

# September Review & Northeast DEWS Discussion

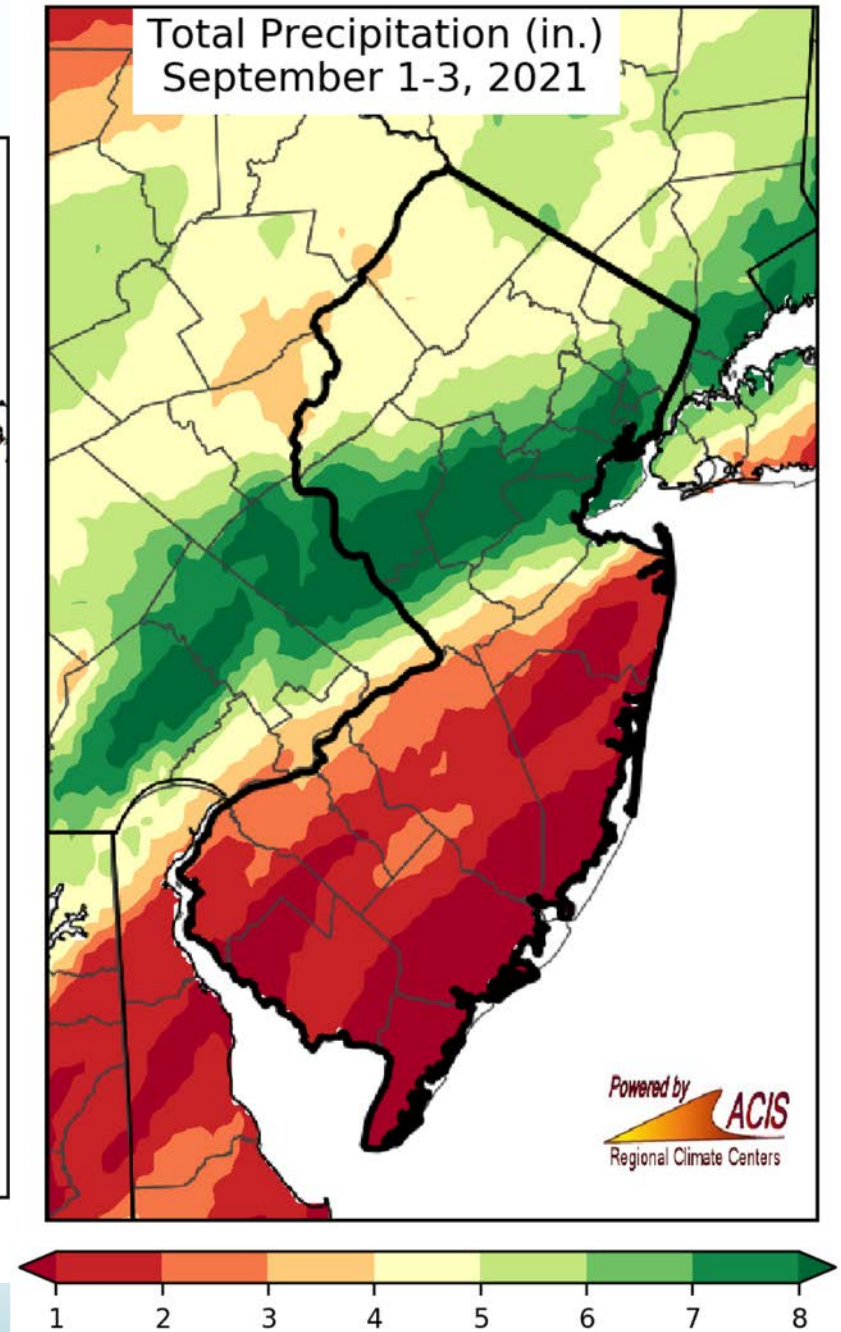
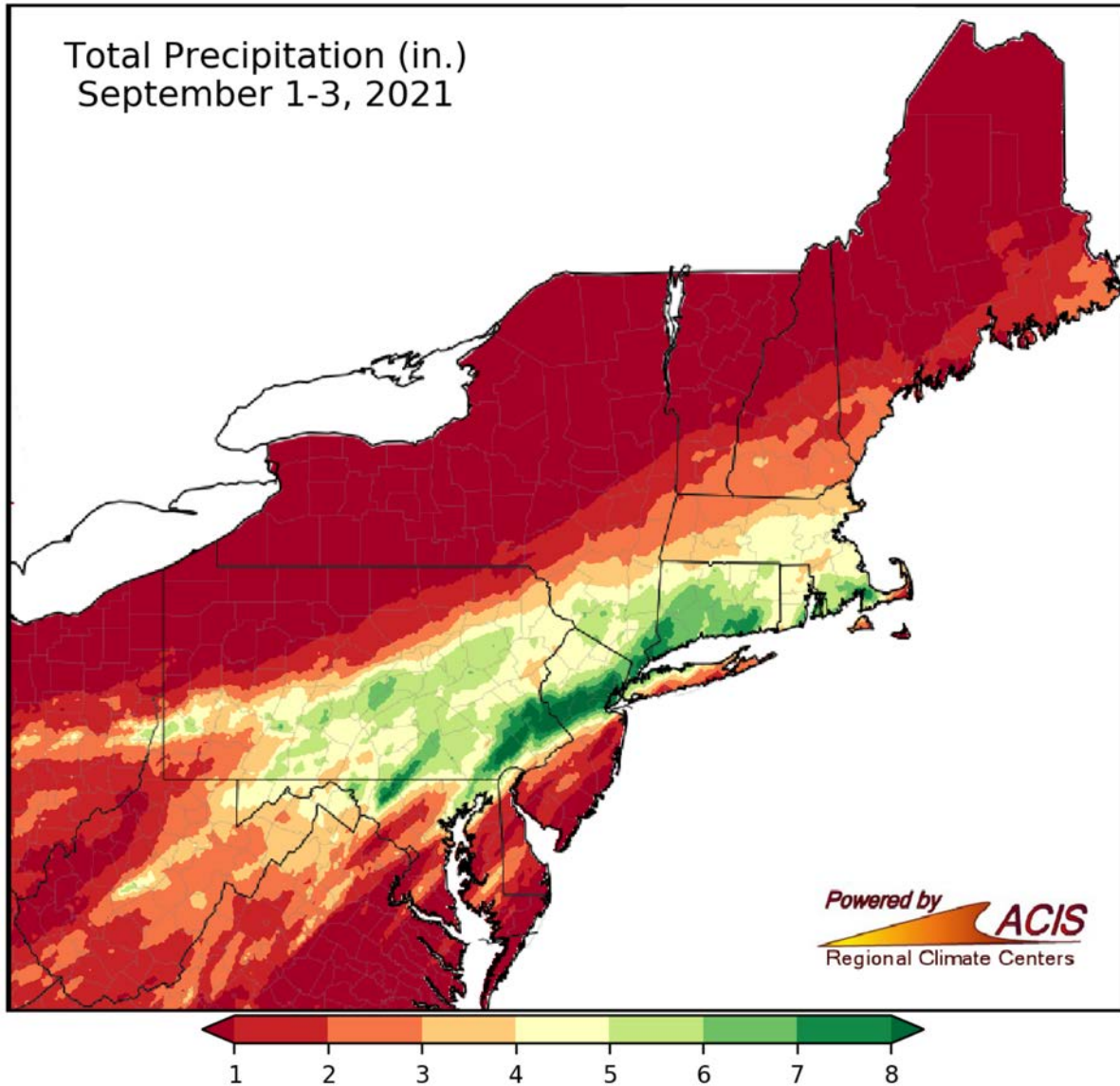
By: Samantha Borisoff, Climatologist  
Northeast Regional Climate Center



Northeast Regional  
Climate Center



# Ida Rainfall



# Ida Rainfall

Station	Sep. 1 Rainfall	Wettest Sep. Day Rank	All-time Wettest Day Rank	Wettest Sep. (month) Rank
Newark, NJ	8.41	1	1	4
Central Park, NY	7.13	2	5	18
LaGuardia Airport, NY	6.80	1	1	9
Harrisburg, PA	6.64	2	3	13
Bridgeport, CT	5.77	1	3	13
Scranton, PA	5.09	2	2	
Allentown, PA	4.15	6		
Baltimore, MD	4.13	8		
Hartford, CT	4.07	7		
Kennedy Airport, NY	2.56	7		

