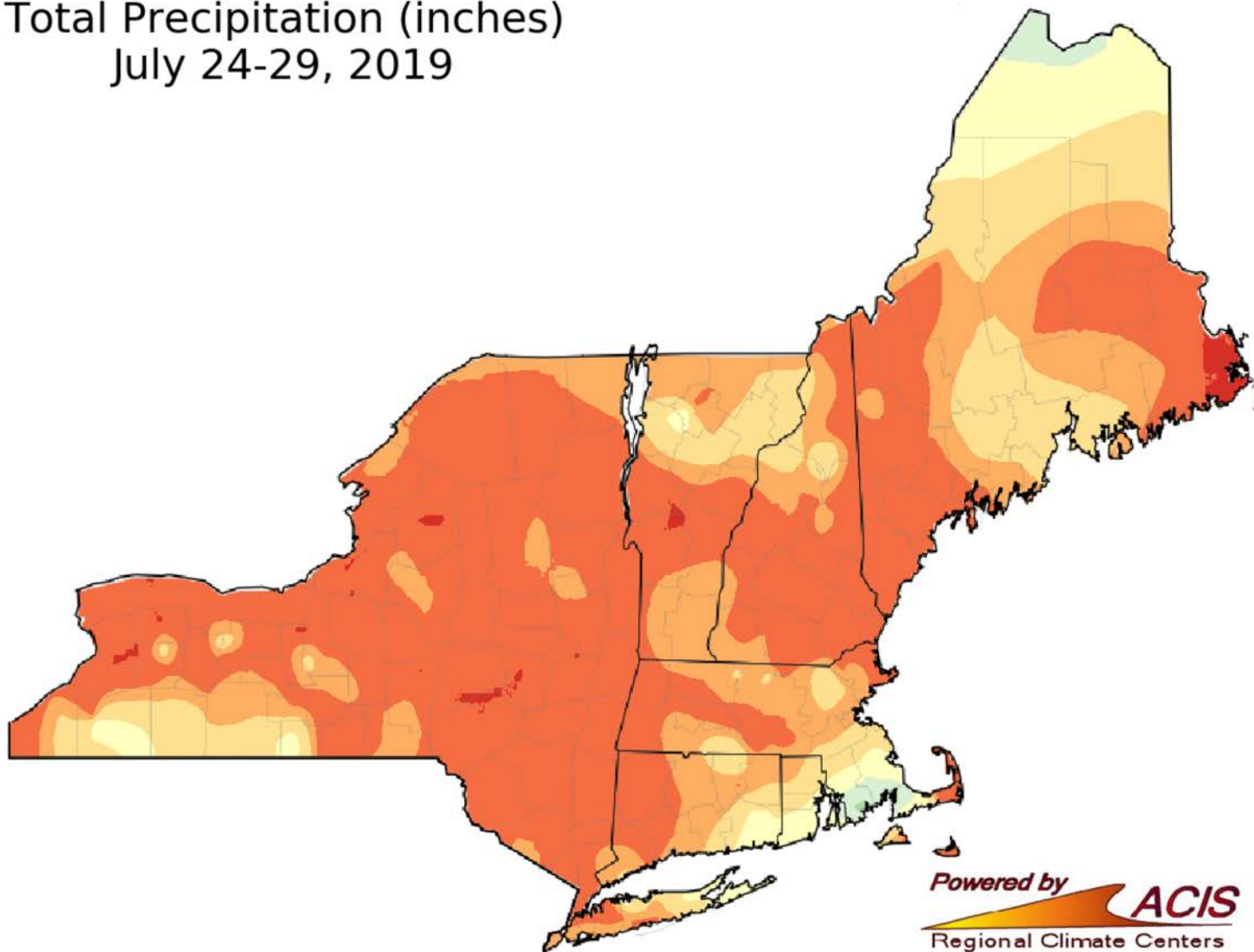


Mid-July:

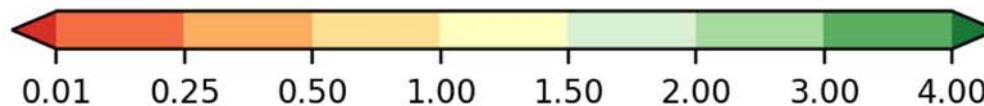
- 1% of the region was abnormally dry
- improved the following week



