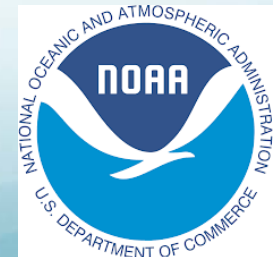


# August Recap & Northeast DEWS Discussion

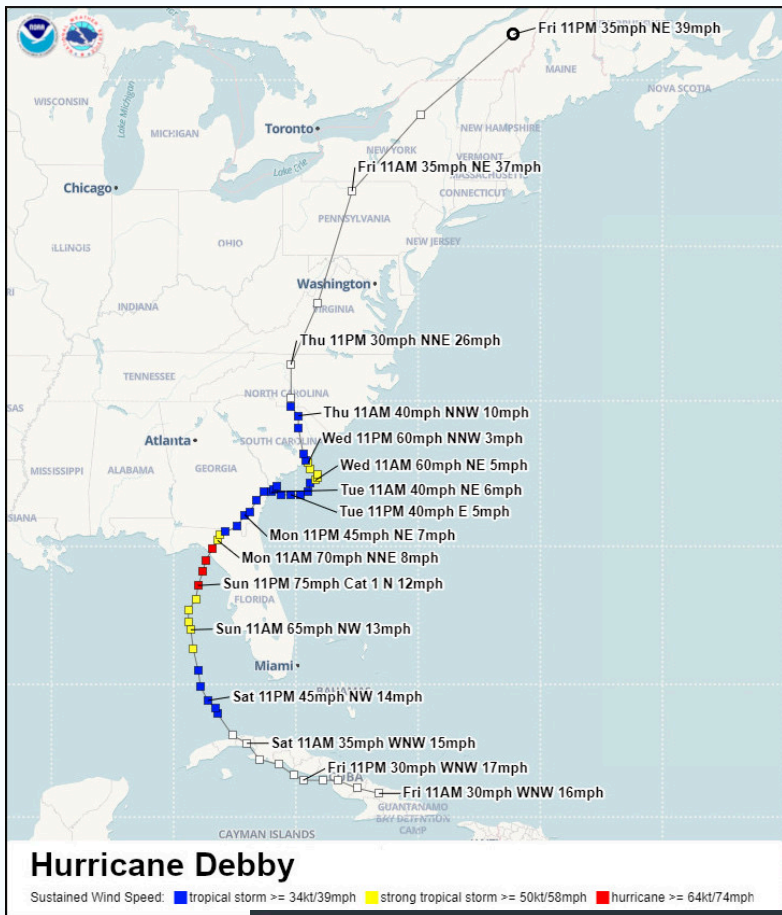
By: Samantha Borisoff, Climatologist  
Northeast Regional Climate Center



Northeast Regional  
Climate Center



# Debby's Remnants



## Flash Flood Emergency

Valid Until  
5:00 PM EDT Friday  
August 9, 2024

**Safety Information**

- Move immediately to higher ground!
- Avoid walking or driving through flood waters!

**Potential Exposure**

- Population: 24,087
- Schools: 15
- Hospitals: 2

This is a life threatening situation. Seek higher ground now!

Map labels: Wirt, Scio, Andover, Greenwood, Jasper, Rathbone, Cameron, Bolivar, Wellsville, Troupsburg, Elkland, Alma, Genesee, Ulysses, Westfield, Coudersport, Galeton, Austin, Morris, Hammersley Fork, Cammal, Driftwood, Renovo, Farrandsville.



Image courtesy of NWS CTP





# August Extreme Rainfall

## Flash Flood Emergency

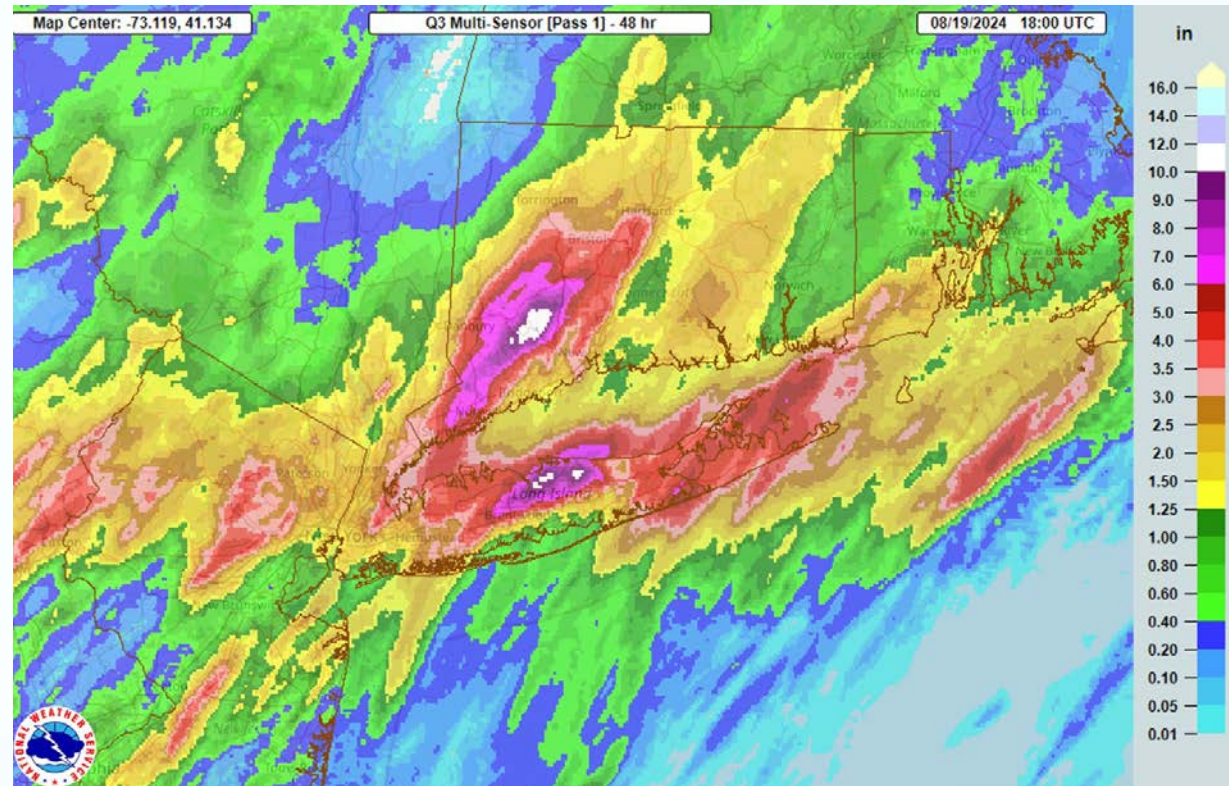
Valid Until  
8:00 PM EDT Sunday  
August 18, 2024

**Safety Information**

- Move immediately to higher ground!
- Avoid walking or driving through flood waters!

**Potential Exposure**

Population: 230,651  
Schools: 68  
Hospitals: 2



## Flash Flood Emergency

Valid Until  
4:30 AM EDT Monday  
August 19, 2024

**Safety Information**

- Move immediately to higher ground!
- Avoid walking or driving through flood waters!

**Potential Exposure**

Population: 905,131  
Schools: 191  
Hospitals: 5

### ...New Haven County...

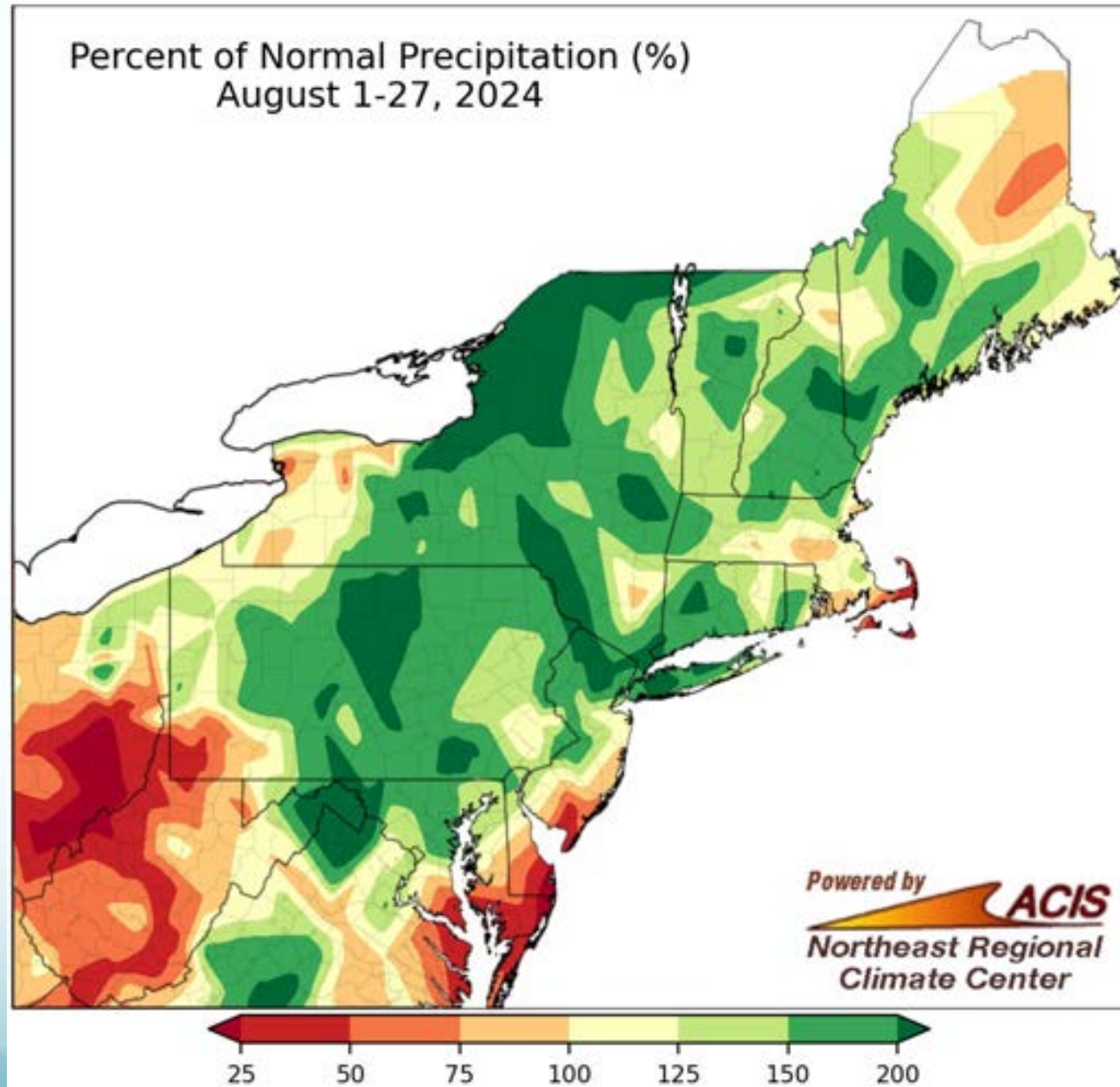
2 WNW Oxford	14.83 in	1200 AM 08/19	Mesonet
2 WNW Oxford	13.52 in	0919 AM 08/19	Public
Oxford	13.50 in	1200 AM 08/19	CWOP

### ...Suffolk County...

1 WNW Sound Beach	10.18 in	0700 AM 08/19	NWS Employee
Miller Place	9.84 in	0615 AM 08/19	CWOP
Port Jefferson Station	9.83 in	0830 AM 08/19	COCORAHS