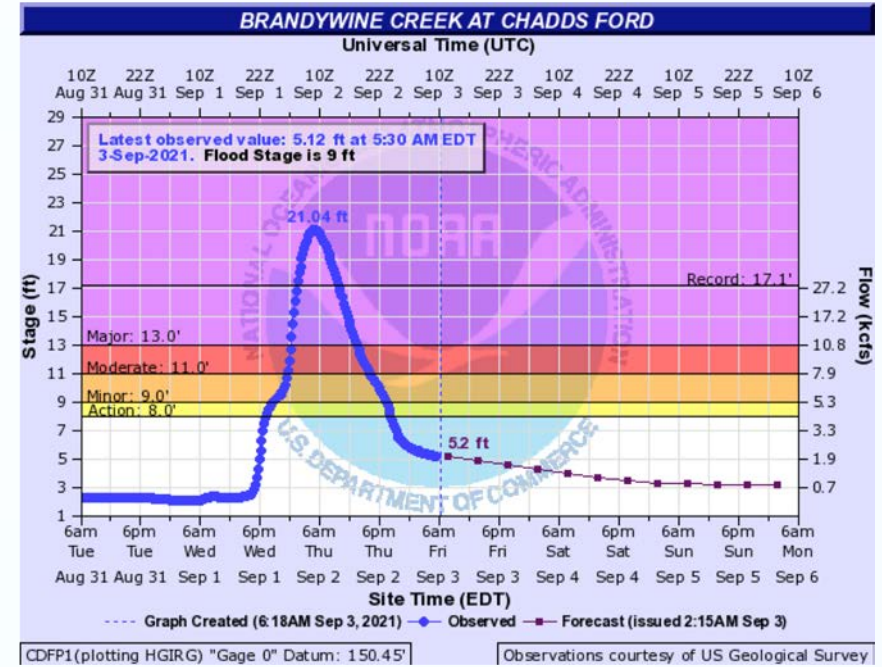
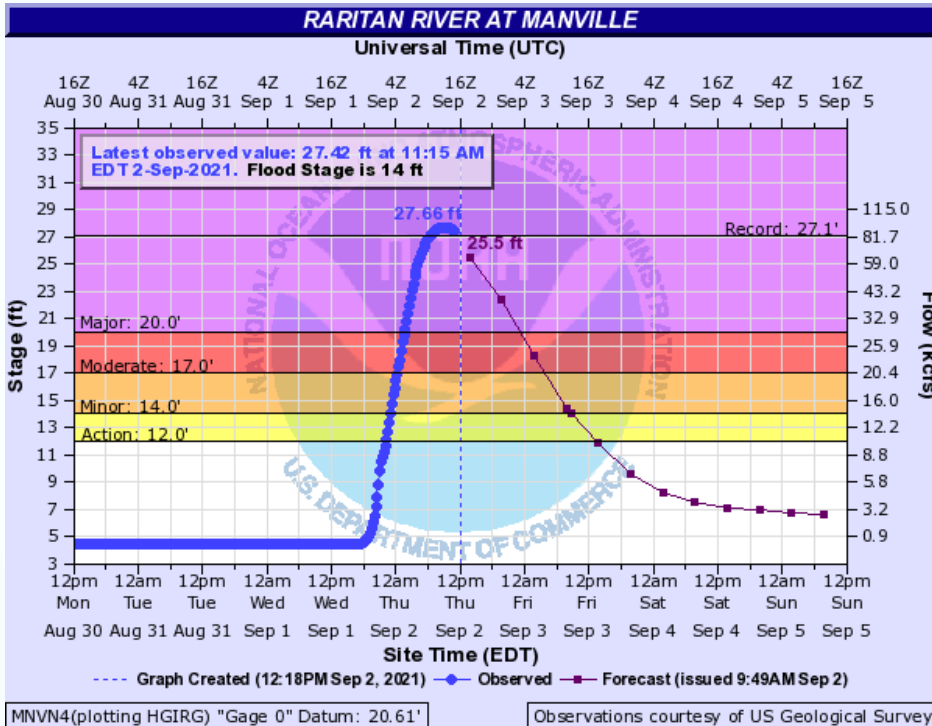
Station	Hourly Period of Record	1-hour Rainfall	2-hour Rainfall	6-hour Rainfall	Daily Period of Record	Daily Rainfall
Central Park, NY	1889-2020	3.15*	4.65*	6.63*	1882-2020	7.13
LaGuardia Airport, NY	1948-2020	2.25		5.87*	1916-2020	6.80*
Newark, NJ	1948-2020	3.24*	5.06*	7.88*	1897-2020	8.41*
Westchester Co. Airport, NY	1948-2020	2.16	3.73	5.59	1944-2020	6.06

\* denotes amount was the greatest for the period of record

Station	1-hour Return Period	2-hour Return Period	6-hour Return Period	Daily Return Period
Central Park, NY	100+	500+	200+	25-50
LaGuardia Airport, NY	10+		100+	25-50
Newark, NJ	200+	500+	500+	100+
Westchester Co. Airport, NY	25-50	200+	100+	10-25



# Ida Flooding



## Neshaminy Creek at Langhorne, PA Wednesday morning September 1

Notice from the same location while cresting during this major flood

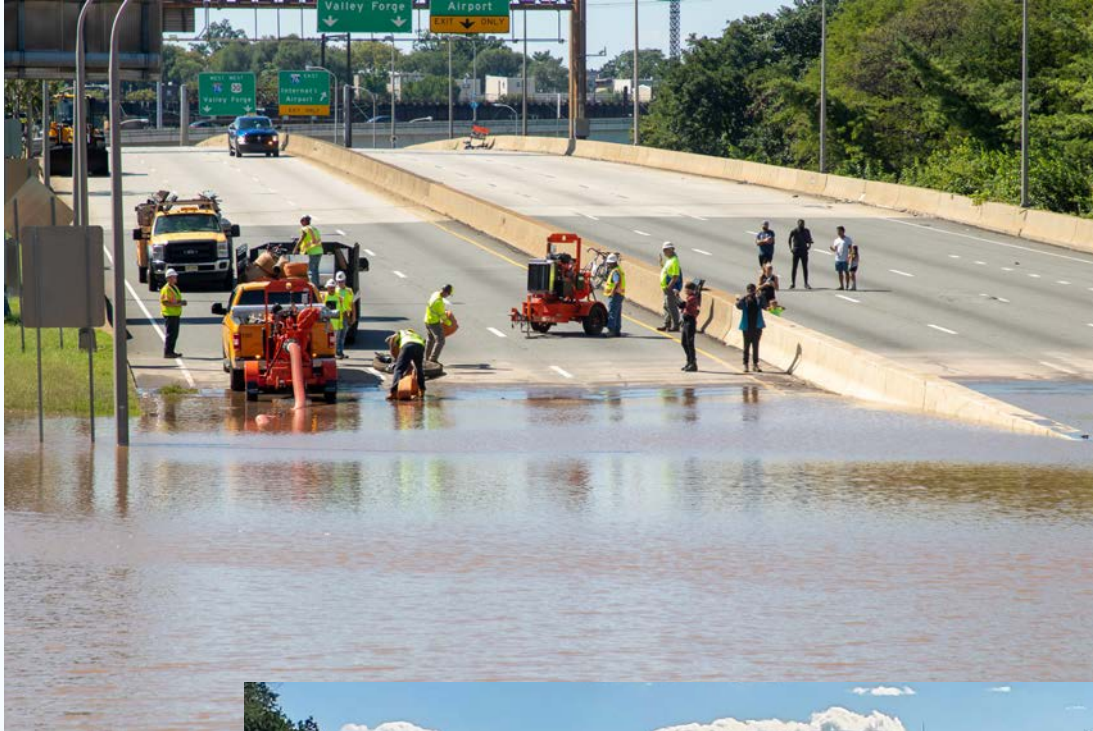
- 1) the water height and
- 2) the amount of vegetation flattened by the flowing water.



NOAA National Weather Service  
Middle Atlantic River Forecast Center

weather.gov/MARFC  
Facebook/Twitter: @NWSMARFC

# Ida Flooding



Courtesy of  
City of  
Philadelphia



Courtesy of  
NYS DEC



Courtesy of  
NYS Police



Courtesy of  
USGS

# Ida Tornadoes



Courtesy of  
NWS PHI

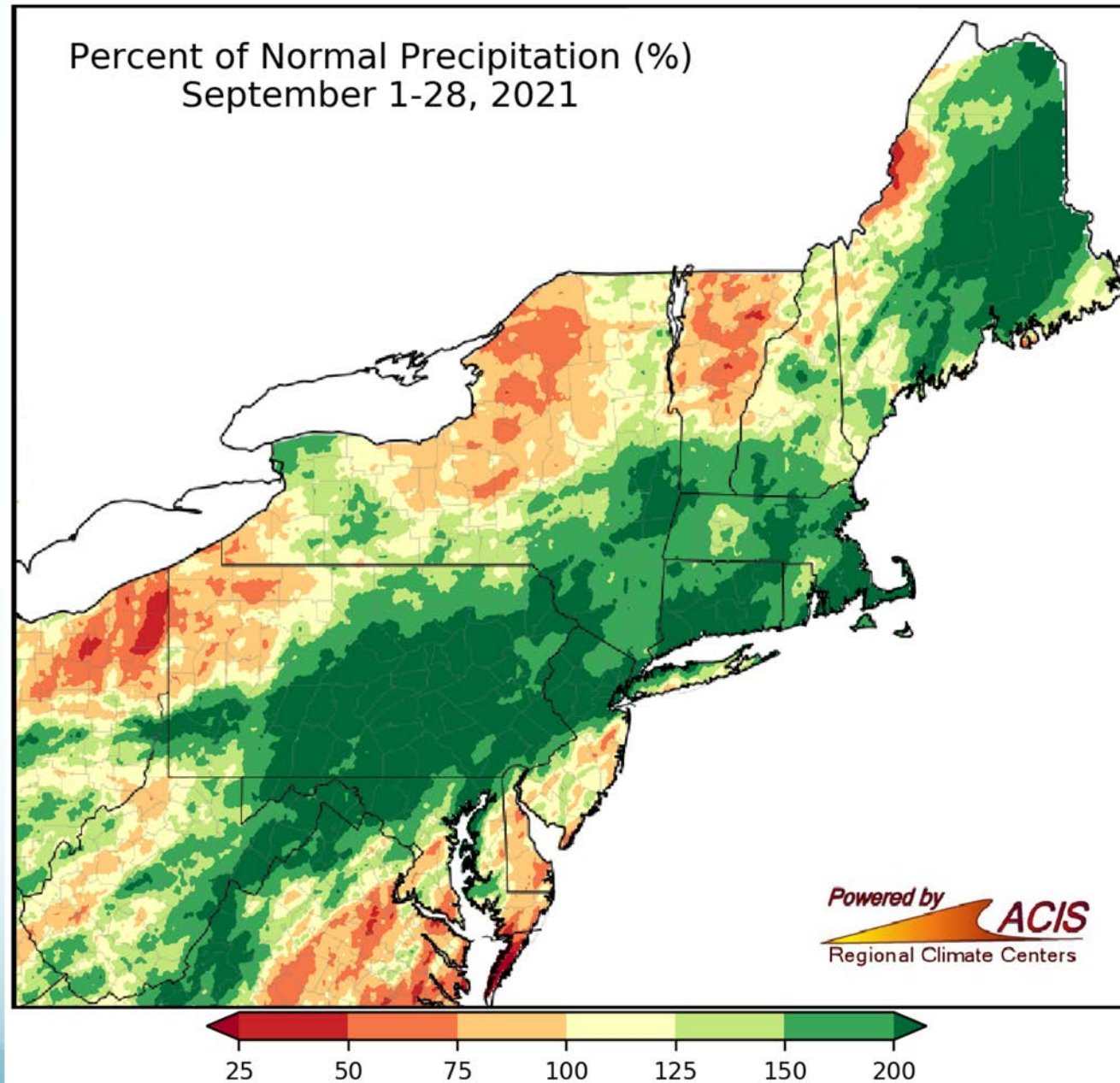
Courtesy of  
NWS PHI



Courtesy of NWS LWX



# September Precipitation



From 50% of normal to more than 200% of normal



# September Precipitation

## Maximum 1-Month Total Precipitation for Avoca Area, PA (ThreadEx)

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

Rank	Value	Ending Date	Missing Days
1	11.76	1955-08-31	0
2	11.75	1945-07-31	0
3	11.46	2011-09-30	0
4	10.59	2018-08-31	0
5	10.49	2021-09-30	2
6	9.76	1999-09-30	0
7	9.70	1947-07-31	0
8	9.56	1983-04-30	0
9	9.41	1946-07-31	0
10	9.38	2004-09-30	0

