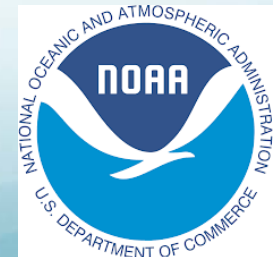


August Recap & Northeast DEWS Discussion

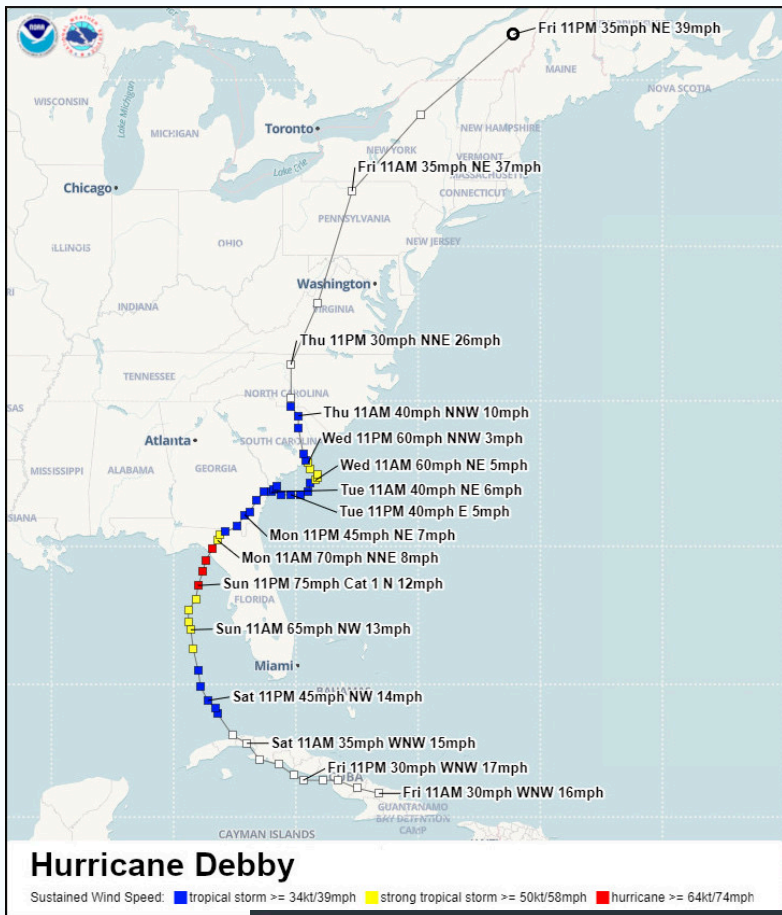
By: Samantha Borisoff, Climatologist
Northeast Regional Climate Center



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



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

NWSNewYork

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

NWSNewYork

...New Haven County...