# August Precipitation

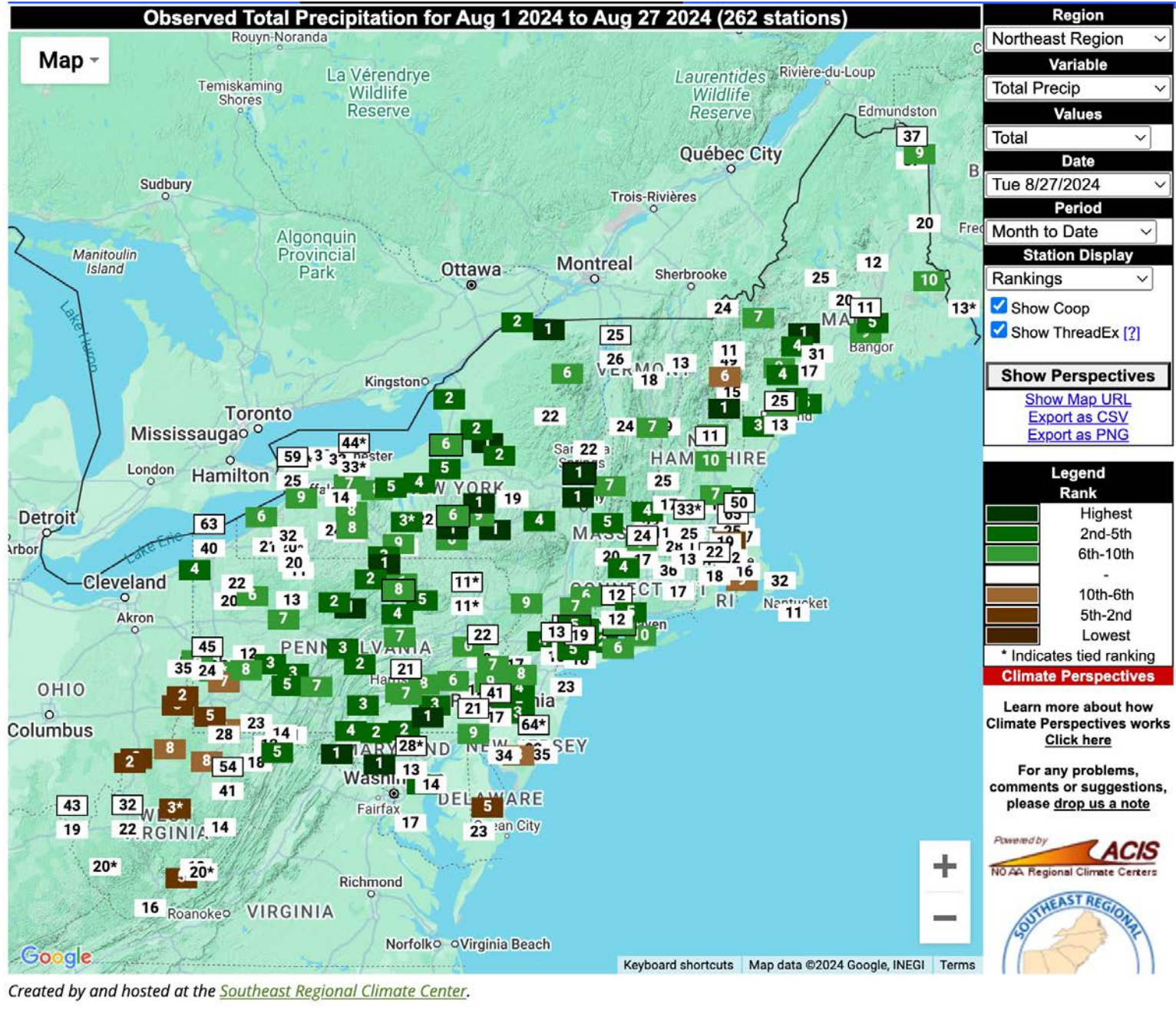


From 25% of normal to more than 200% of normal



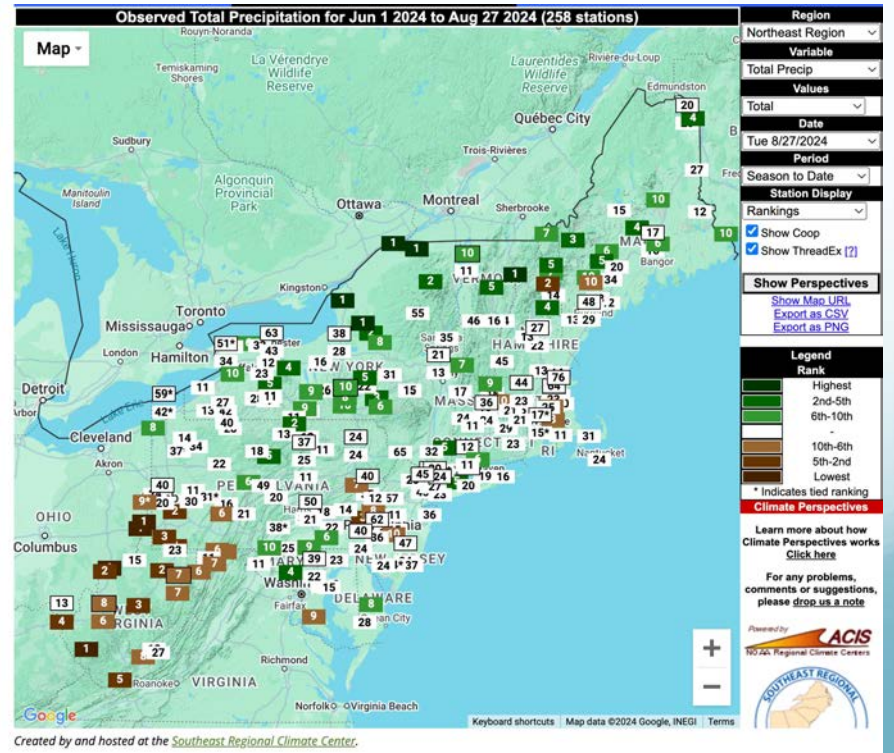
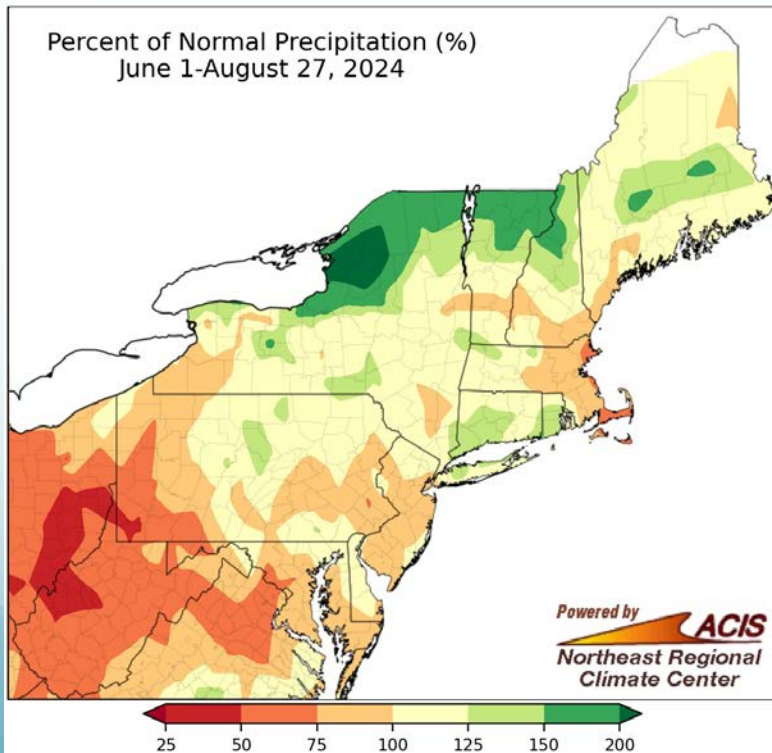
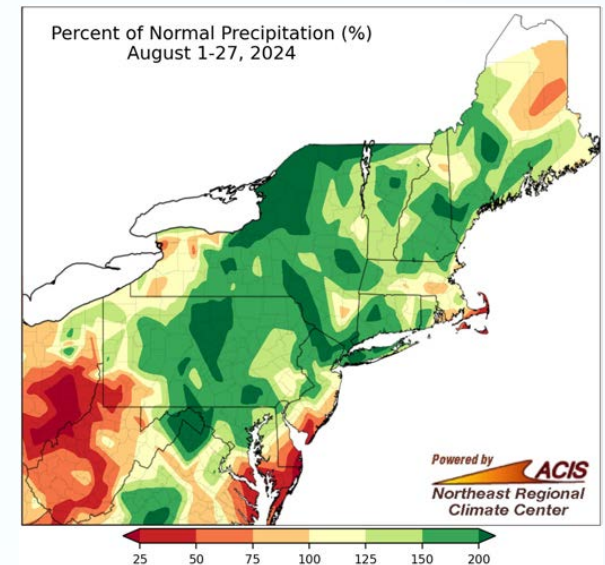
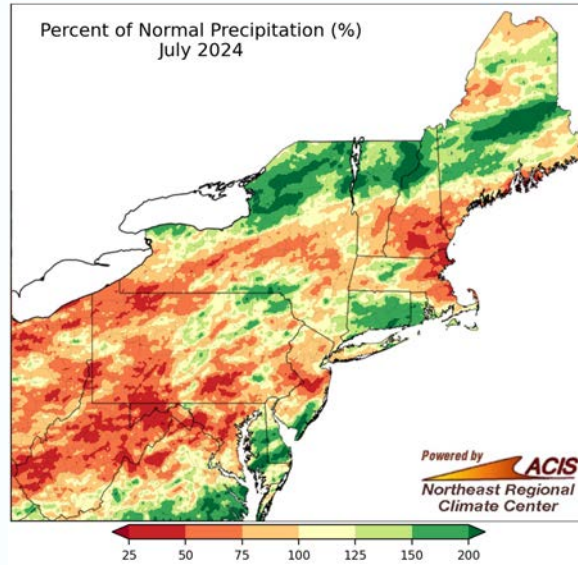
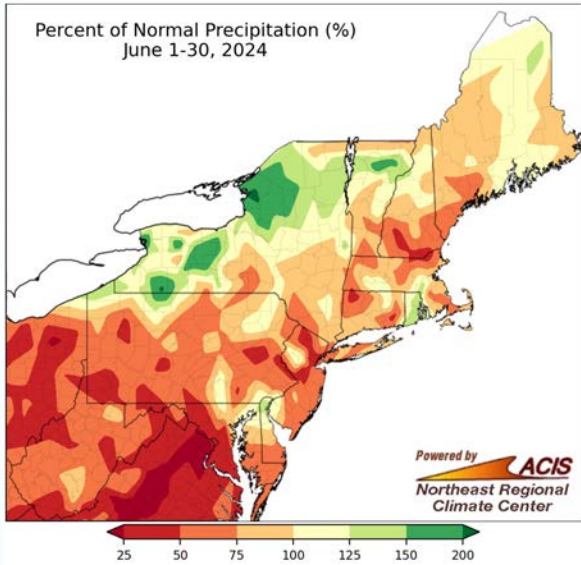