Period of record: 1901-01-01 to 2021-09-28

Location	Sep Rank (wettest)*
Newark, NJ	1
Bridgeport, CT	2
Scranton, PA	2
Harrisburg, PA	3
LaGuardia Airport, NY	4
Central Park, NY	6
Boston, MA	7
Caribou, ME	7
Washington, DC	7
Allentown, PA	8
Islip, NY	9
Worcester, MA	10
Dulles Airport, VA	16
Kennedy Airport, NY	16
Binghamton, NY	17
Elkins, WV	17
Hartford, CT	17
Buffalo, NY	19

\*data through Sep. 28

## Maximum 1-Month Total Precipitation for Newark Area, NJ (ThreadEx)

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

Rank	Value	Ending Date	Missing Days
1	18.79	2011-08-31	0
2	13.22	2005-10-31	0
3	11.85	2007-04-30	0
4	11.84	1955-08-31	0
5	11.53	1977-11-30	0
6	11.22	2020-07-31	0
7	11.14	1983-03-31	0
-	11.14	1983-04-30	0
9	10.63	1971-08-31	0
10	10.50	2003-06-30	0
-	10.50	2021-09-30	2

Period of record: 1931-02-01 to 2021-09-28

## Maximum 1-Month Total Precipitation for Middletown-Harrisburg Area, PA (ThreadEx)

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

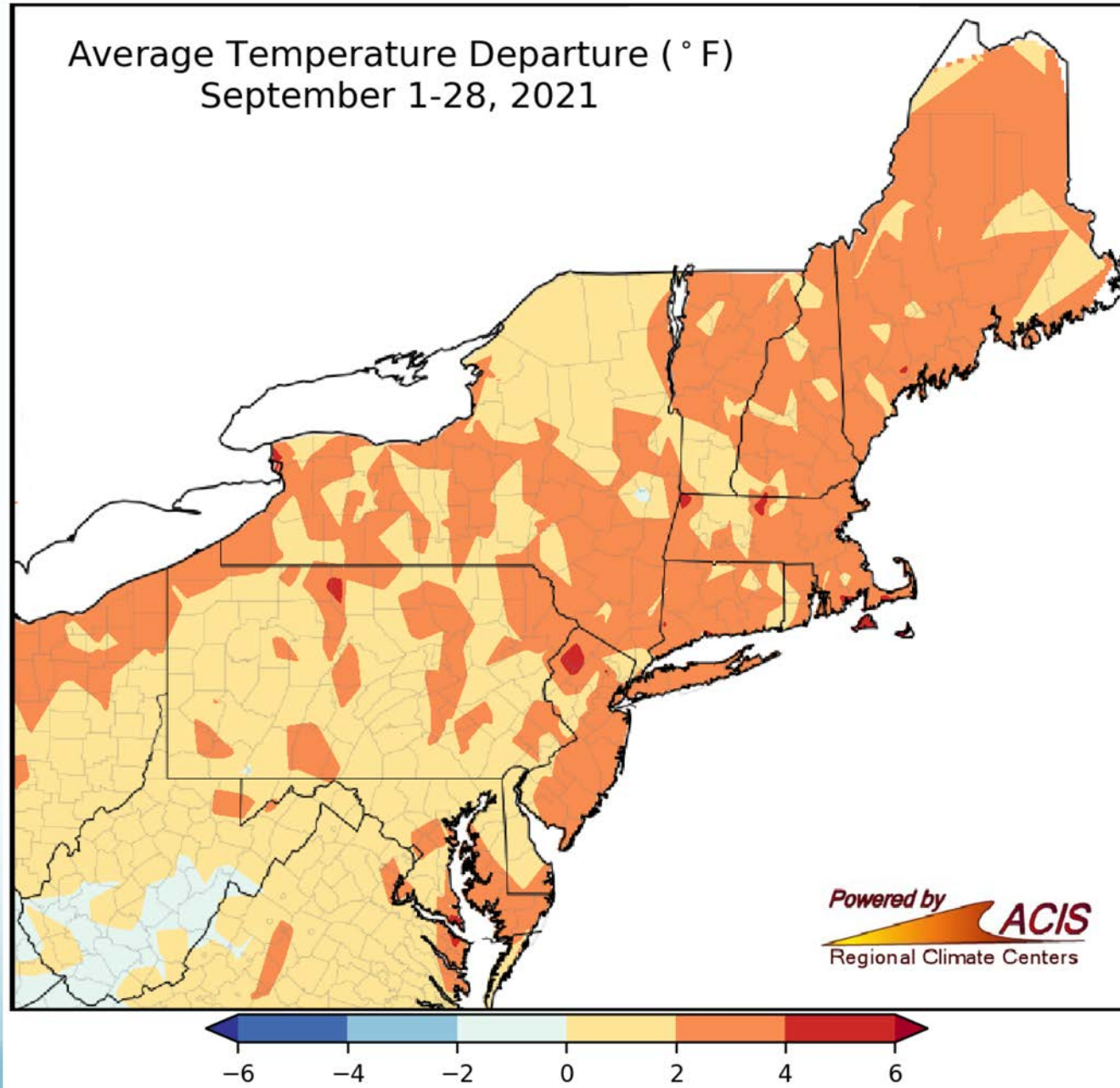
Rank	Value	Ending Date	Missing Days
1	18.55	1972-06-30	0
2	18.43	2011-09-30	0
3	14.97	1975-09-30	0
4	12.09	2018-07-31	0
5	11.40	2021-09-30	2
6	11.04	2013-10-31	0
7	10.67	1933-08-31	0
8	10.50	2004-09-30	0
9	10.29	1915-08-31	0
10	9.87	1976-10-31	0

Period of record: 1888-07-01 to 2021-09-28





# September Temperatures



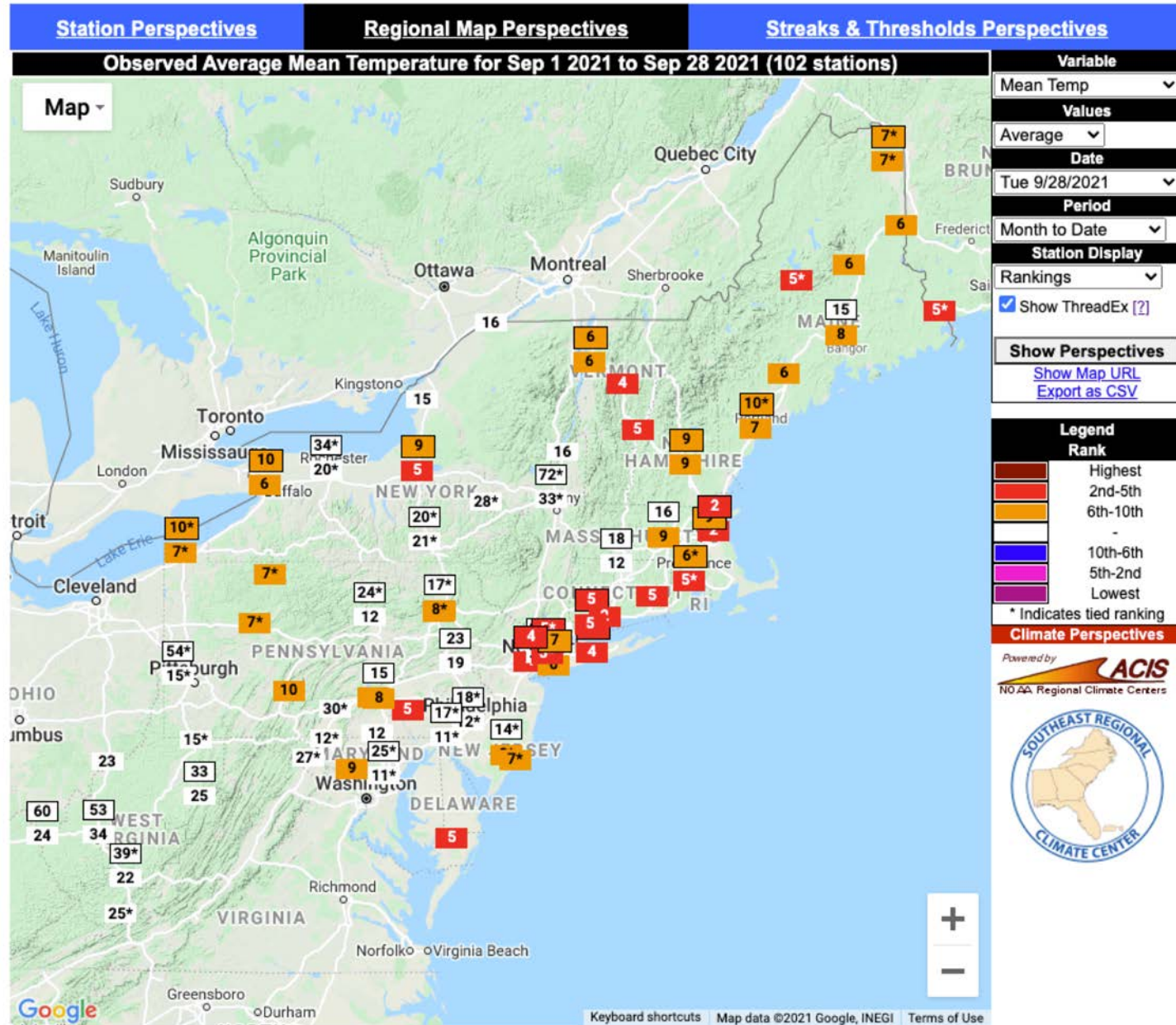
From 2°F below normal to 4°F above normal