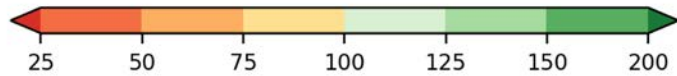
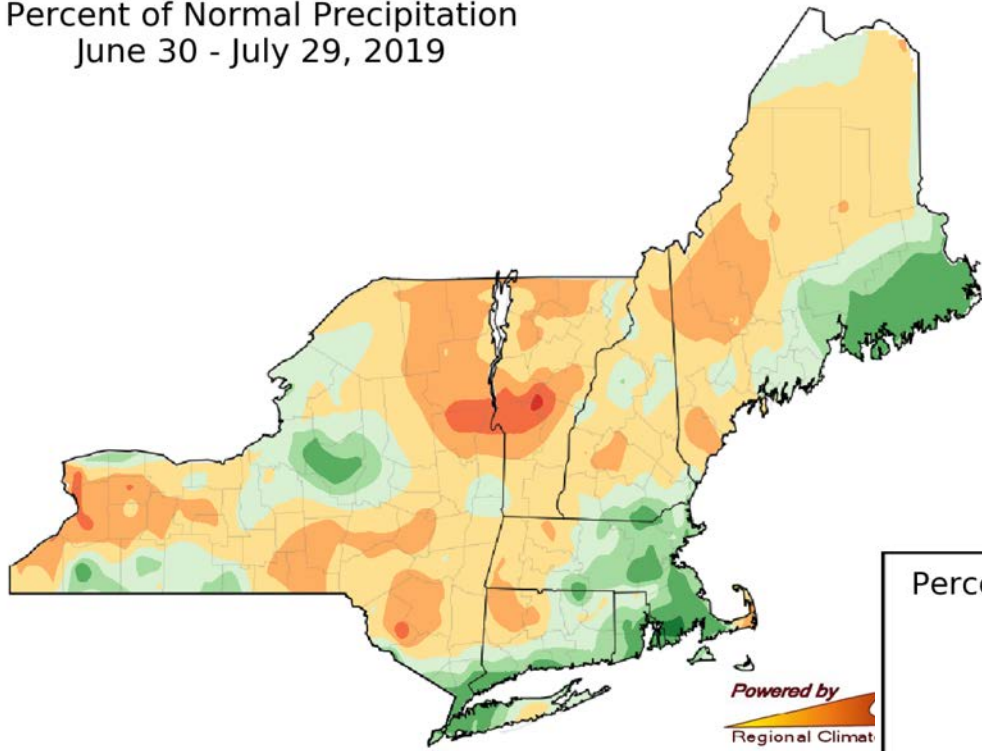
# Total Precipitation (inches) July 24-29, 2019



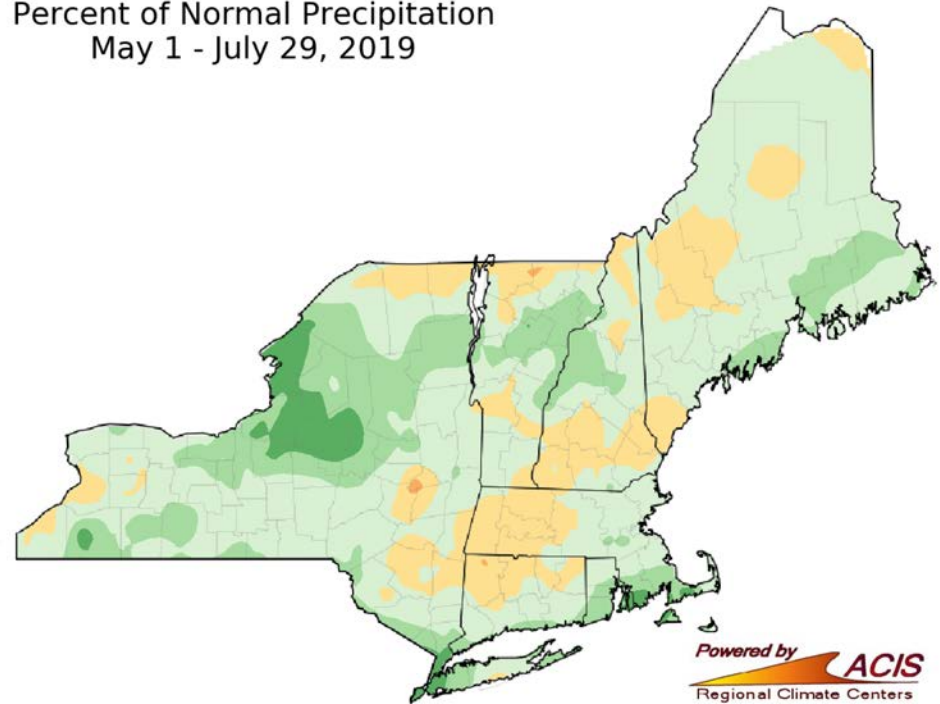
Powered by **ACIS**  
Regional Climate Centers