# August Precipitation

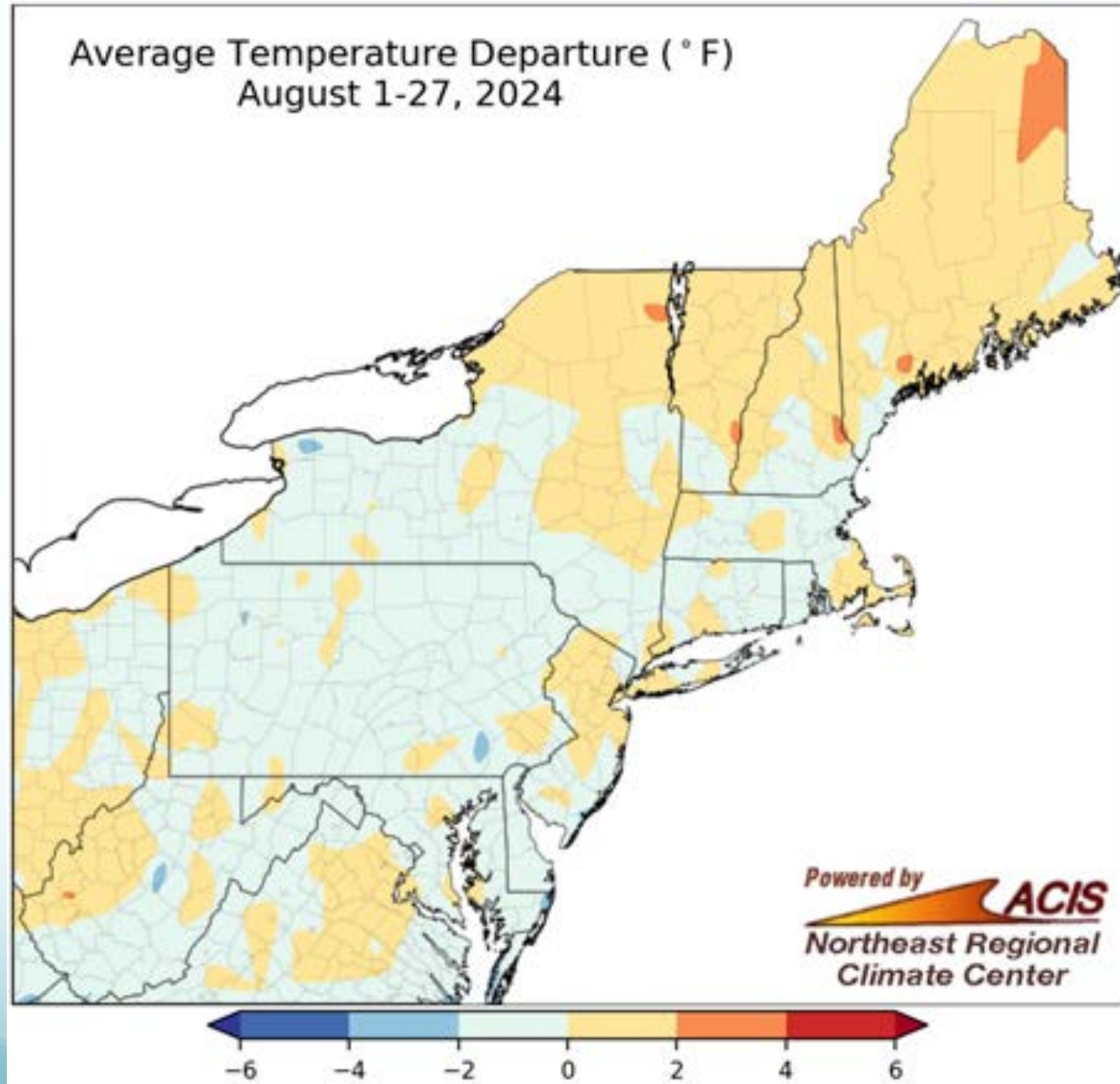




# Summer Precipitation



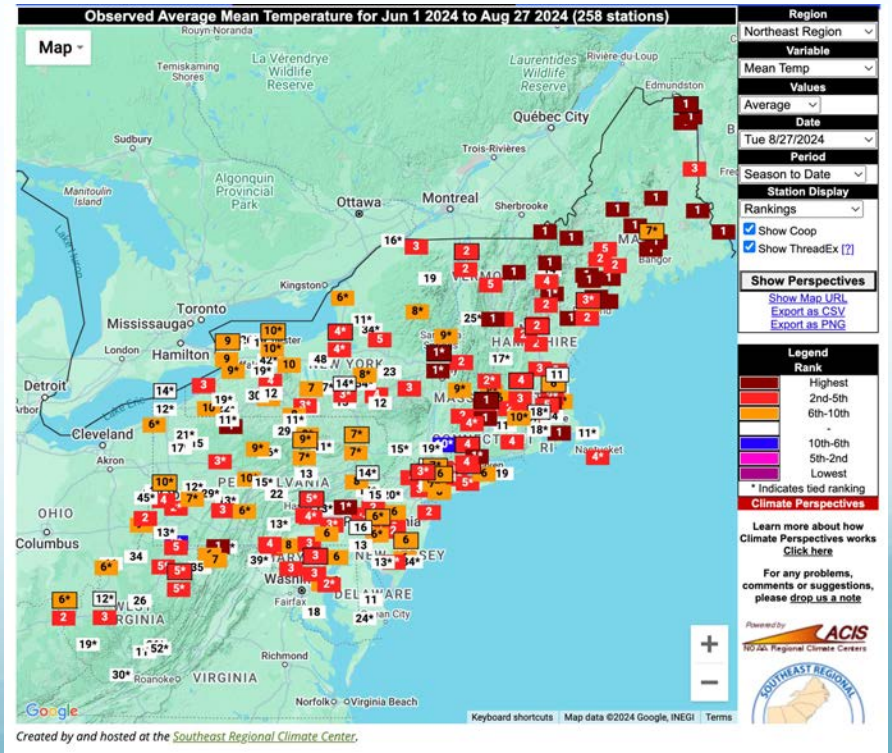
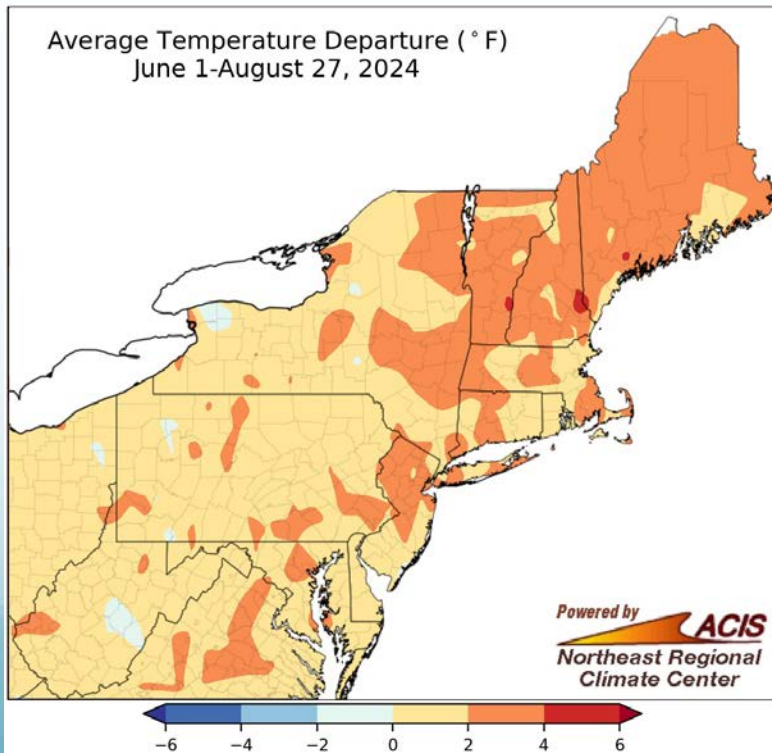
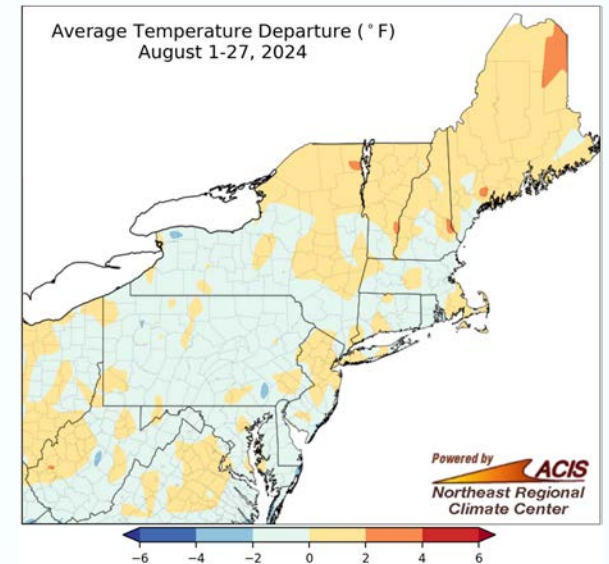
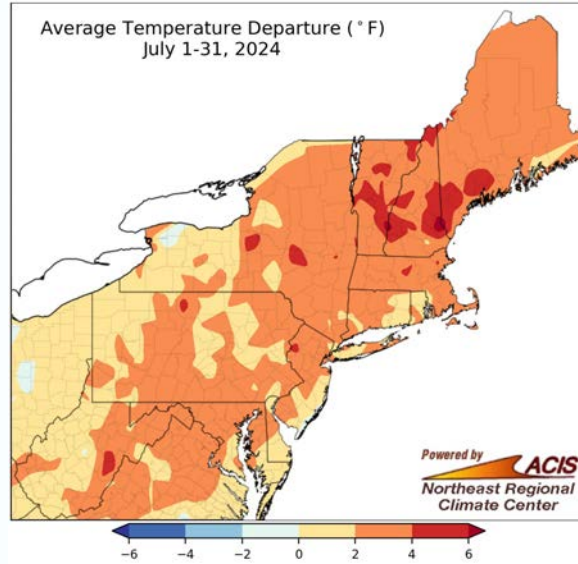
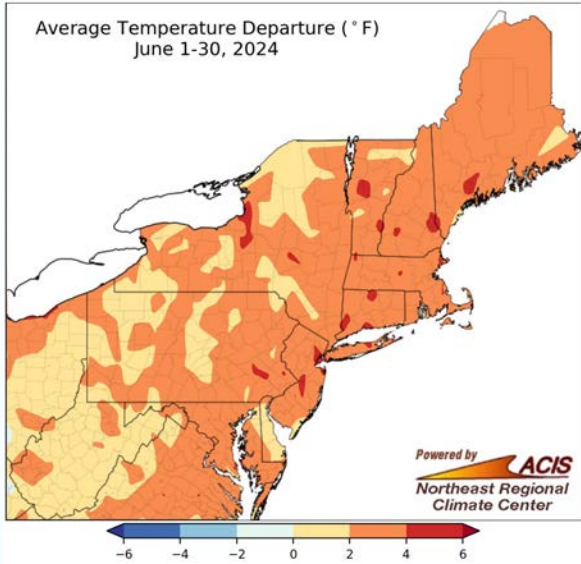
# August Temperatures



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



# Summer Temperatures





# Other August Events

Image courtesy of NWS CAR



Click a location below for detailed forecast.



[Watches, Warnings & Advisories](#)



[Air Quality Alert](#)

[Hazardous Weather Outlook](#)

Last Map Update: Thu, Aug 15, 2024 at 1:32:26 pm EDT

## Ernesto Brings Dangerous Waves & Rip Currents

August 18, 2024  
3:29 PM

Through Midnight Monday night

- High Surf Advisory for Downeast Coast
- Small Craft Advisory for All Waters
- Ernesto Stays Well South of Maine
- Long period swells will impact the coast causing High Rip Current Risk Today and a Moderate Rip Current Risk Monday

**Rip Current Risk:**  
Monday (8/19)

Downeast Coast Beaches

If caught in a rip current, do not panic!  
• Swim along the shoreline; NOT directly into shore  
• Once free of the current's pull, swim at an angle away from the current toward shore  
• If needed, tread water and wave or call for help

Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.