# September Temperatures

## Southeast RCC Climate Perspectives

Expand



# Drought Monitor

## U.S. Drought Monitor Northeast Climate Region

**August 31, 2021**  
(Released Thursday, Sep. 2, 2021)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
<b>Current</b>	77.08	10.79	10.60	1.54	0.00	0.00
<b>Last Week</b> 08-24-2021	77.36	12.05	9.05	1.54	0.00	0.00
<b>3 Months Ago</b> 06-01-2021	59.73	37.44	2.83	0.00	0.00	0.00
<b>Start of Calendar Year</b> 12-29-2020	77.60	18.77	3.63	0.00	0.00	0.00
<b>Start of Water Year</b> 09-29-2020	29.84	24.85	19.05	22.37	3.89	0.00
<b>One Year Ago</b> 09-01-2020	46.06	26.00	18.72	9.23	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

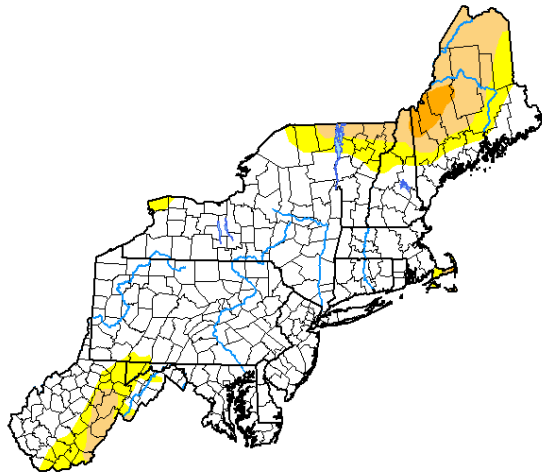
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

David Simeral  
Western Regional Climate Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



## U.S. Drought Monitor Northeast Climate Region

**September 28, 2021**  
(Released Thursday, Sep. 30, 2021)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
<b>Current</b>	90.30	6.56	2.35	0.80	0.00	0.00
<b>Last Week</b> 09-21-2021	86.21	7.97	5.03	0.80	0.00	0.00
<b>3 Months Ago</b> 06-29-2021	58.59	21.37	16.53	3.51	0.00	0.00
<b>Start of Calendar Year</b> 12-29-2020	77.60	18.77	3.63	0.00	0.00	0.00
<b>Start of Water Year</b> 09-29-2020	29.84	24.85	19.05	22.37	3.89	0.00
<b>One Year Ago</b> 09-29-2020	29.84	24.85	19.05	22.37	3.89	0.00

Intensity:

- None
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- D4 Exceptional Drought

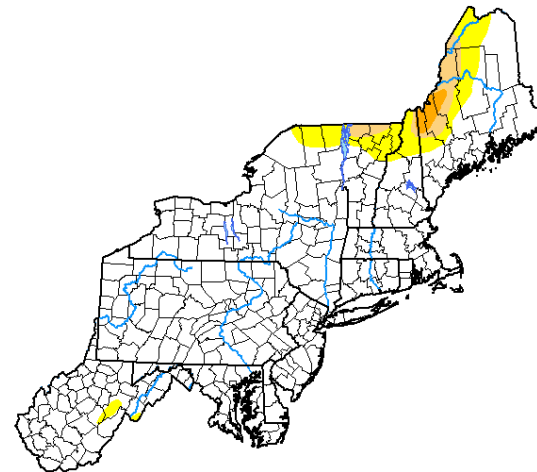
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Author:

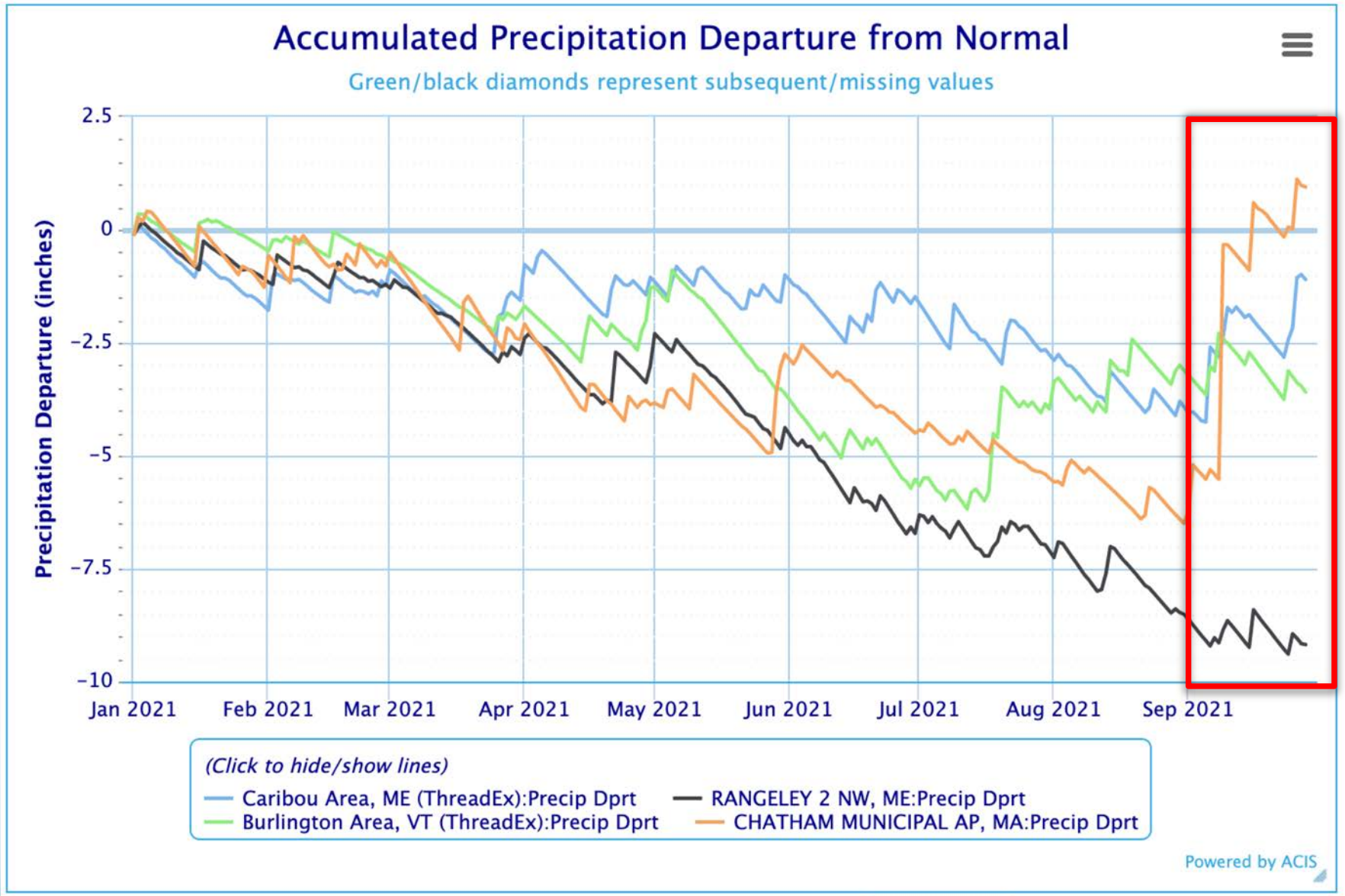
Brian Fuchs  
National Drought Mitigation Center