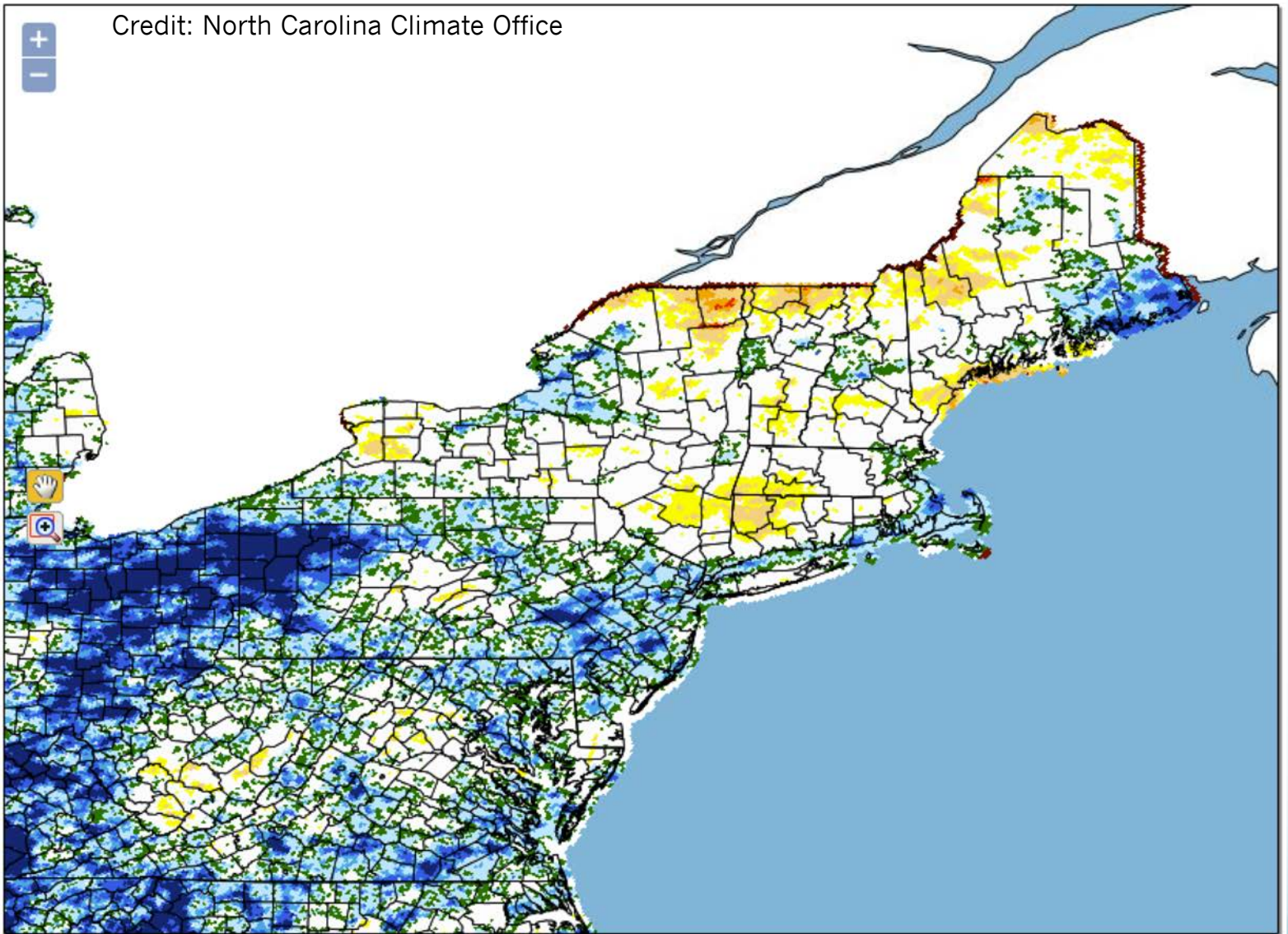
Percent of Normal Precipitation  
June 30 - July 29, 2019



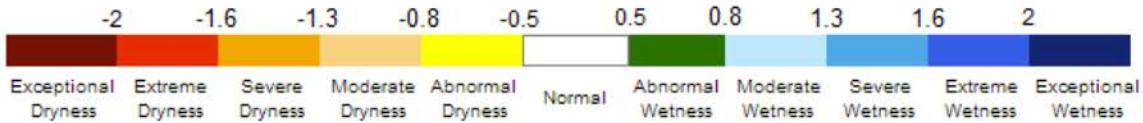
Percent of Normal Precipitation  
May 1 - July 29, 2019