**National Weather Service**  
Caribou, ME

## Rip Current Risk for Sun/Sun Night

Valid 8 AM Sun Aug 18, 2024 to 8 AM Mon Aug 19, 2024

Weather Forecast Office  
Mount Holly  
Issued Aug 17, 2024 4:11 AM EDT

**NWSMount Holly**

**Threat Risk**

Moderate

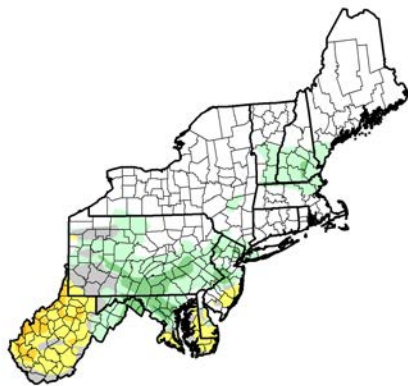
High

Source: Bari, Maza, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

weather.gov/phi

# Drought Monitor

## U.S. Drought Monitor Class Change - Northeast Climate Region 4 Week



August 27, 2024  
compared to  
July 30, 2024

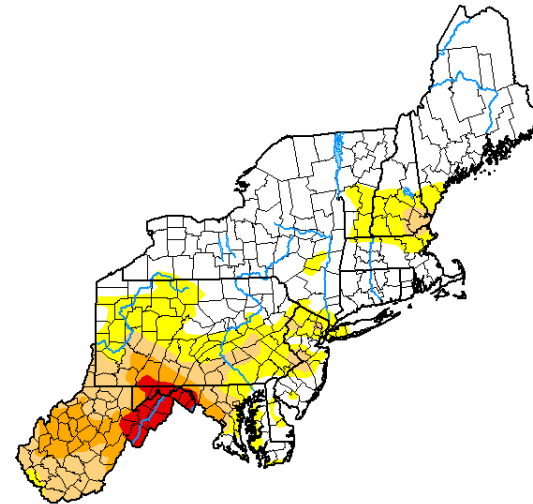
droughtmonitor.unl.edu

## U.S. Drought Monitor Northeast

**July 30, 2024**  
(Released Thursday, Aug. 1, 2024)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	60.02	19.18	12.02	6.07	2.70	0.00
Last Week 07-23-2024	61.71	19.55	10.44	6.26	2.03	0.00
3 Months Ago 04-30-2024	98.14	1.86	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	87.20	10.30	1.83	0.67	0.00	0.00
Start of Water Year 09-26-2023	88.48	10.08	1.36	0.08	0.00	0.00
One Year Ago 08-01-2023	85.77	10.68	2.96	0.59	0.00	0.00



### Intensity:



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:

Lindsay Johnson  
National Drought Mitigation Center



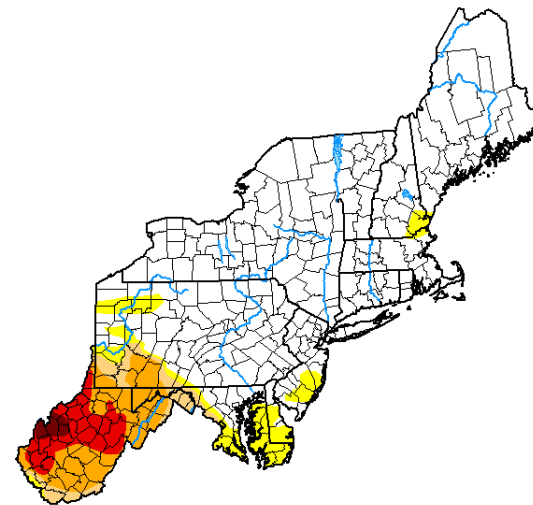
droughtmonitor.unl.edu

## U.S. Drought Monitor Northeast

**August 27, 2024**  
(Released Thursday, Aug. 29, 2024)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	77.85	6.85	3.09	7.28	4.25	0.69
Last Week 08-20-2024	79.25	5.45	4.90	7.64	2.77	0.00
3 Months Ago 05-28-2024	95.80	4.20	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	87.20	10.30	1.83	0.67	0.00	0.00
Start of Water Year 09-26-2023	88.48	10.08	1.36	0.08	0.00	0.00
One Year Ago 08-29-2023	91.45	6.27	2.26	0.02	0.00	0.00



### Intensity:



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:

Richard Heim  
NCEI/NOAA

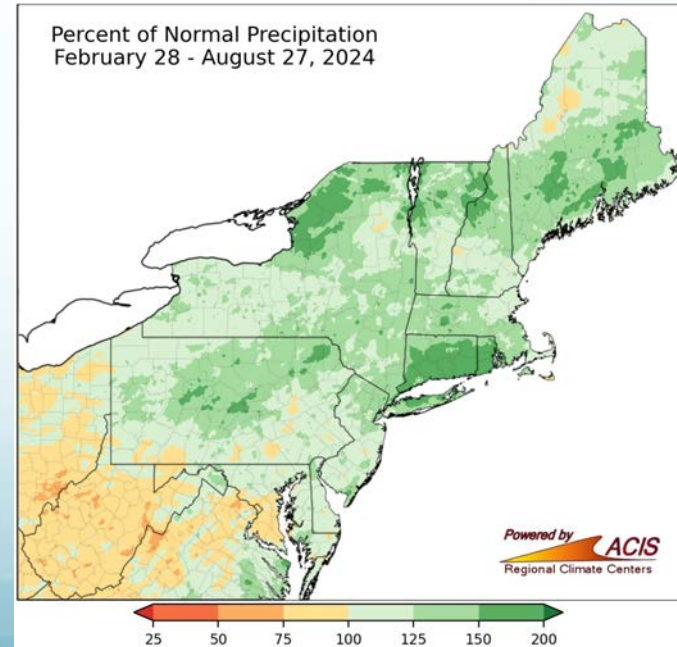
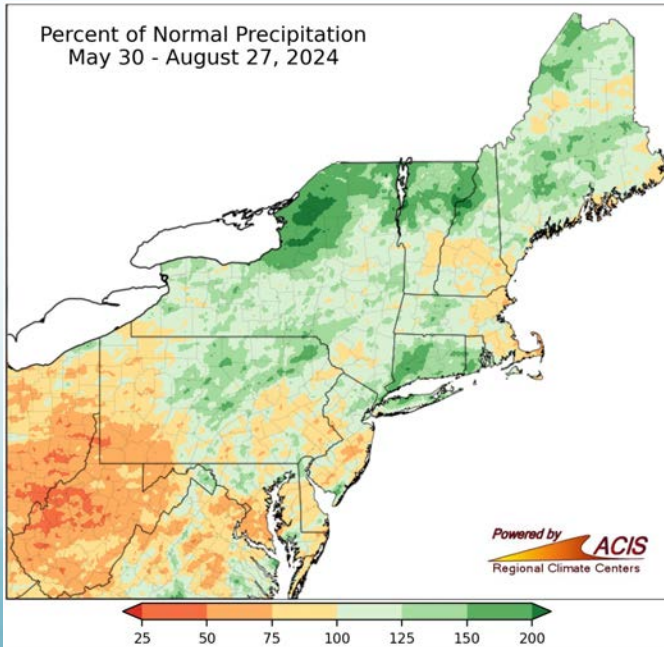
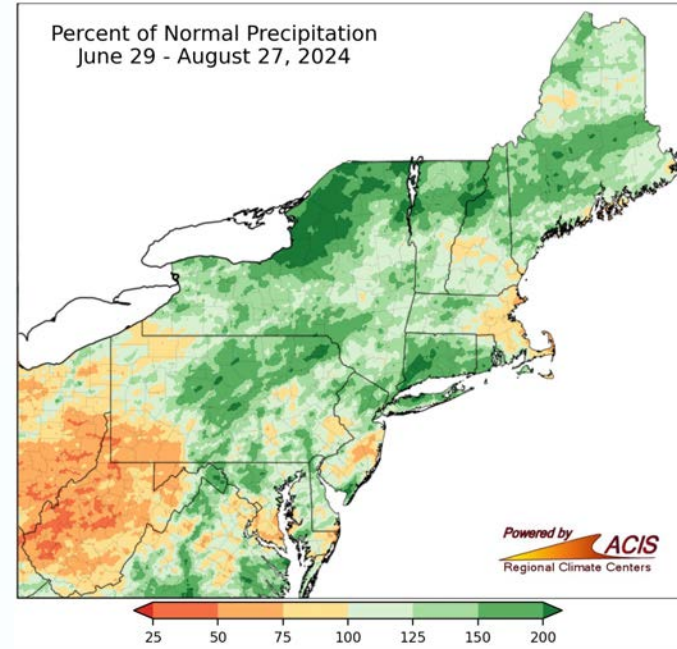
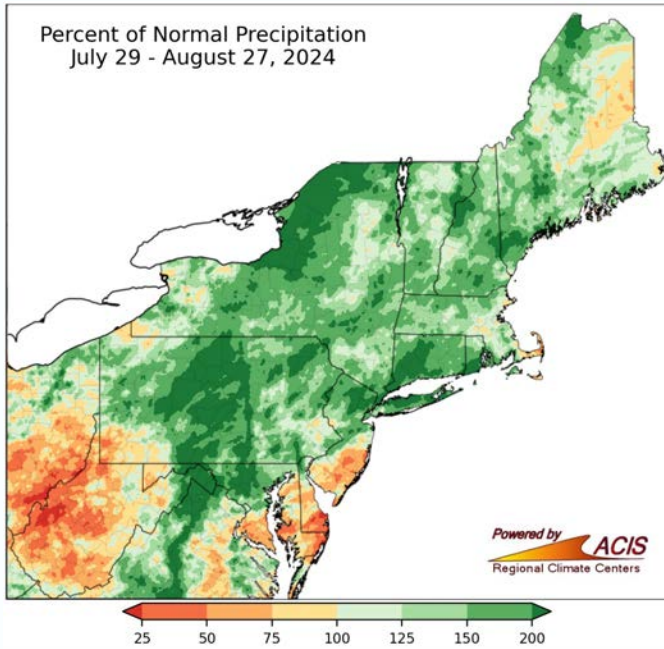


droughtmonitor.unl.edu

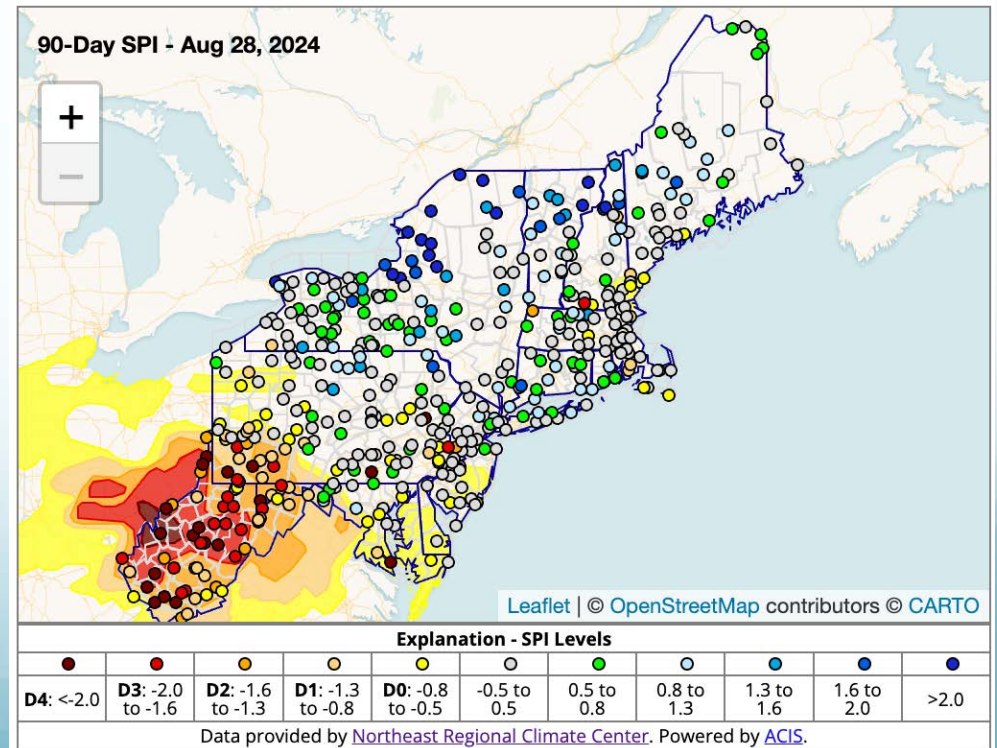
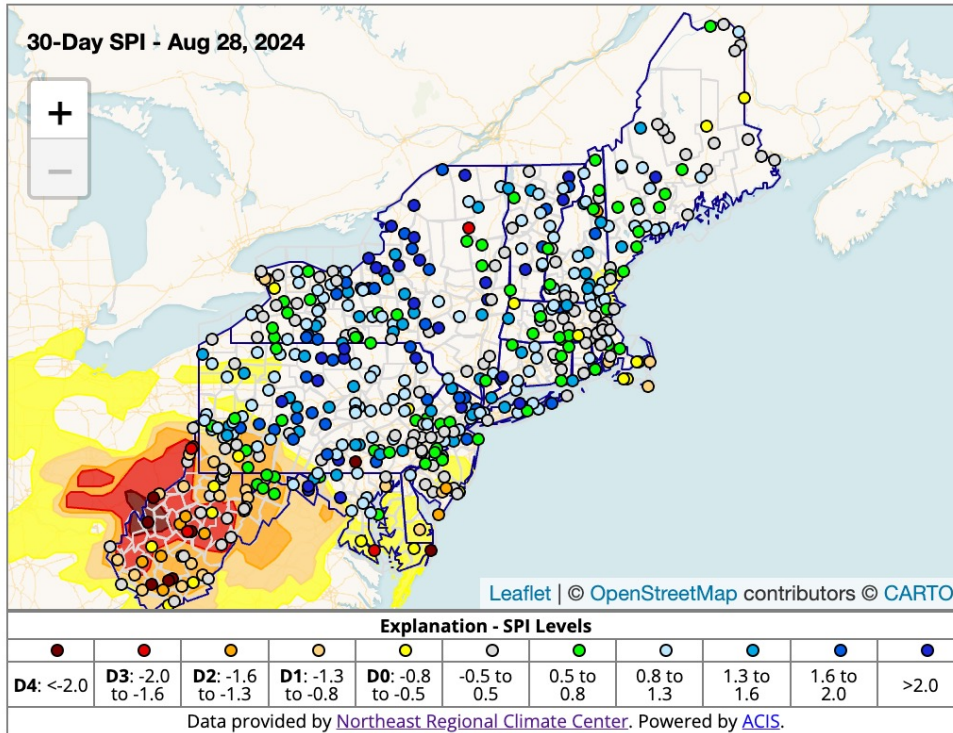