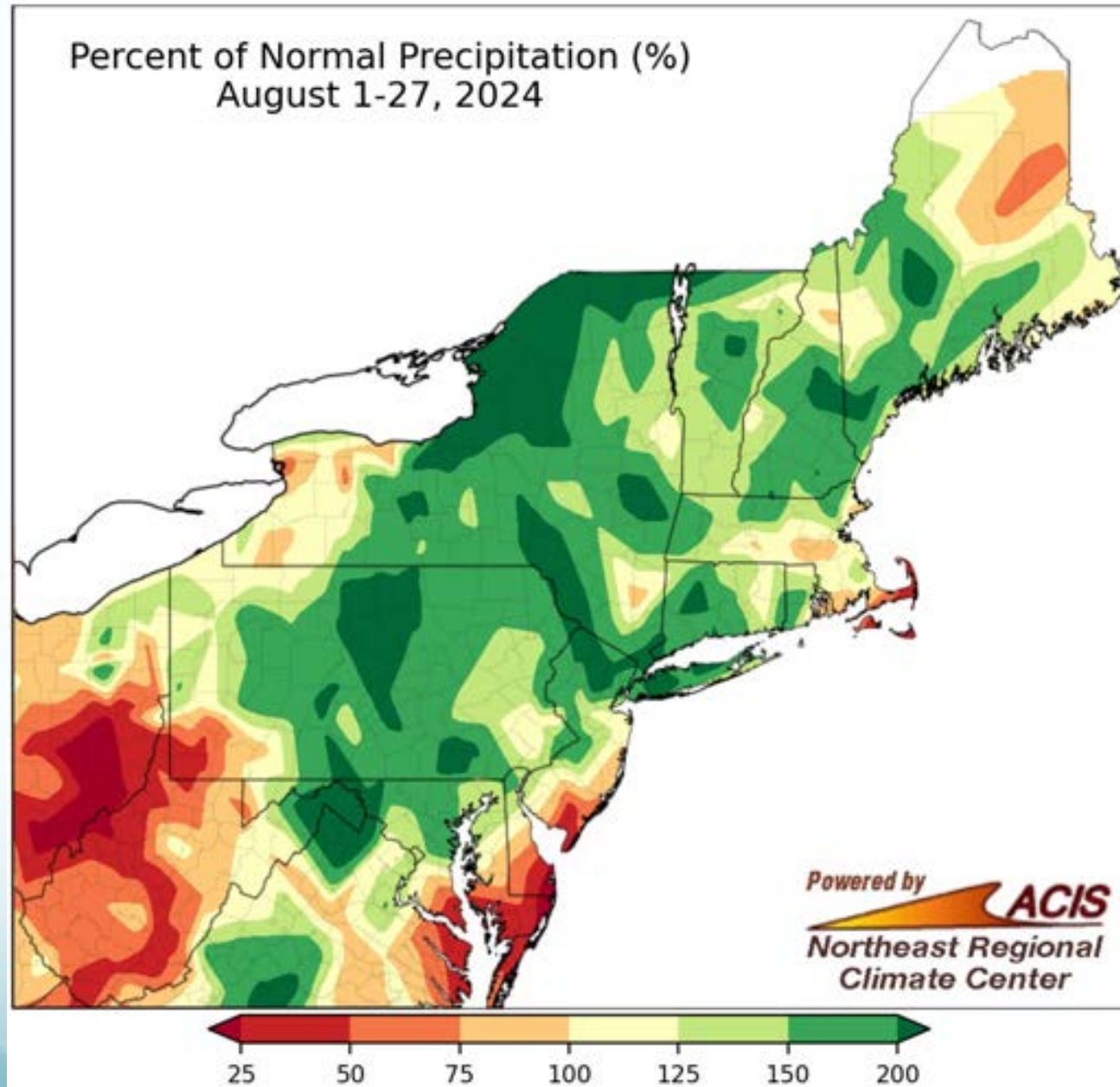
2 WNW Oxford	14.83 in	1200 AM 08/19	Mesonet
2 WNW Oxford	13.52 in	0919 AM 08/19	Public
Oxford	13.50 in	1200 AM 08/19	CWOP