Credit: North Carolina Climate Office



### 60 day SPI for July 29, 2019



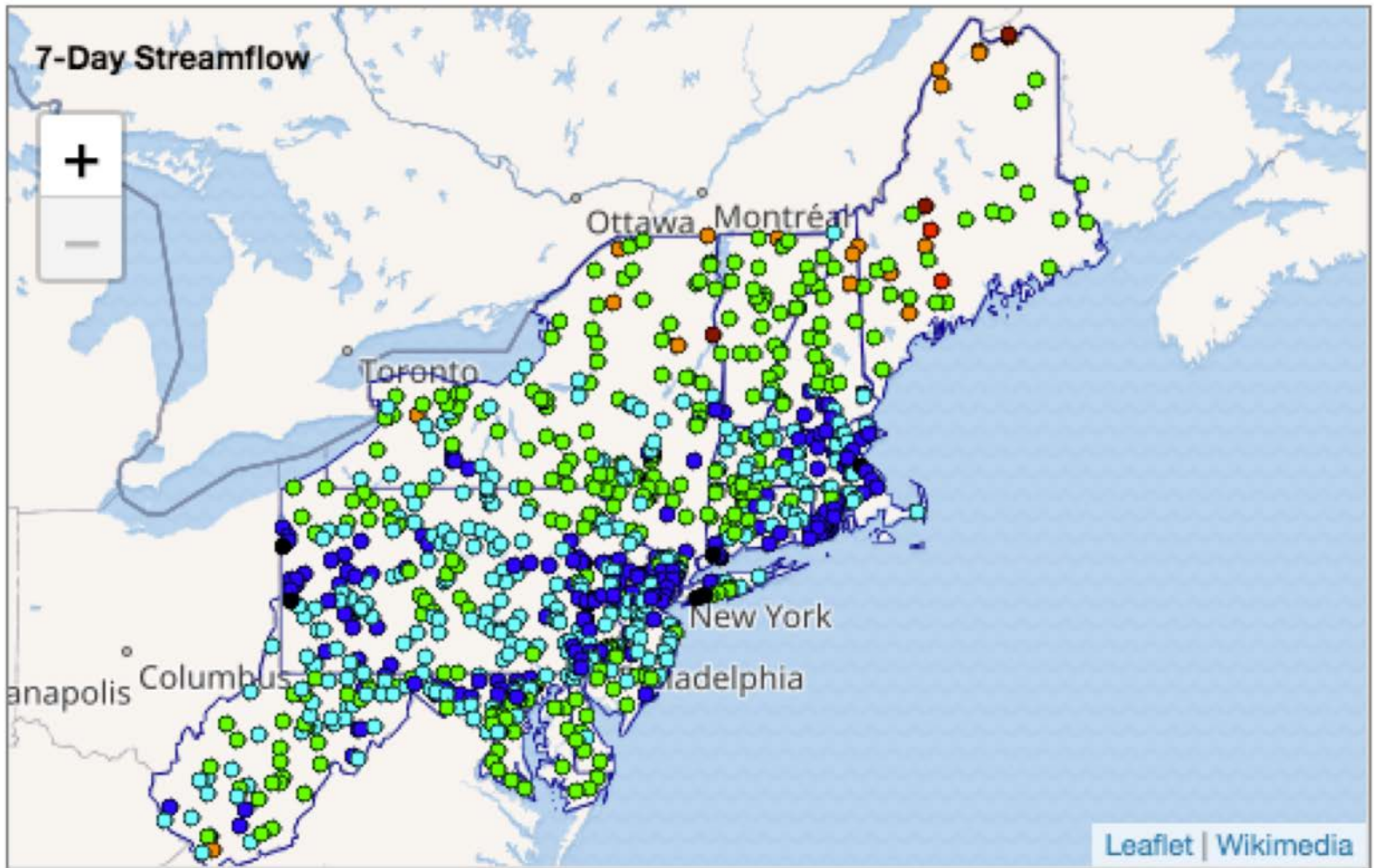
Transparency:



DOWNLOAD  
GEOTIFF





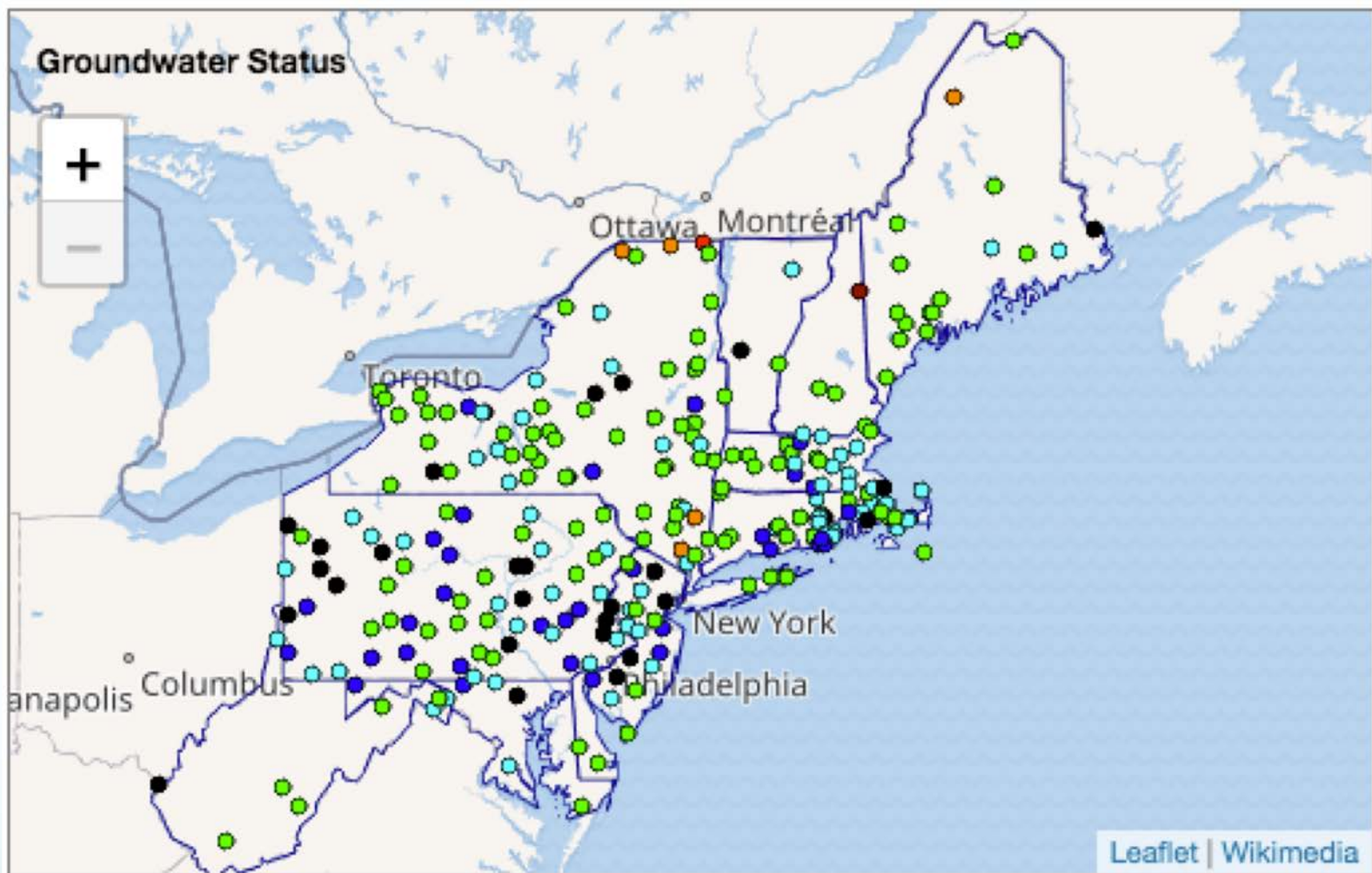


**Explanation - Percentile Classes**

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

Data provided by [USGS WaterWatch - Streamflow](#).