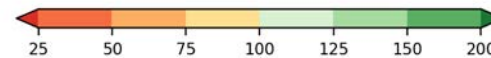
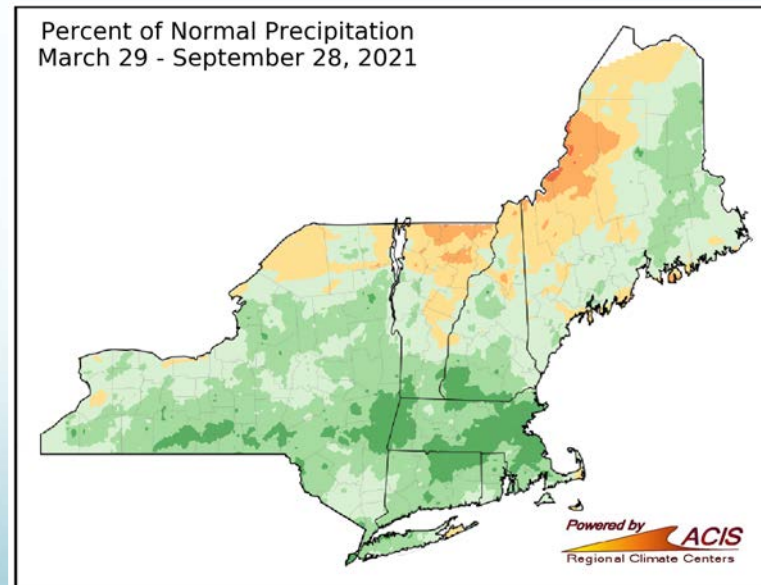
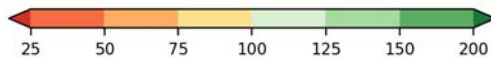
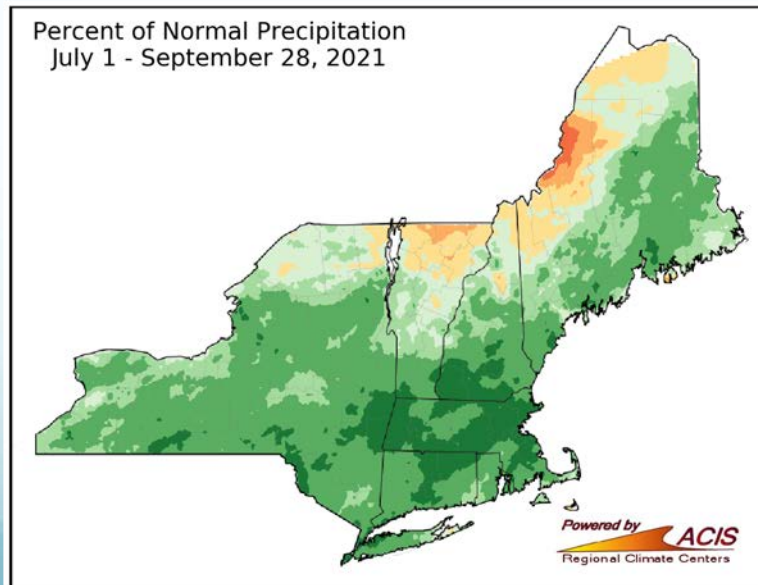
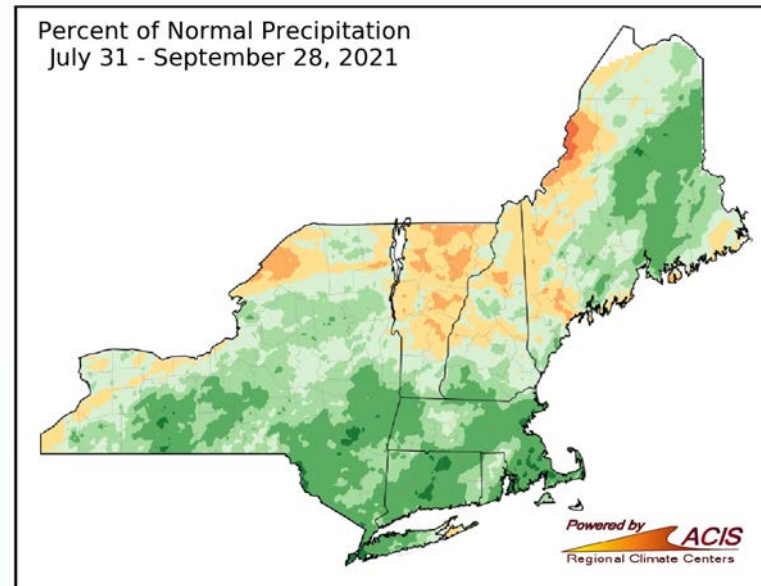
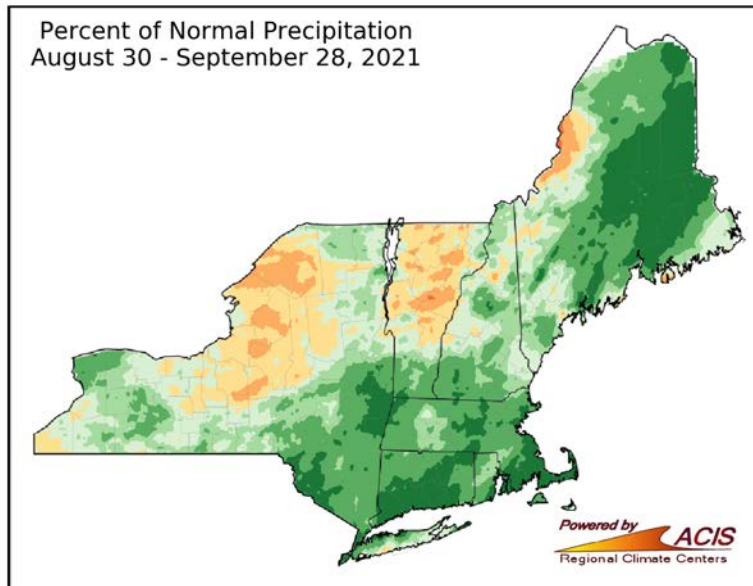
[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



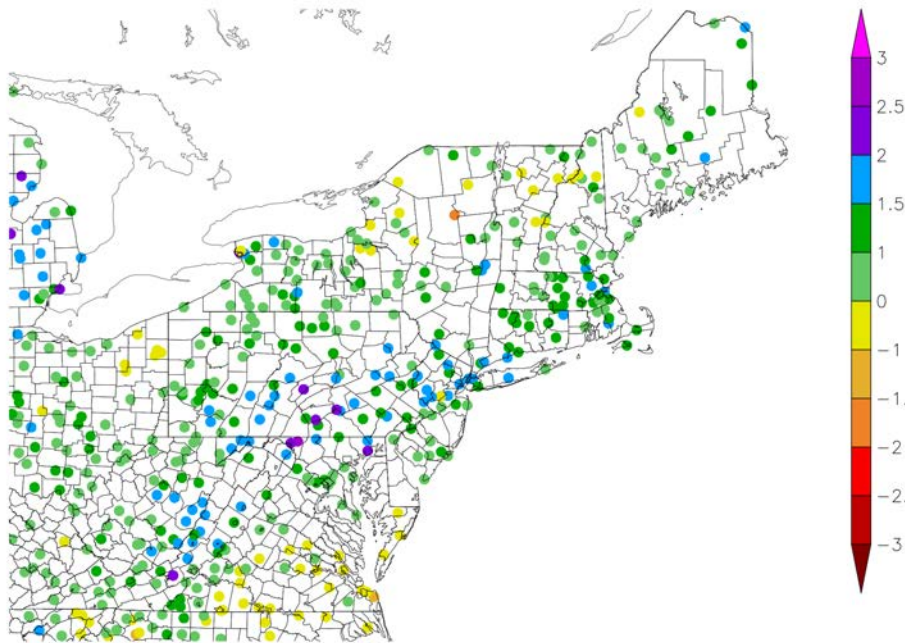
# Precipitation



# Precipitation



30 Day SPI  
8/27/2021 - 9/25/2021

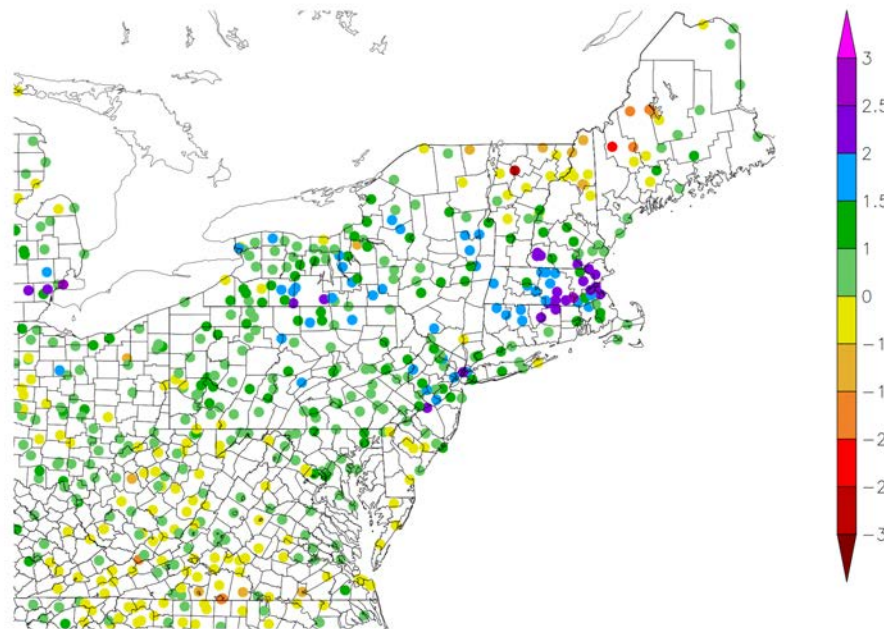


Generated 9/26/2021 at HPRCC using provisional data.

NOAA Regional Climate Center

# Standardized Precipitation Index

6 Month SPI  
3/28/2021 - 9/27/2021



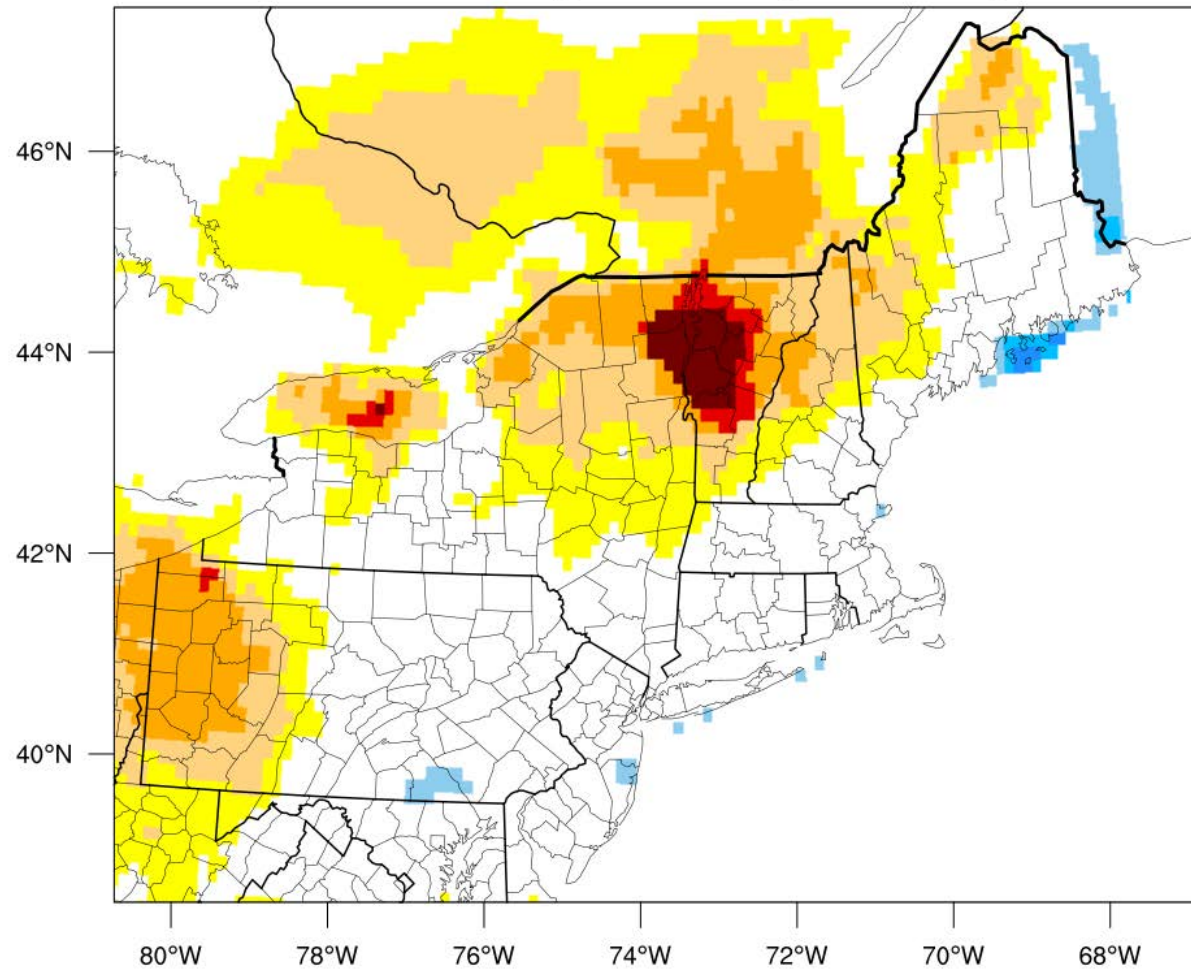
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NOAA Regional Climate Center