...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



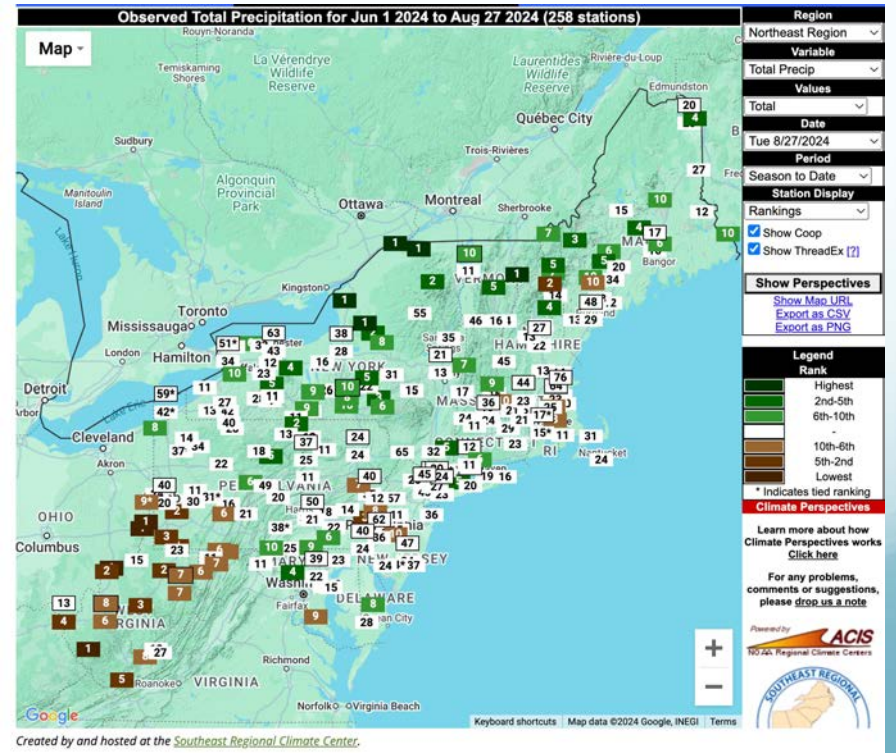
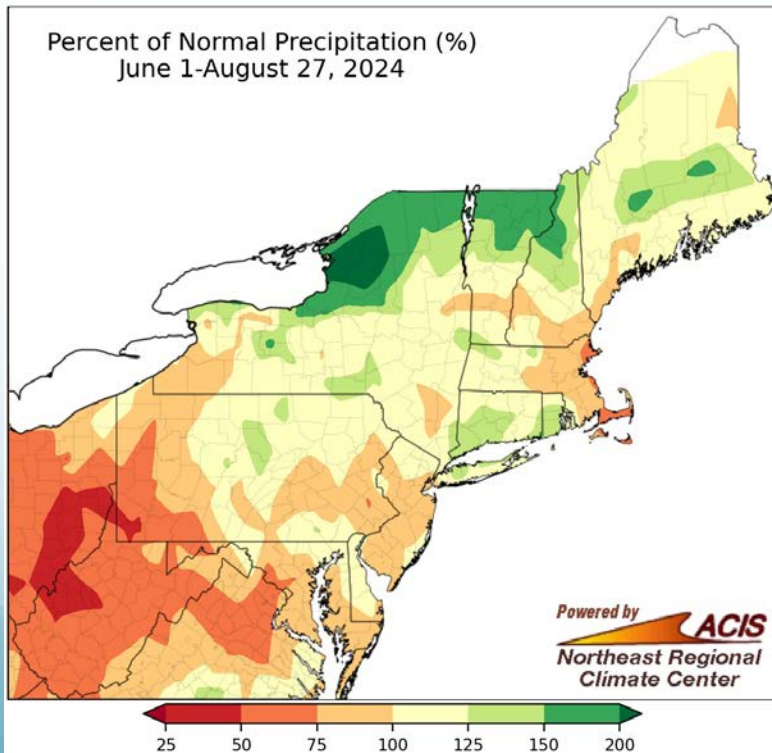
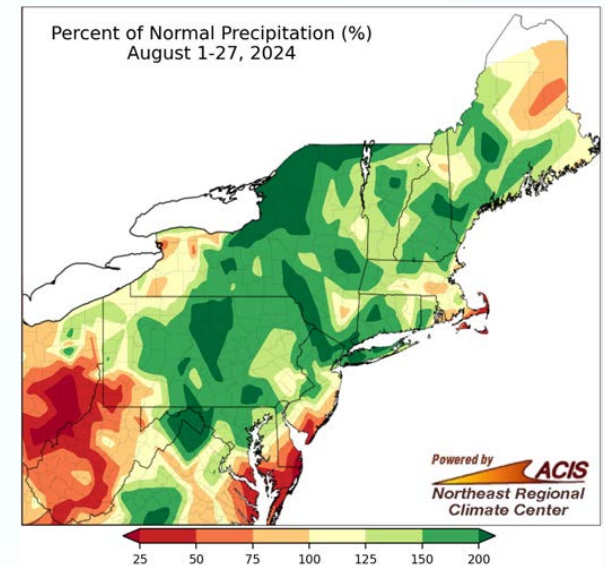
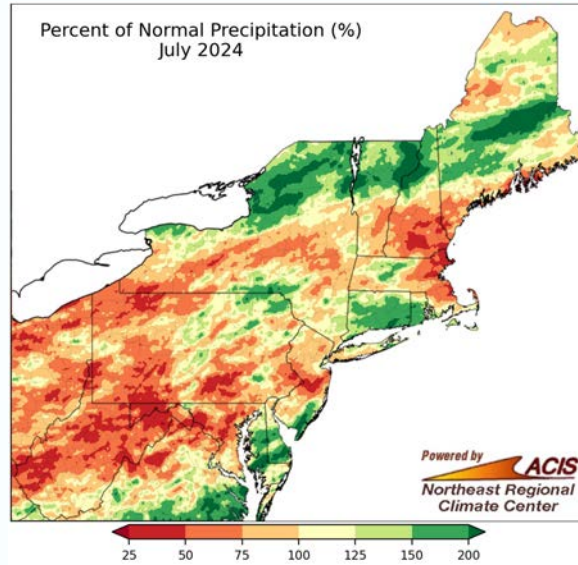
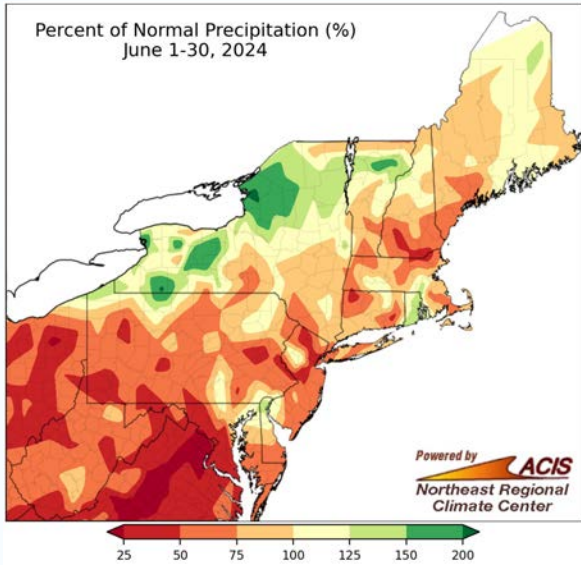
From 25% of normal to more than 200% of normal