# Precipitation

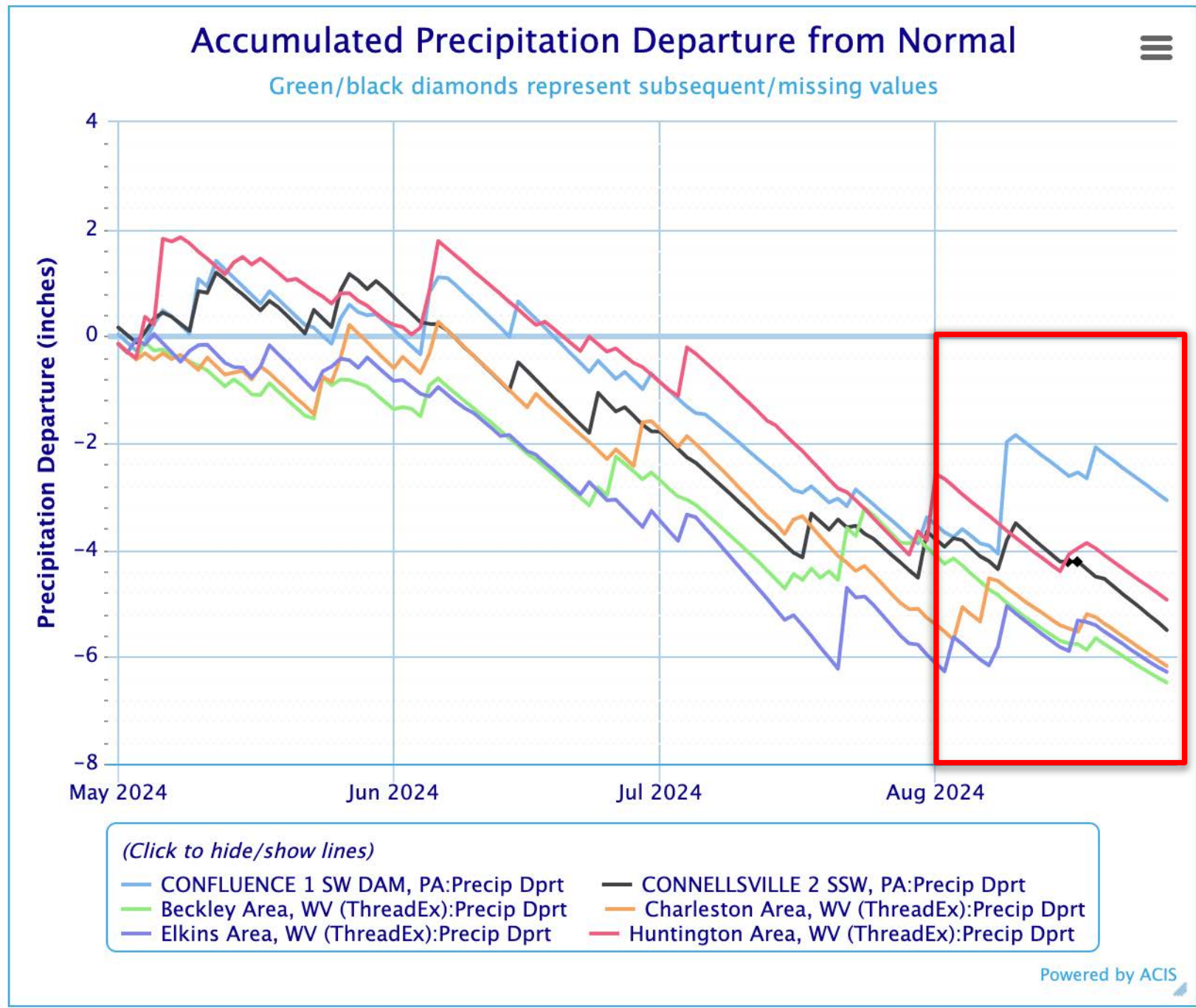


# Standardized Precipitation Index



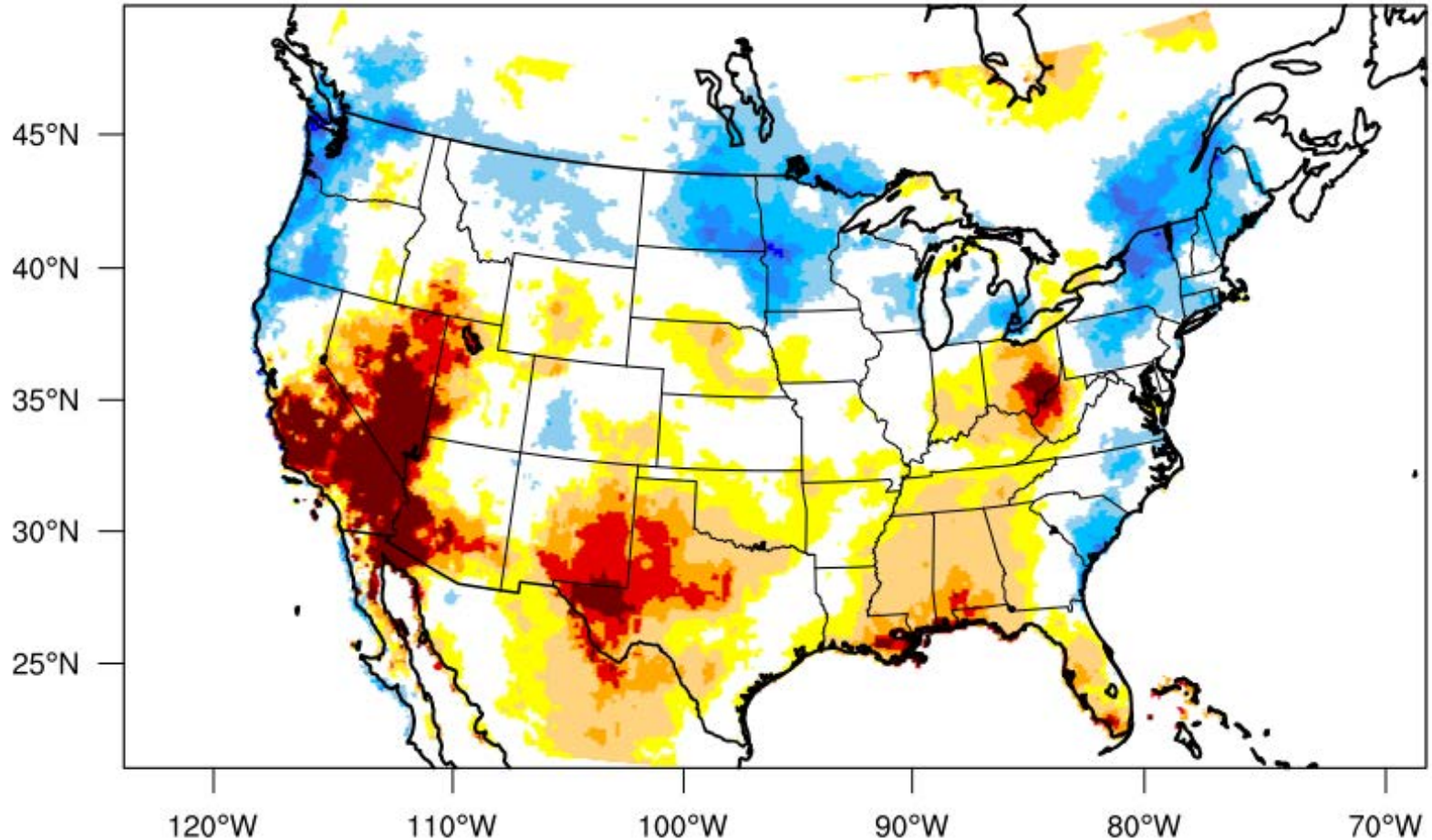


# Precipitation



# Evap. Demand Drought Index

3-week EDDI categories for August 24, 2024



Drought categories



100% 98% 95% 90% 80% 70%

Wetness categories



30% 20% 10% 5% 2% 0%

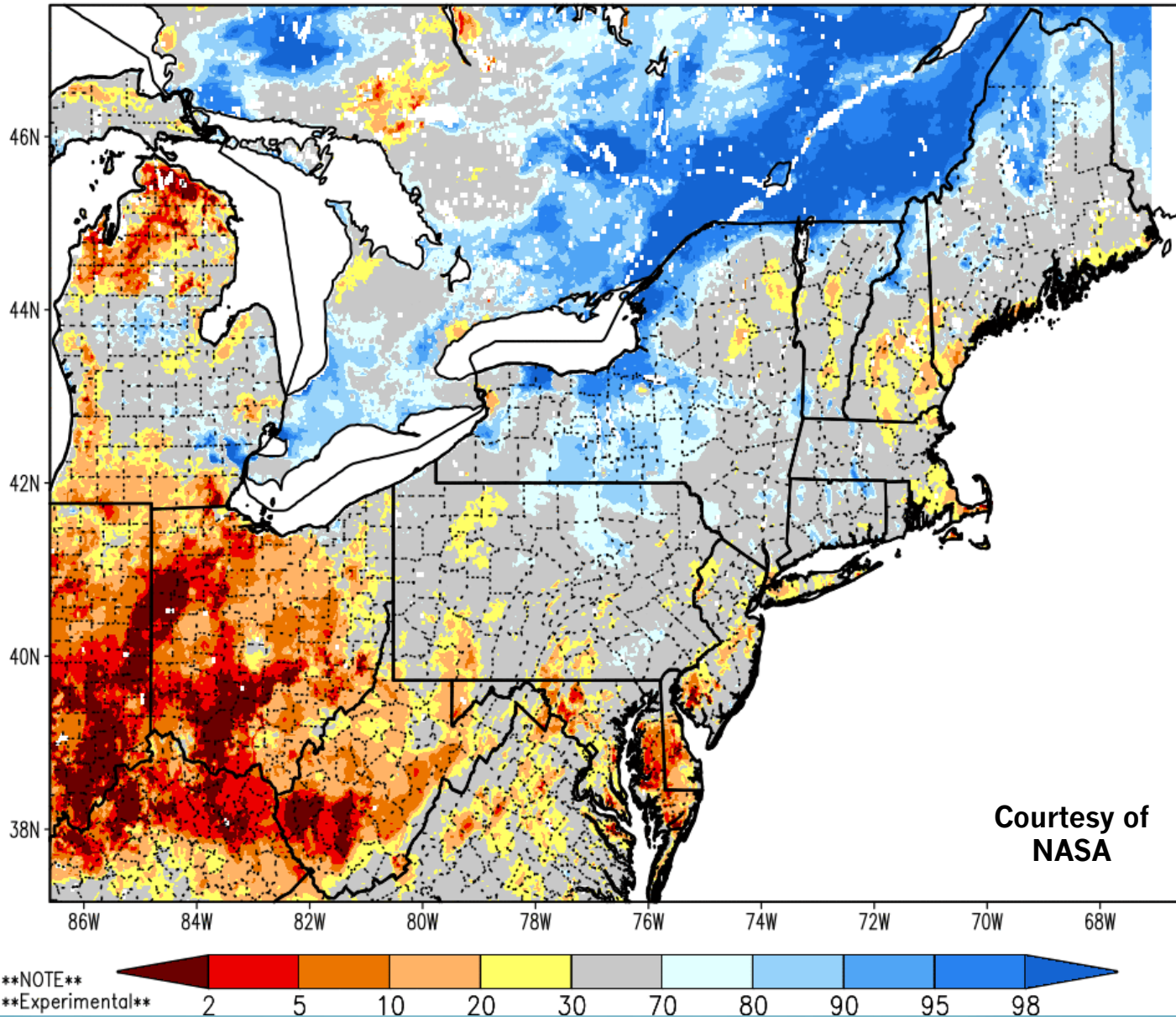
(EDDI-percentile category breaks: 100% = driest; 0% = wettest)