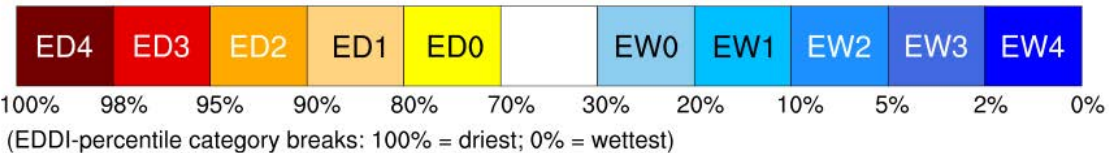
# Evap. Demand Drought Index

3-week EDDI categories for September 24, 2021



Drought categories

Wetness categories

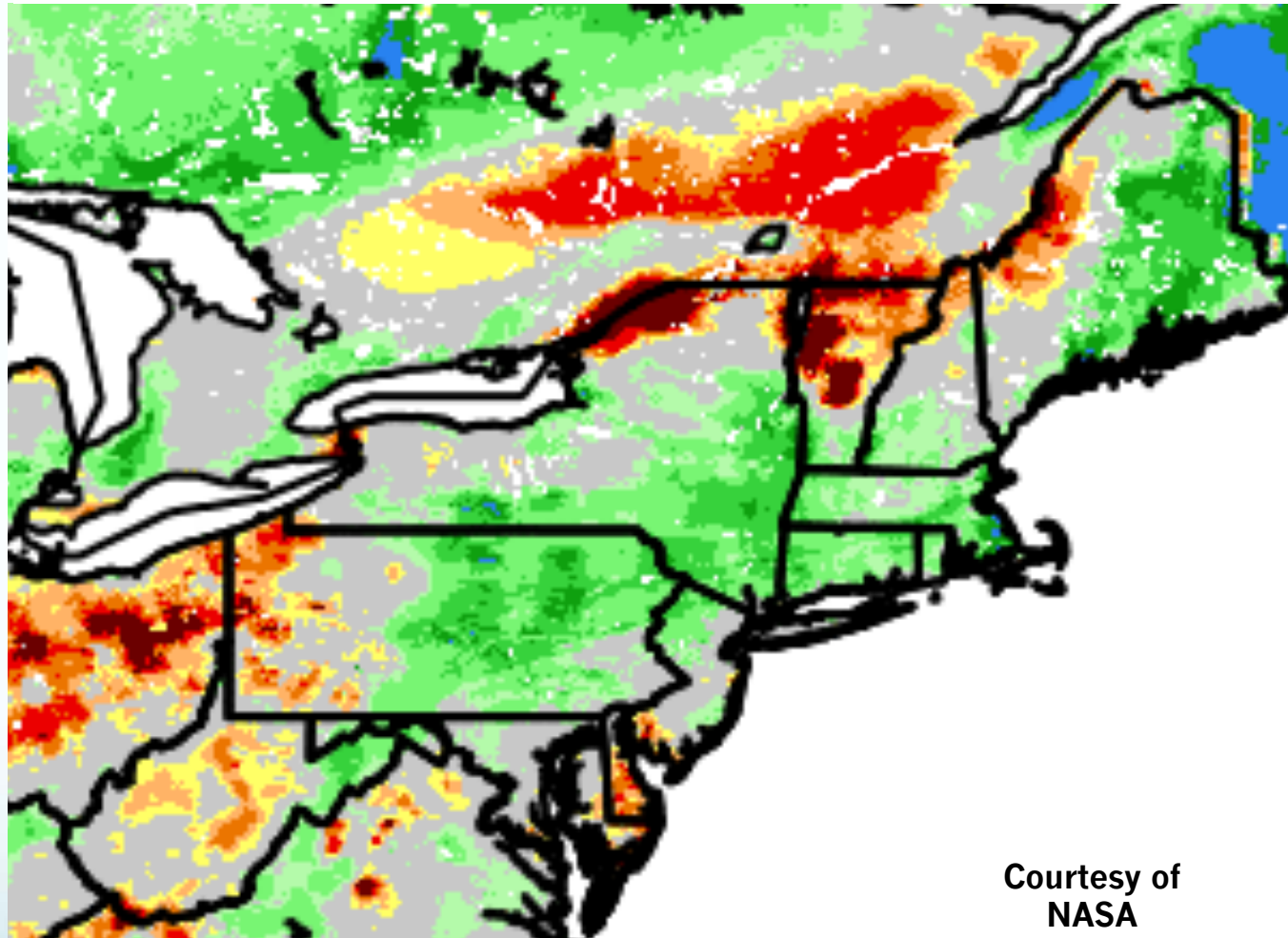


Generated by NOAA/ESRL/Physical Sciences Laboratory



# Soil Moisture

SPoRT-LIS 0-100 cm Soil Moisture percentile valid 29 Sep 2021

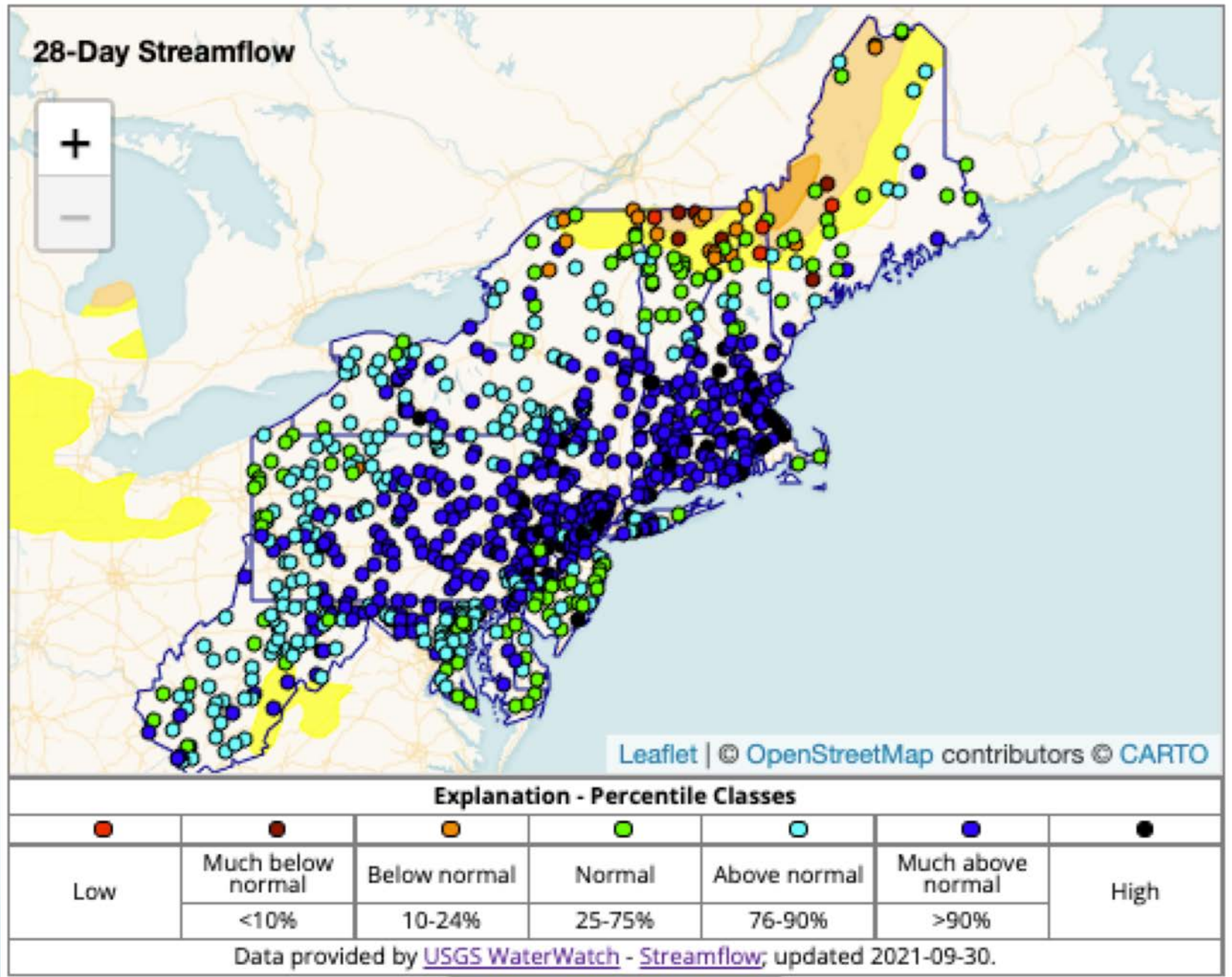


**\*\*NOTE\*\***  
**\*\*Experimental\*\***

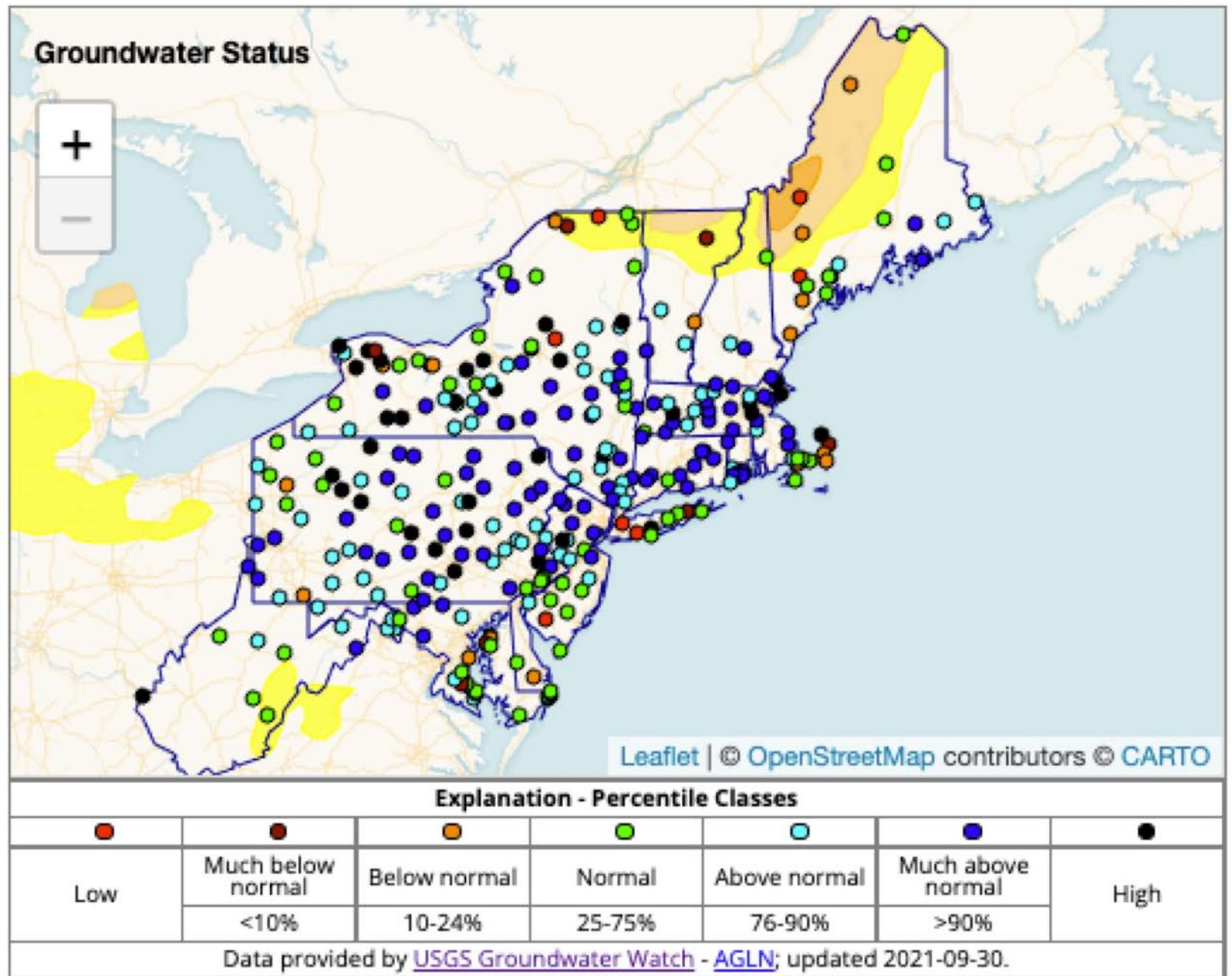