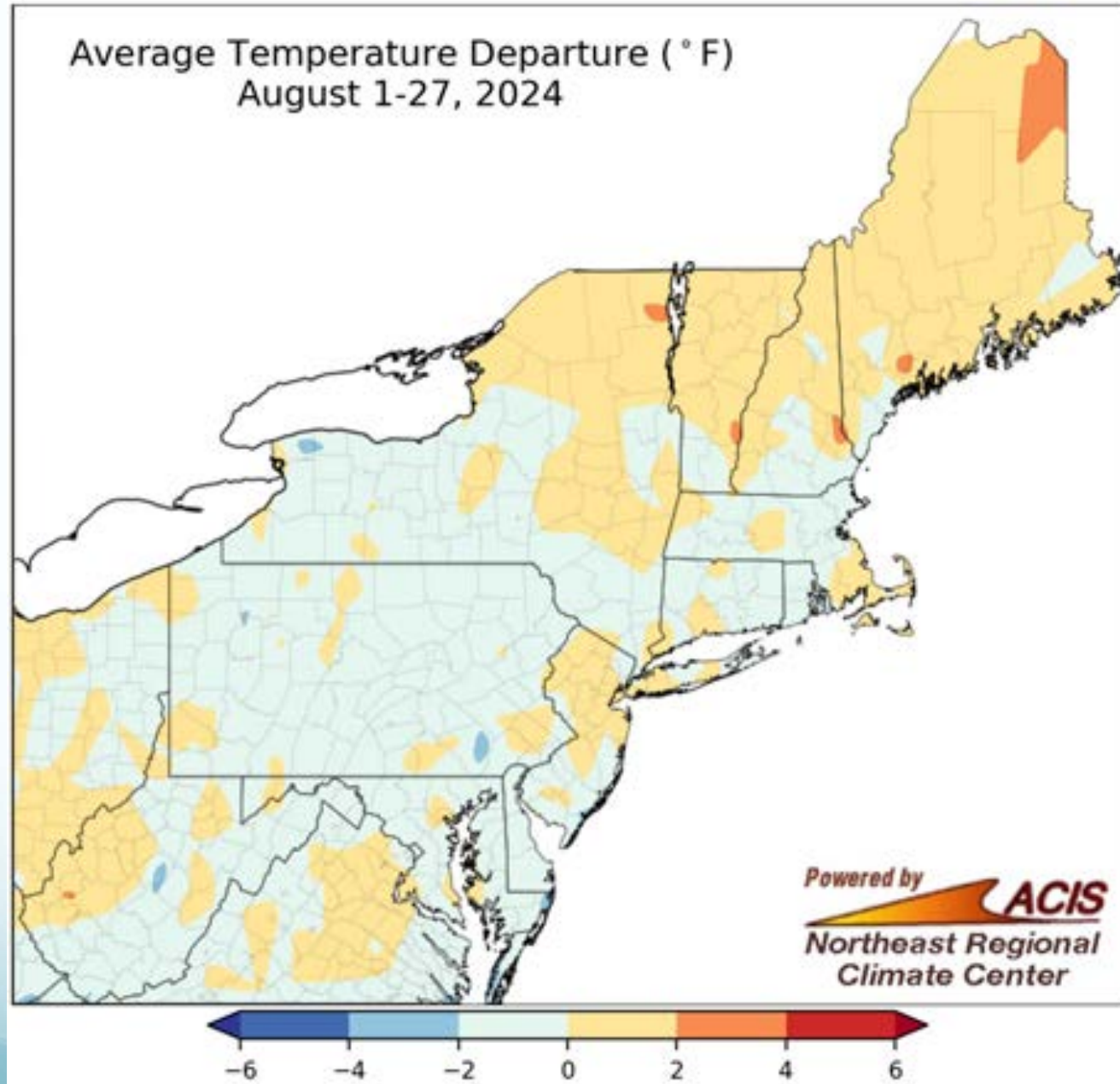
August Precipitation



Summer Precipitation