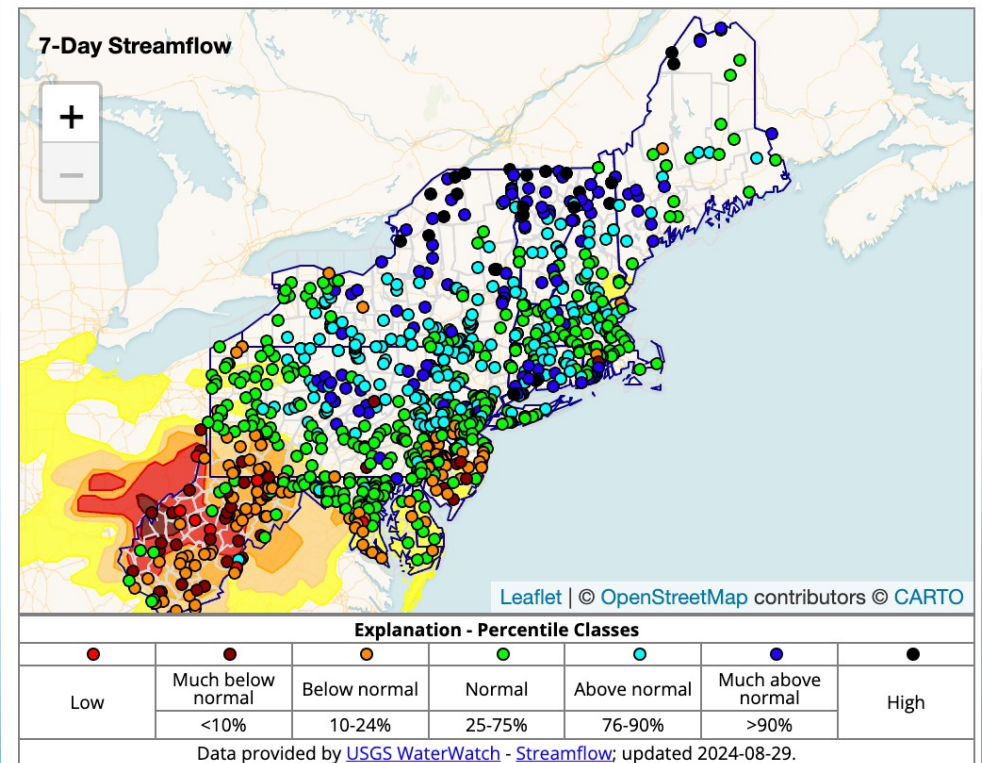
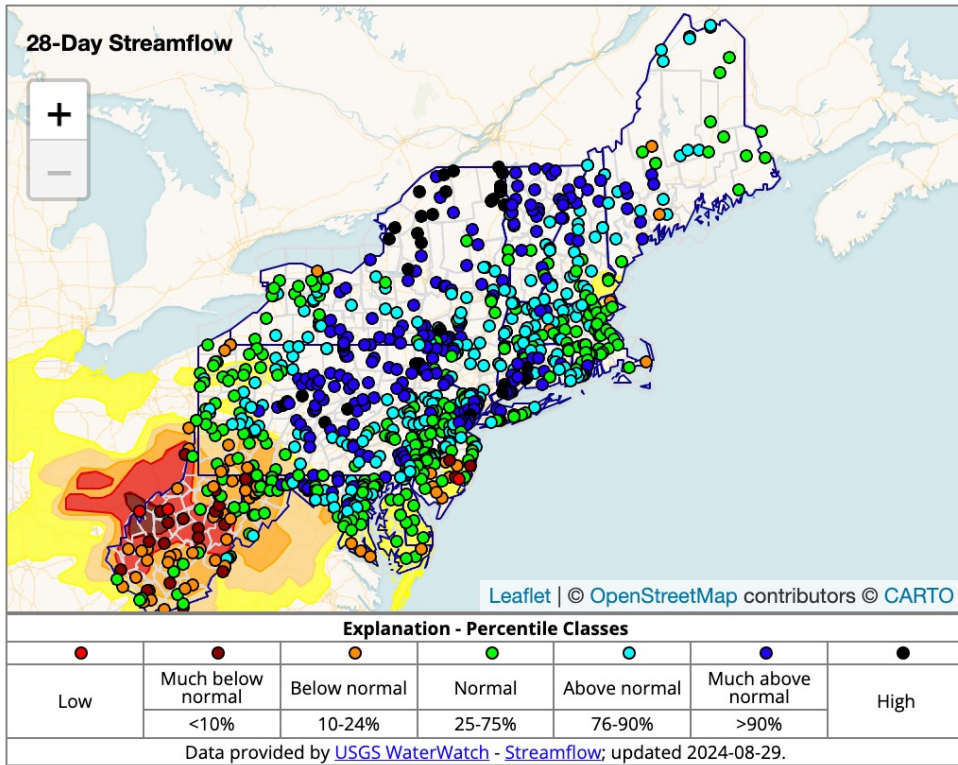