**Explanation - Percentile Classes**

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

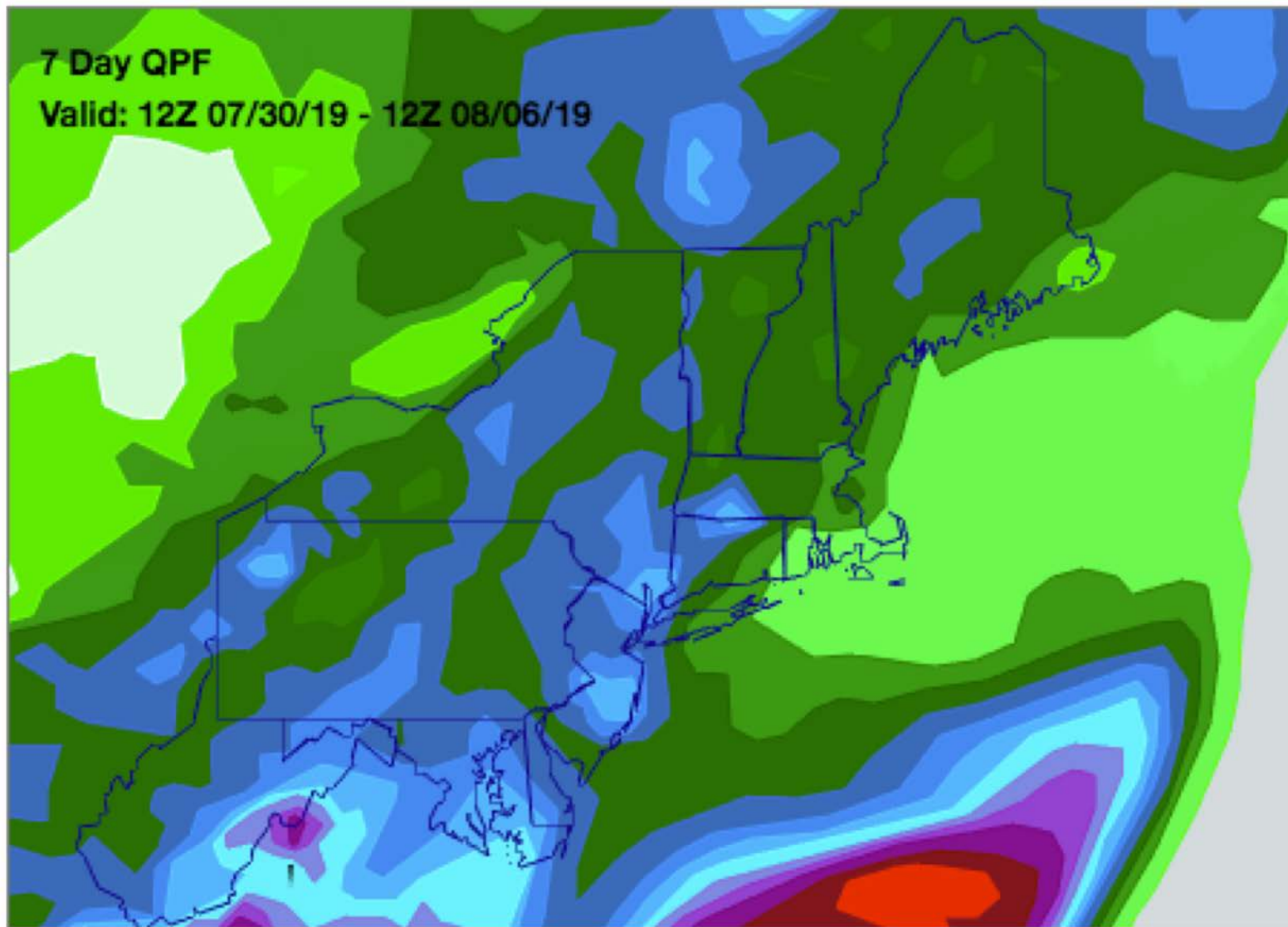
Data provided by [USGS Groundwater Watch](#) - [Climate Response Network](#).



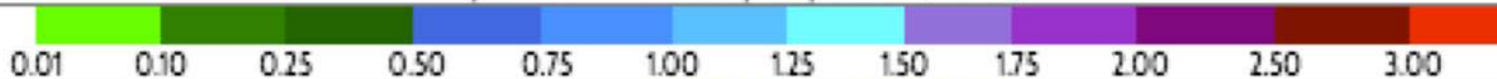


# 7 Day QPF

Valid: 12Z 07/30/19 - 12Z 08/06/19



Explanation - Forecast precipitation (inches)