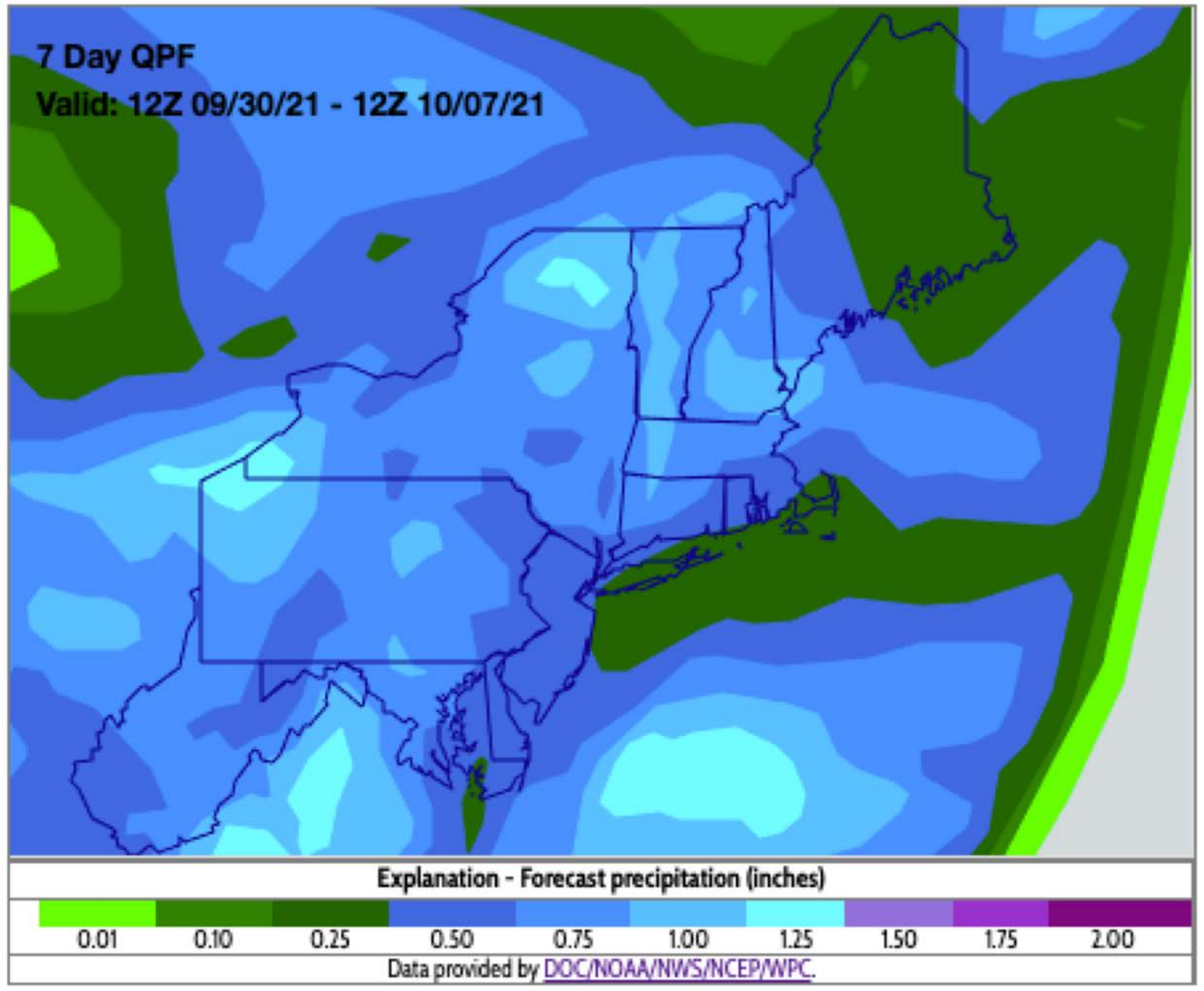
# Streamflow



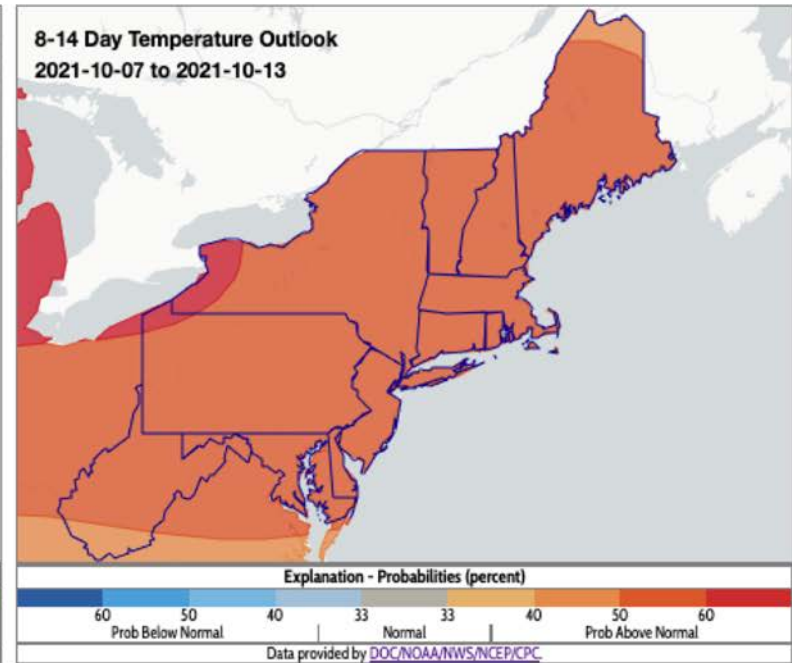
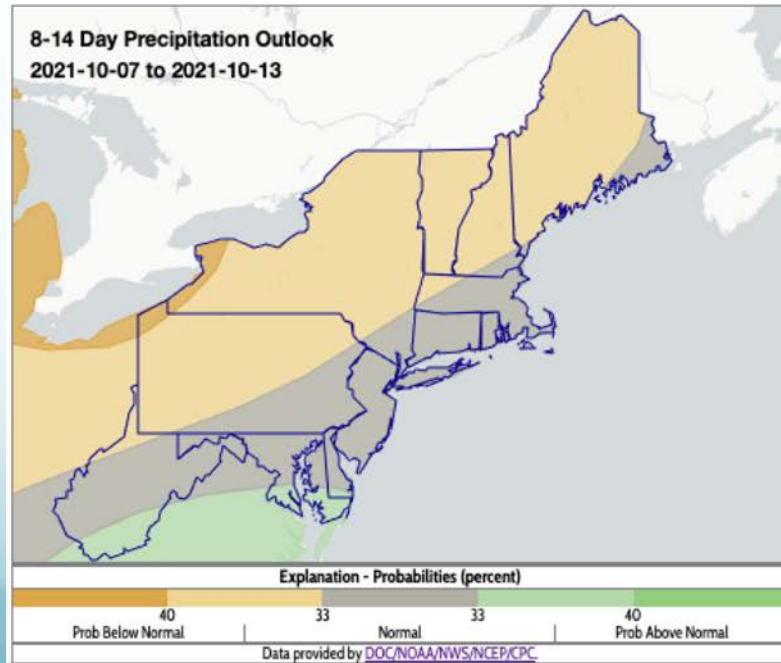
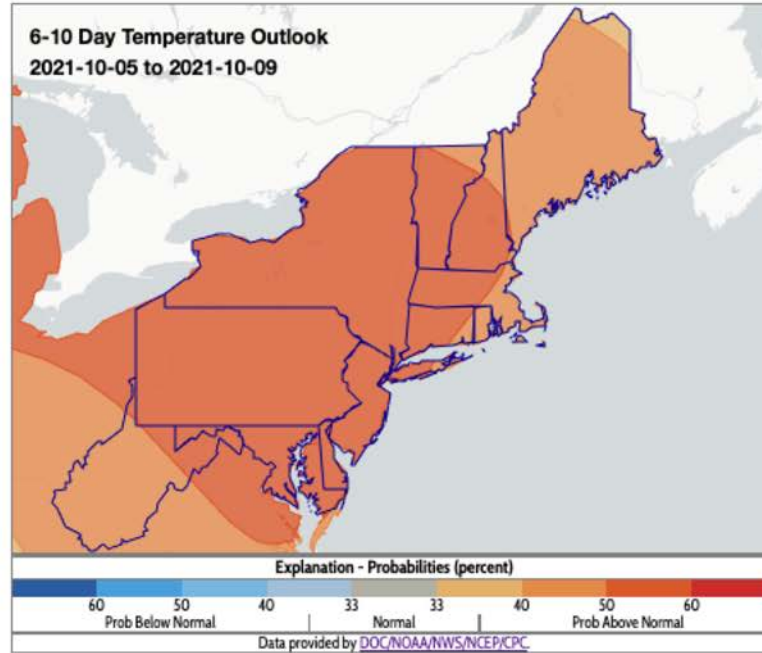
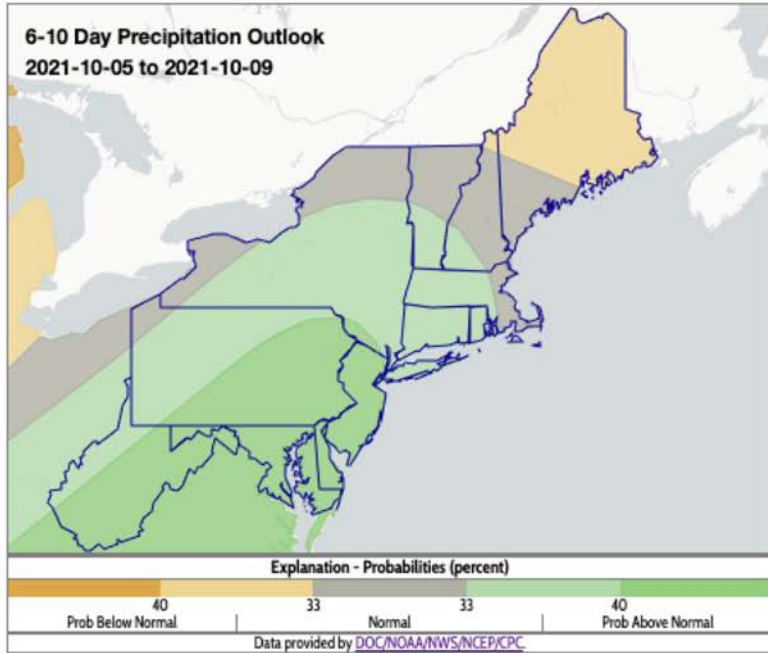
# Groundwater



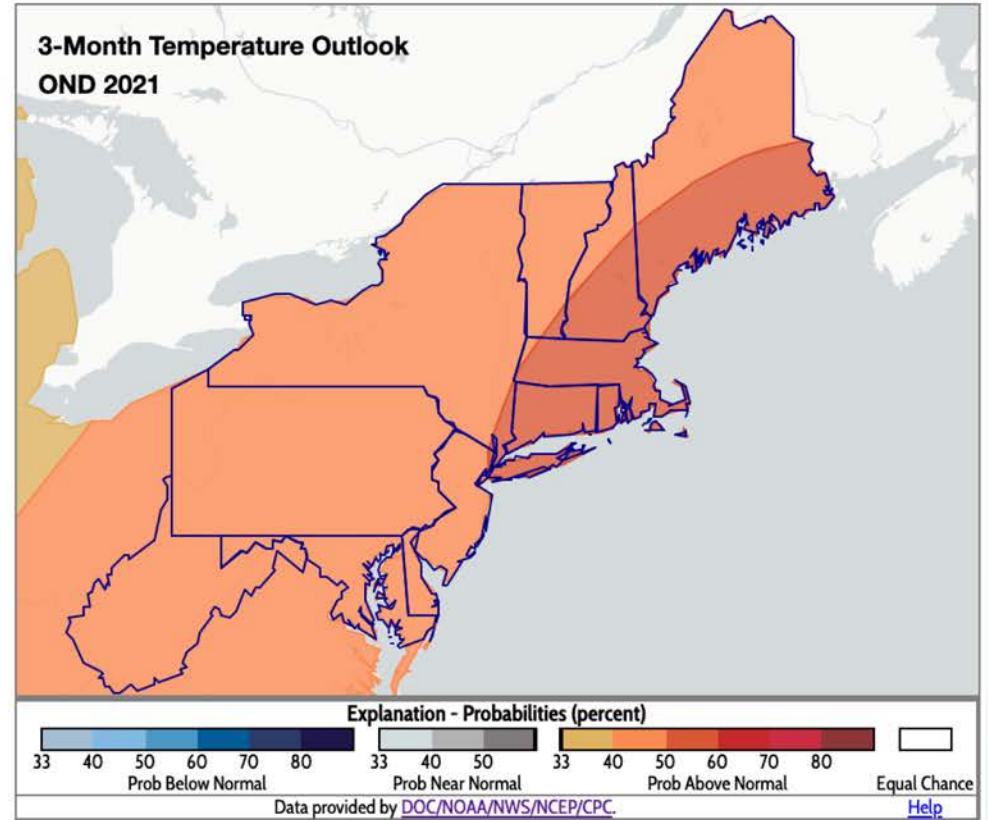
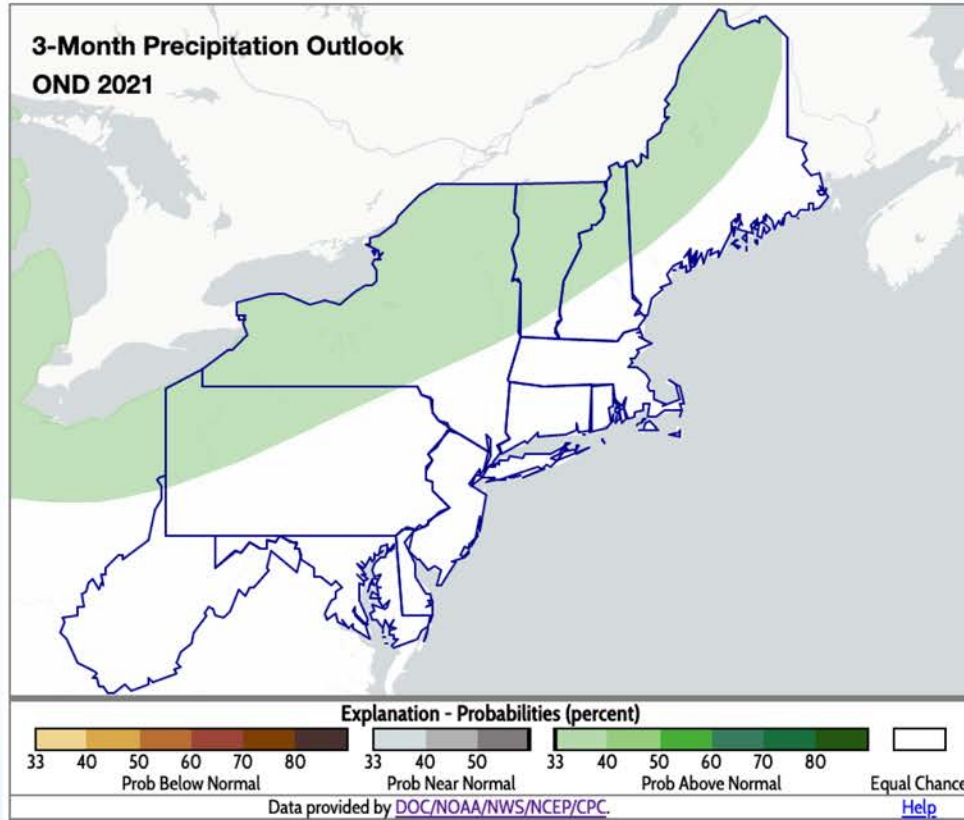
# Precipitation Forecast



# Short-term Outlooks



# Three-Month Outlook



# Contact Information

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

## Upcoming Webinars

- Thursday, October 28 at 9:30am
  - Chesapeake Bay watershed IDF curve project
- Tuesday, November 30 at 9:30am
  - ENSO and winter outlooks
- Thursday, December 16 at 9:30am
  - NOAA National Water Model
- Thursday, January 27 at 9:30am
  - Snow survey and climatologies



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