# Soil Moisture

SPoRT-LIS 0-100 cm Soil Moisture percentile valid 29 Aug 2024

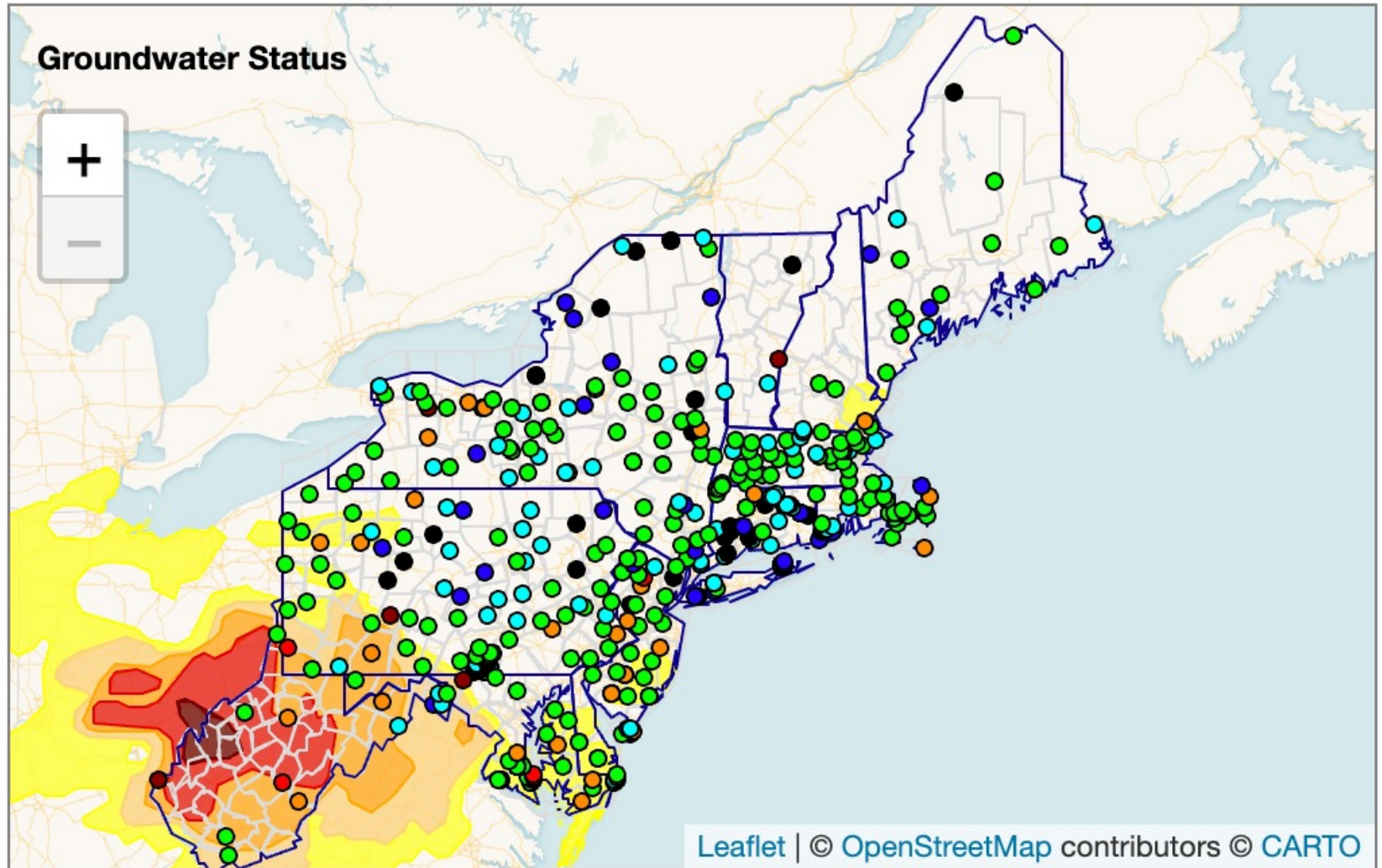


# Streamflow





# Groundwater



## Explanation - Percentile Classes

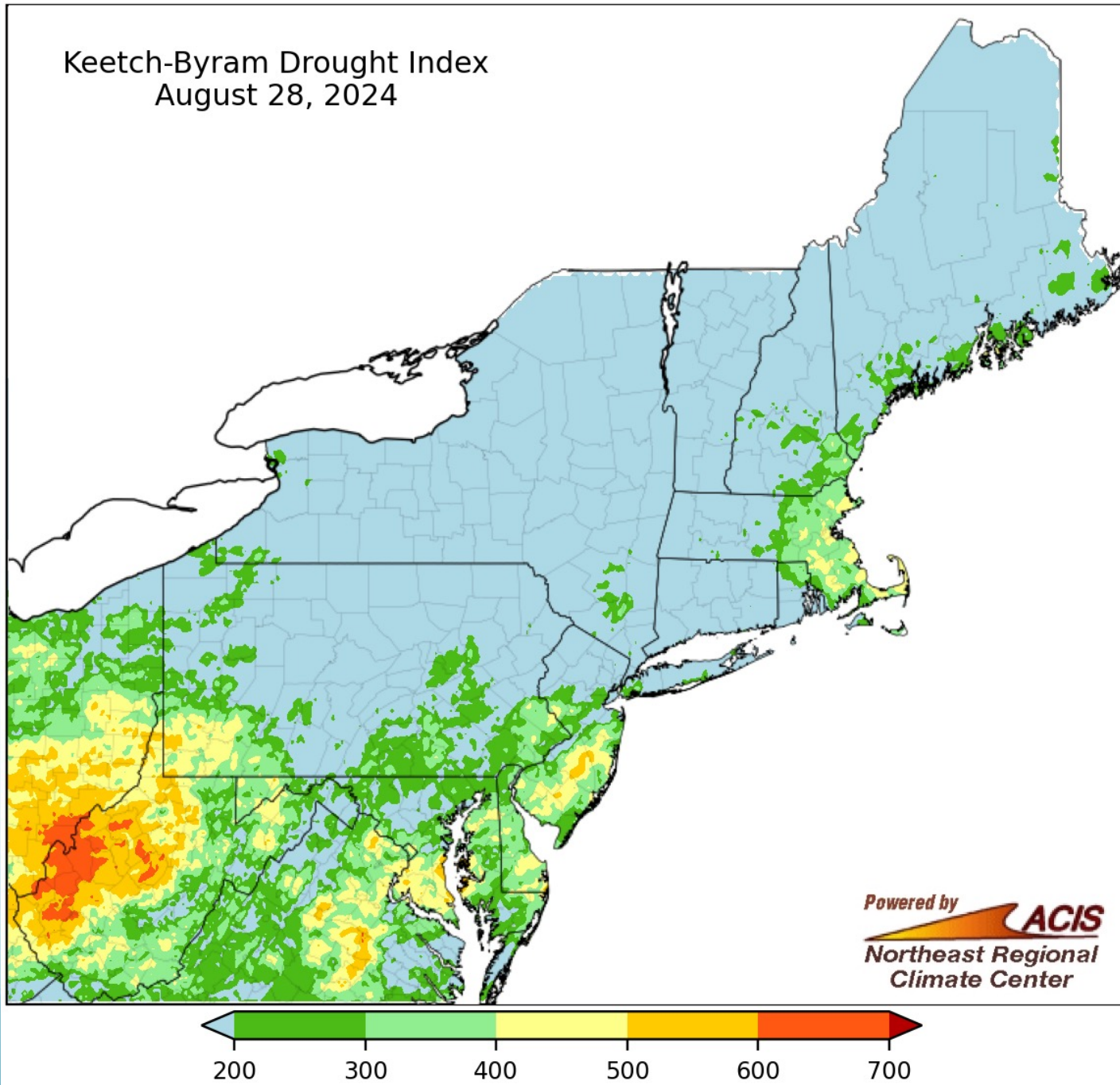
Low	Much below normal	Below normal	Normal	Above normal	Much above normal	High
	<10%	10-24%	25-75%	76-90%	>90%	

Data provided by [USGS Groundwater](#) - [About this map](#); updated 2024-08-29.



# Wildfire Risk

Keetch-Byram Drought Index  
August 28, 2024







NICHOLAS COUNTY, WV

## Drought cuts boating season short at Summersville Lake

by: Blake DeJarnatt  
Posted: Aug 27, 2024 / 07:24 PM EDT  
Updated: Aug 27, 2024 / 07:24 PM EDT

WEST VIRGINIA

## Drought conditions across West Virginia impacting fall foliage

by: Kelli McAlhany  
Posted: Aug 21, 2024 / 07:23 PM EDT  
Updated: Aug 21, 2024 / 07:23 PM EDT

WEST VIRGINIA

## West Virginia extends drought State of Emergency

by: Jessica Patterson  
Posted: Aug 23, 2024 / 04:34 PM EDT  
Updated: Aug 23, 2024 / 05:31 PM EDT

WEST VIRGINIA

## West Virginia drought continues to kill plants, lawns

by: Blake DeJarnatt  
Posted: Aug 19, 2024 / 09:13 AM EDT  
Updated: Aug 19, 2024 / 09:13 AM EDT



### Headlines from WOWK



# Drought Impacts



## Summary of Impacts

August 22, 2024  
3:02 PM

Links: See/submit [Condition Monitoring Observer Reports \(CMOR\)](#) and view the [Drought Impacts Reporter](#)

### Hydrologic Impacts

- Streamflows remain well below normal in both the last 14 and 30 day timeframes. Some recreational activities are being impacted.
- Several reservoirs are well below summer pool or nearing winter pool ahead of schedule.
- Some voluntary water restrictions have been put in place.

### Agricultural Impacts

- Soil moisture is at or below the 10th percentile across the upper Ohio Valley. See the [NWS Climate Prediction Center](#)
- Some deterioration in crop conditions is being noted, especially in Ohio and West Virginia. Some farmers are hauling water for livestock. [USDA](#)

### Fire Hazard Impacts

- The Keetch-Byram Drought Index is around 400-500 in eastern Ohio and northern West Virginia. If drought persists, there is an increased risk for brush fires. [WAFS/NIFC](#)

### Mitigation Actions

- Please refer to your municipality and/or water provider for mitigation information.



National Oceanic and Atmospheric Administration  
U.S. Department of Commerce

National Weather Service  
Pittsburgh, PA



## Summary of Impacts

Links: See/submit [Condition Monitoring Observer Reports \(CMOR\)](#) and view the [Drought Impacts Reporter](#)

### Hydrologic Impacts

- 7-day average streamflows continue well below much of southeast OH and central/northern WV
- Several reservoir lake levels are below summer pools in WV

### Agricultural Impacts

- Low soil moisture has stunted crop growth in many parts of the state now
- Crop yield losses continue to be reported in the state particularly in the western, central, and now southeast OH
  - Lack of hay has resulted in supplemental feeding
- Hauling of water for livestock continues across western and central WV and now in southeast OH

### Fire Hazard Impacts

- If dryness persists, above normal brush fire activity is possible during the second half of summer given drying vegetation and the continued potential for above normal temperatures.

### Mitigation Actions

- Please refer to your municipality and/or water provider for mitigation information.