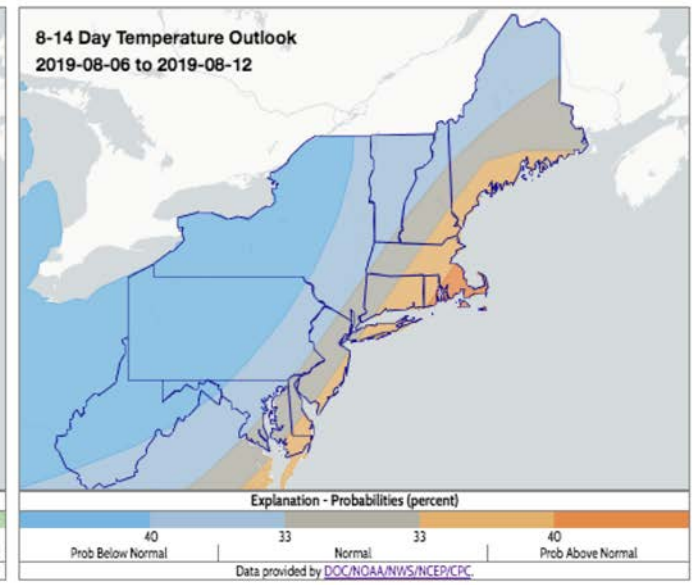
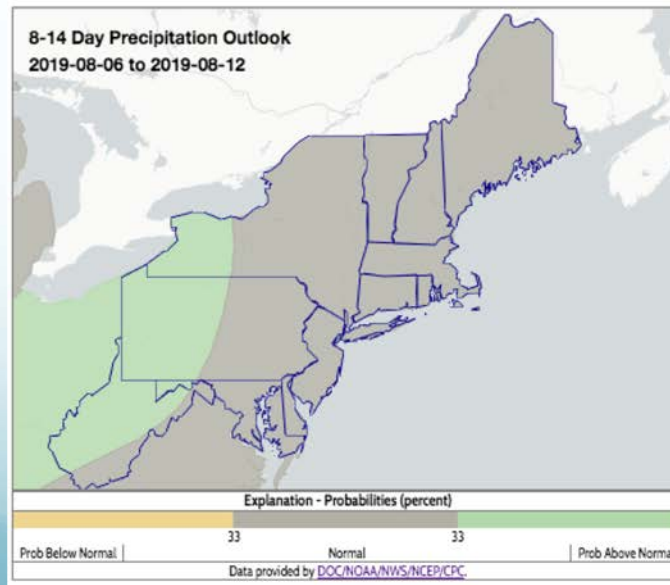
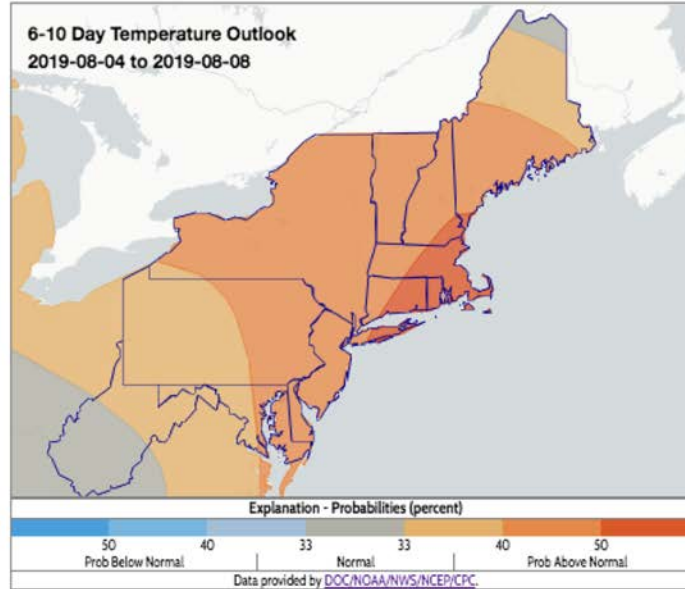
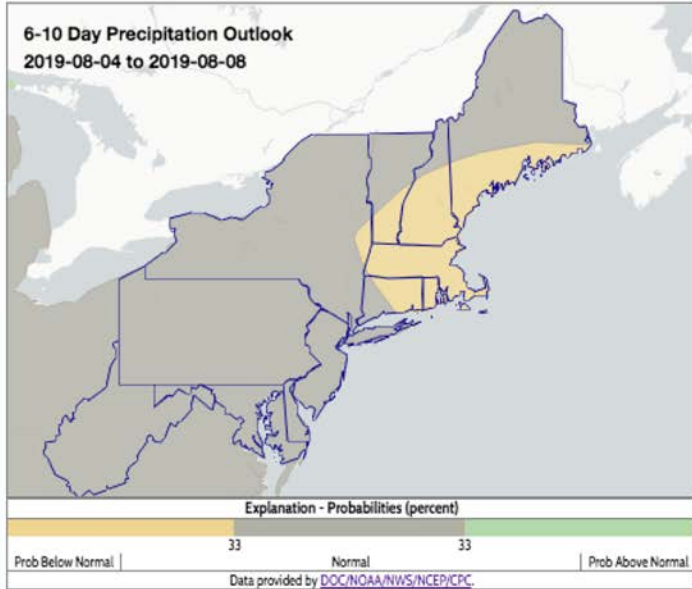


Data provided by [DOC/NOAA/NWS/NCEP/WPC](https://www.noaa.gov/).