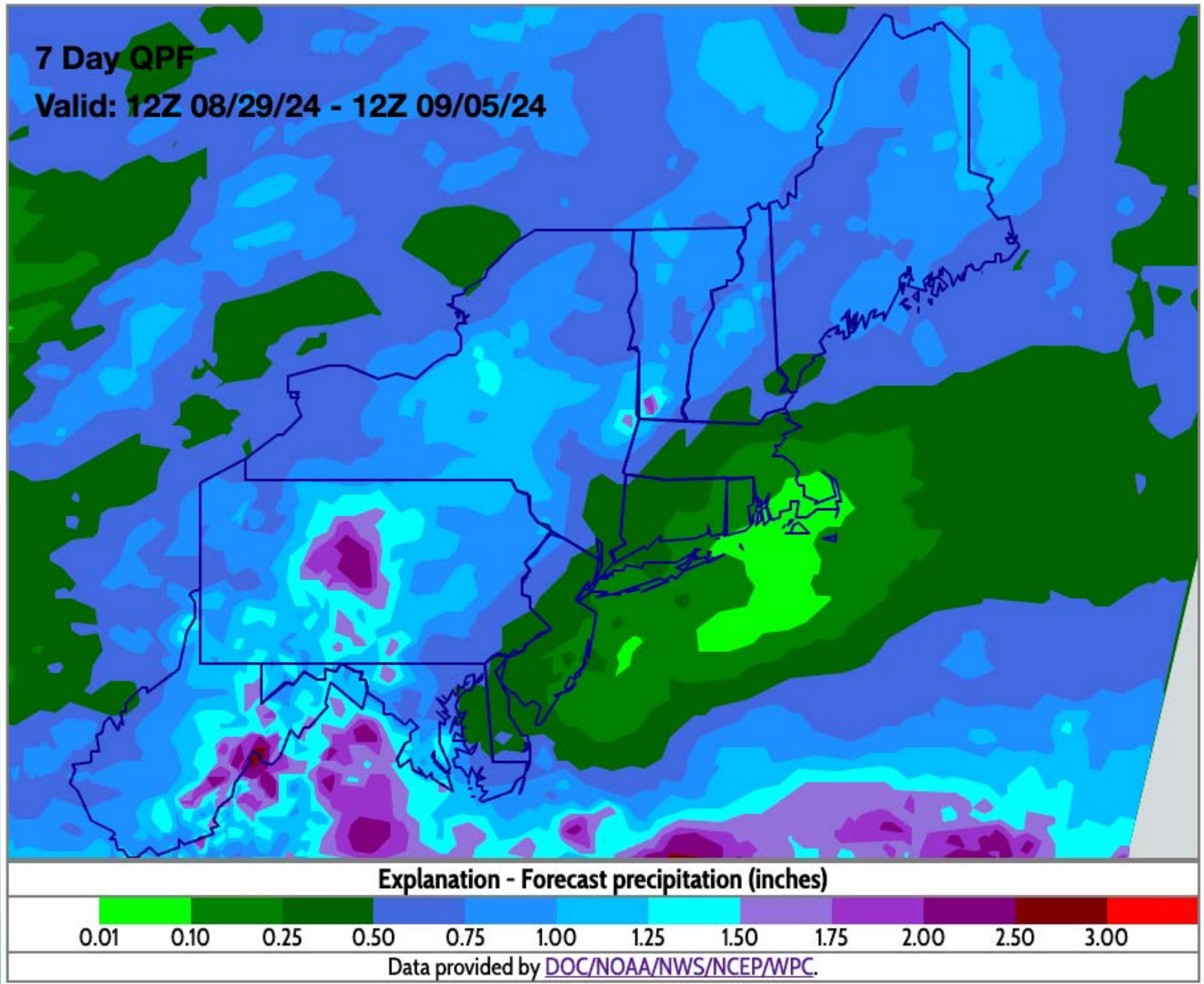


National Oceanic and Atmospheric Administration  
U.S. Department of Commerce

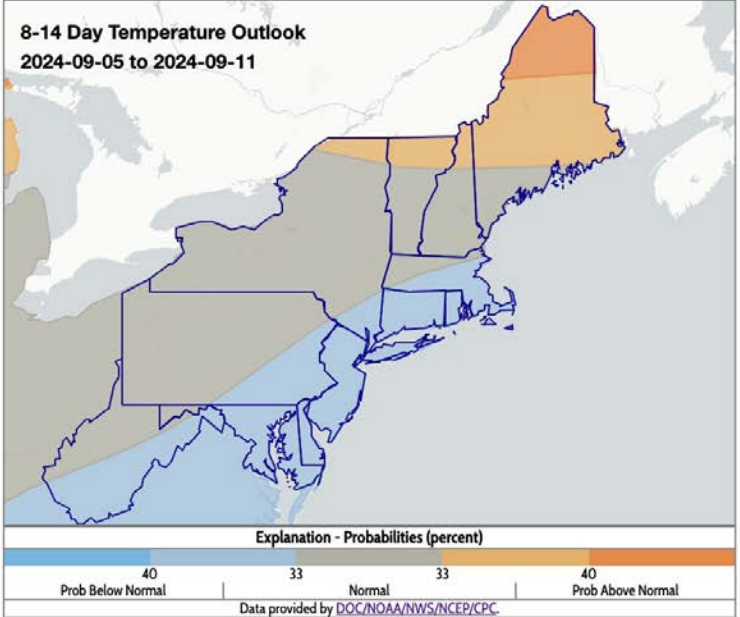
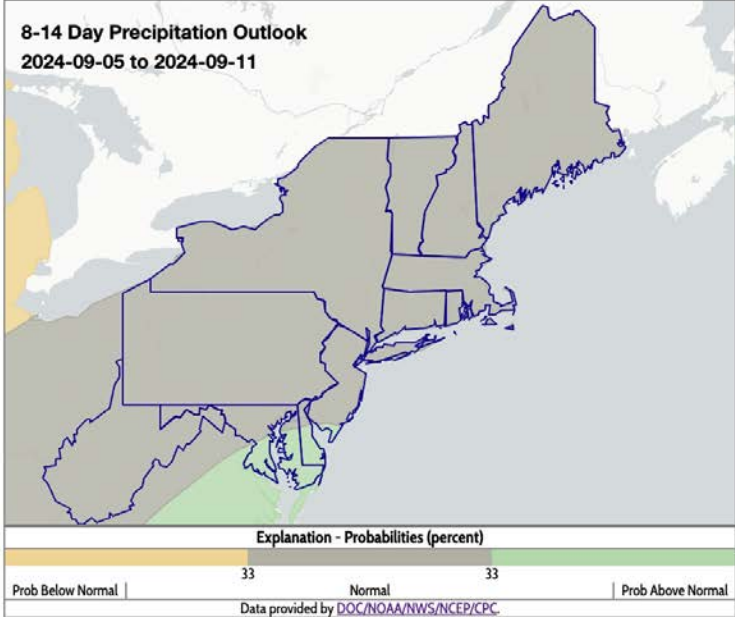
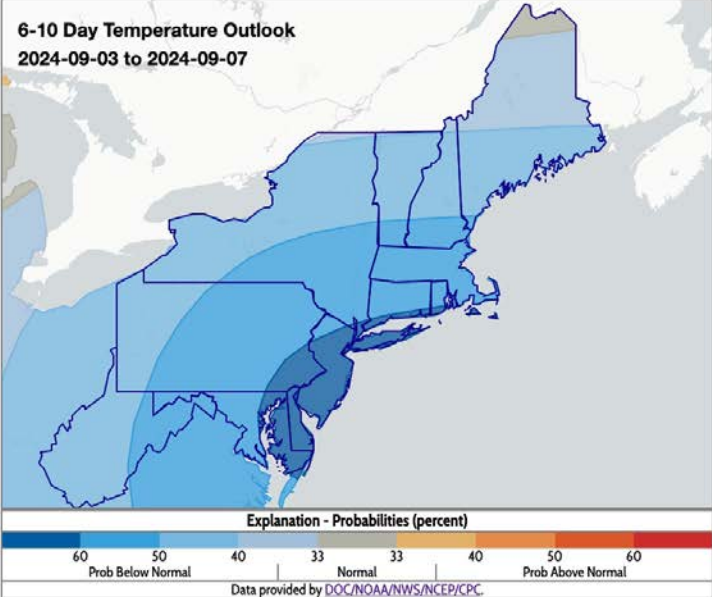
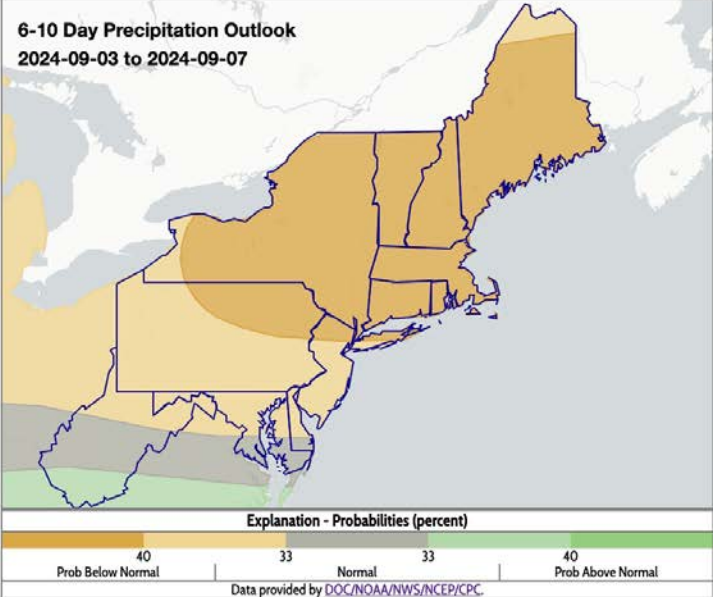
National Weather Service  
Charleston, WV



# Precipitation Forecast

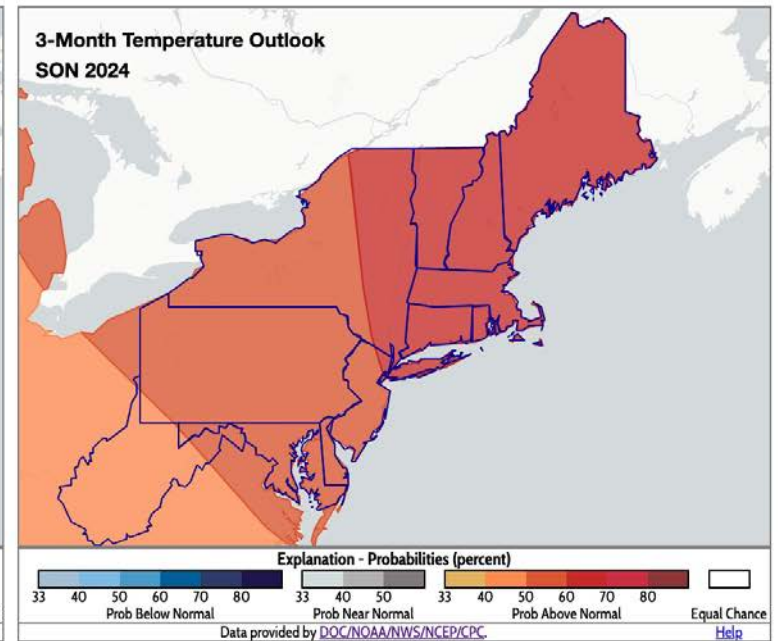
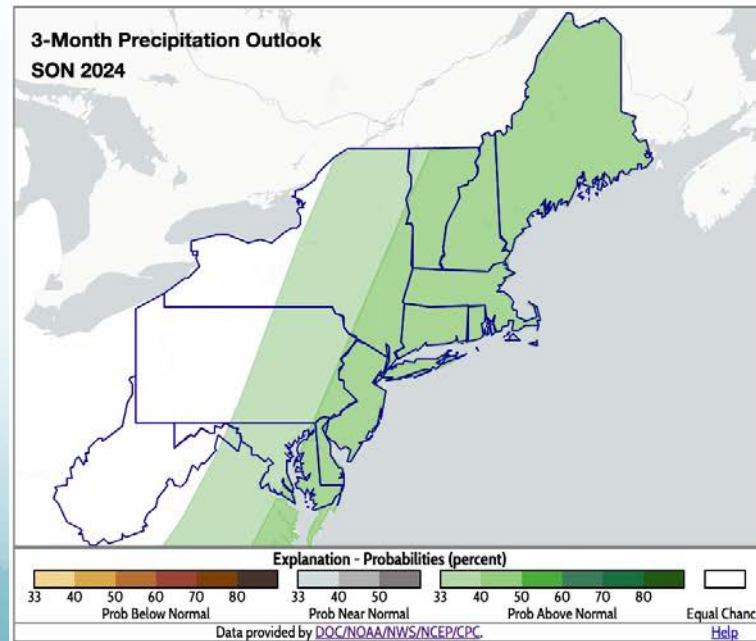
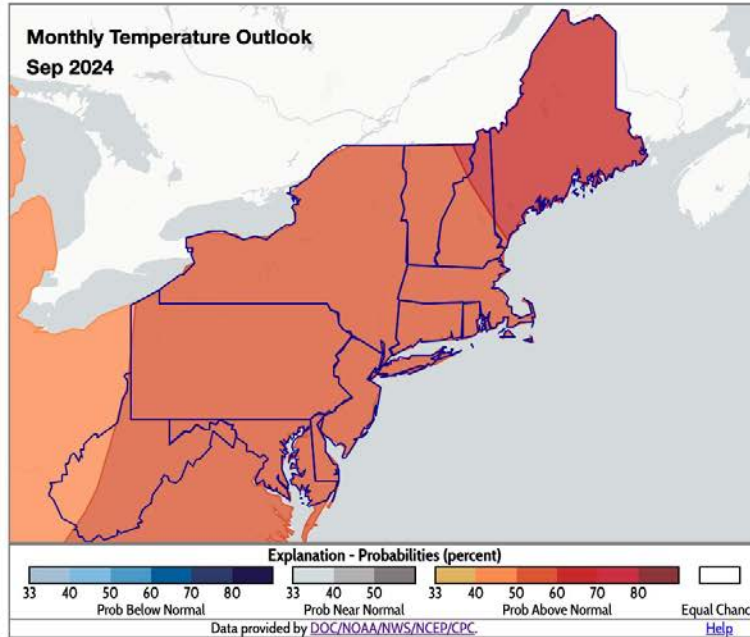
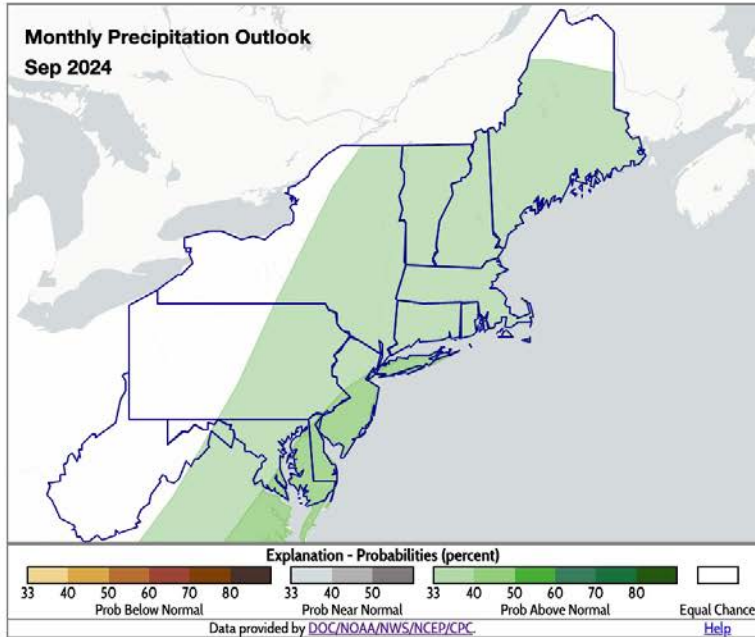


# Short-term Outlooks





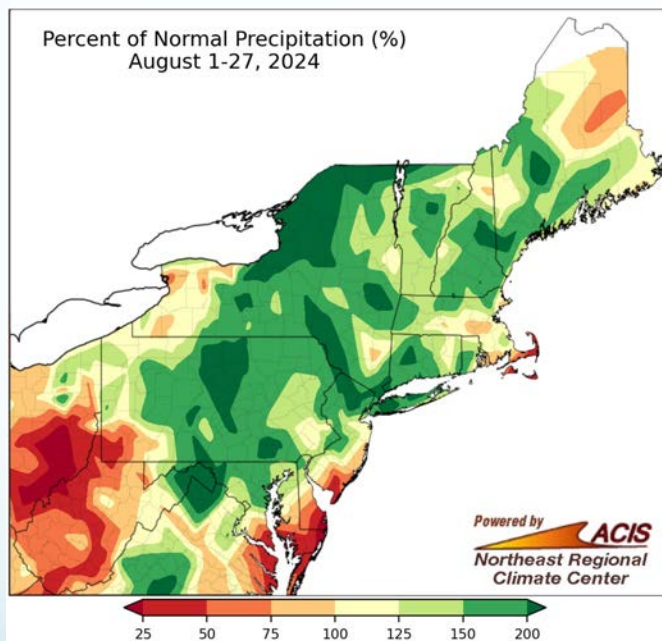
# Monthly & 3-Month Outlooks



# Summary

## August-to-date conditions:

- Near-normal temperatures
- Wet for most w/ some extreme rain events; quite dry for much of WV



## Drought:

- First-ever exceptional drought in WV
- Drought and abnormal dryness expanded in southern parts of the region
  - Widespread drought impacts such as crop losses, reduced water levels, increased fire risk, etc. continue in WV (and SW PA)
- Minor improvement in northern spots

## Outlooks:

- Short-term: below-normal precipitation and temperatures favored for most areas for 6-10 day period; near-normal precipitation and below- or near-normal temperatures favored for most areas for 8-14 day period
- Sep and Fall: above-normal precipitation favored for coastal areas; above-normal temperatures favored for entire region





# Contact Information

- nrcc@cornell.edu
- NEW - NRCC newsletter!

## Upcoming Webinars

- Thursday, September 26 at 9:30am EDT
  - Wildfire Smoke Mortality Estimation Tool
- Thursday, October 31 at 9:30am EDT
  - NYS Extreme Heat Action Plan
- Thursday, November 21 at 9:30am EDT
  - Use of NOAA Radar Data to Analyze Extreme Precip



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