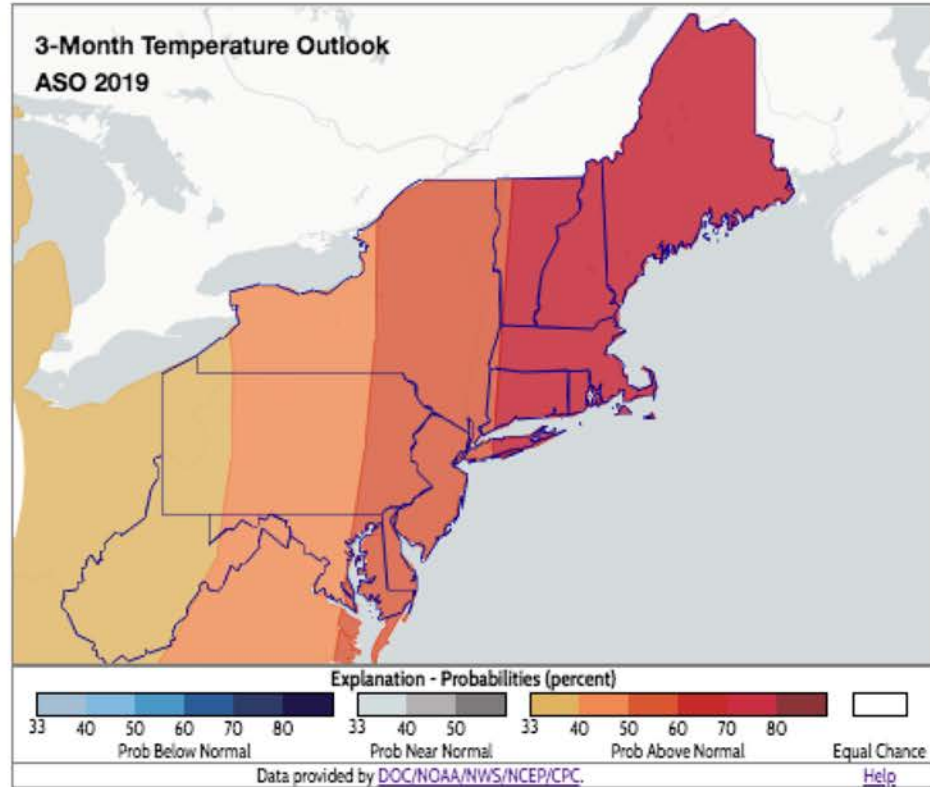
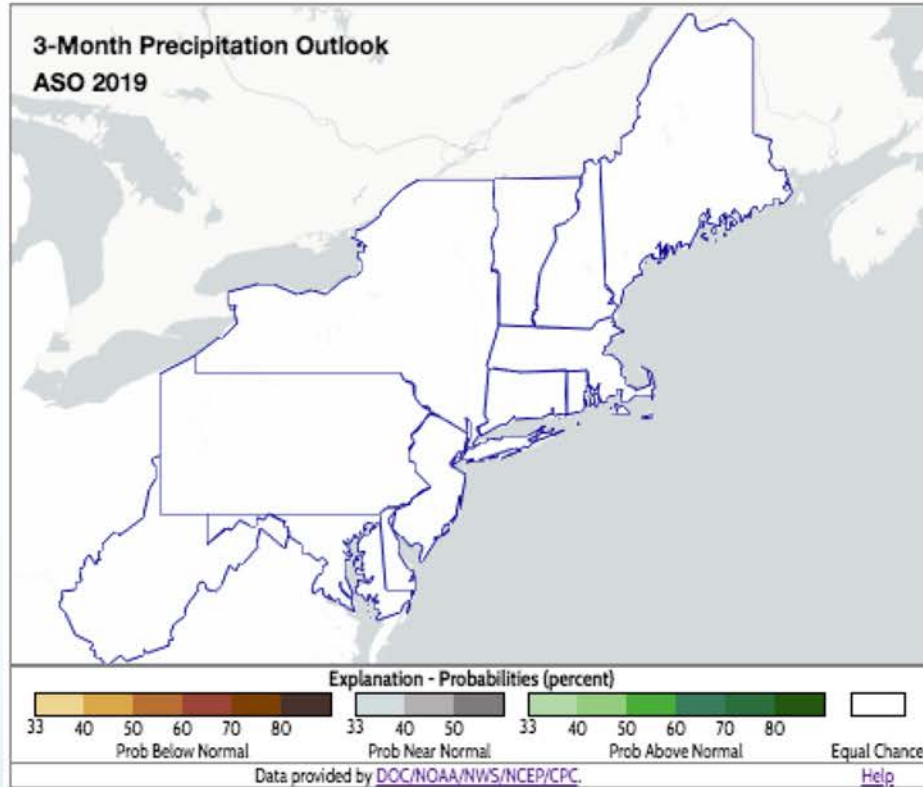




# Short-term Outlooks



# Long-term Outlooks



# Contact Information

- [nrcc@cornell.edu](mailto:nrcc@cornell.edu)
- 607-255-1751

## Upcoming Webinars

- Thursday, August 29 at 9:30 am
  - Updated Hurricane Outlook
- Thursday, September 26 at 9:30 am
  - Massachusetts Hazards and Climate Vulnerability Assessment
- Thursday, October 31 at 9:30 am
  - Report Out on our Special Extreme Precip Webinar Series & Regional Workshop

[www.nrcc.cornell.edu](http://www.nrcc.cornell.edu)