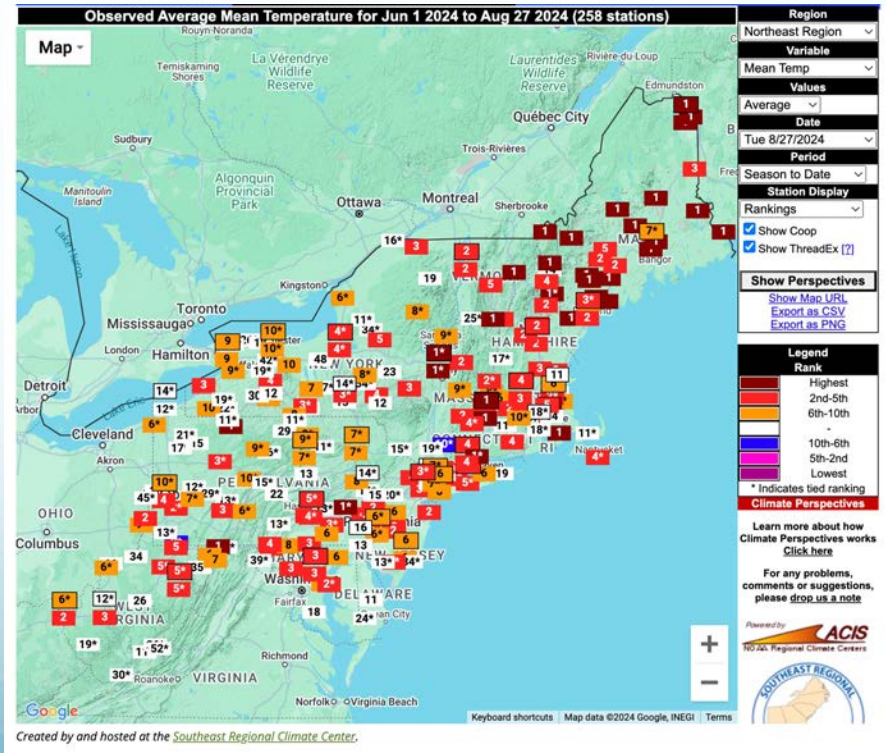
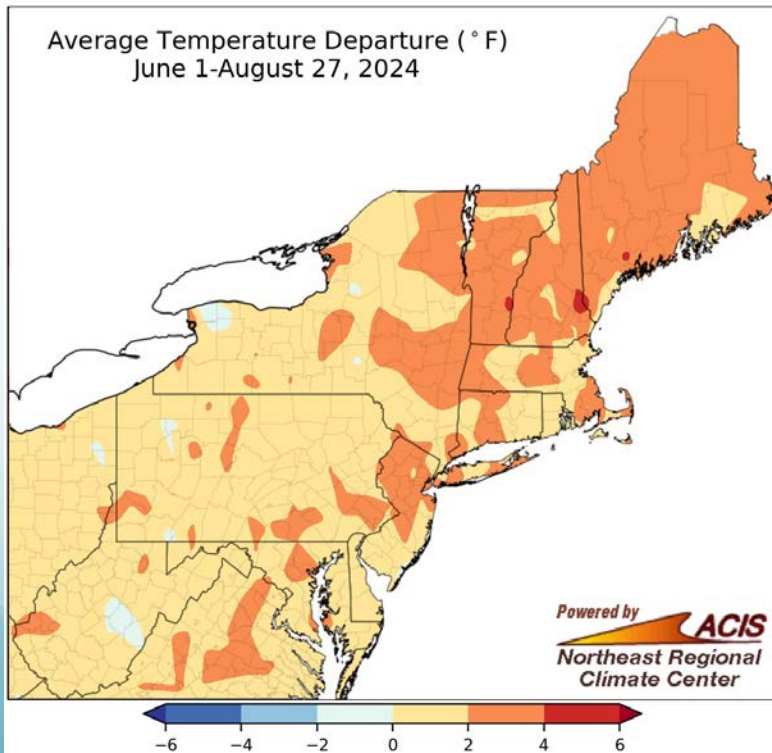
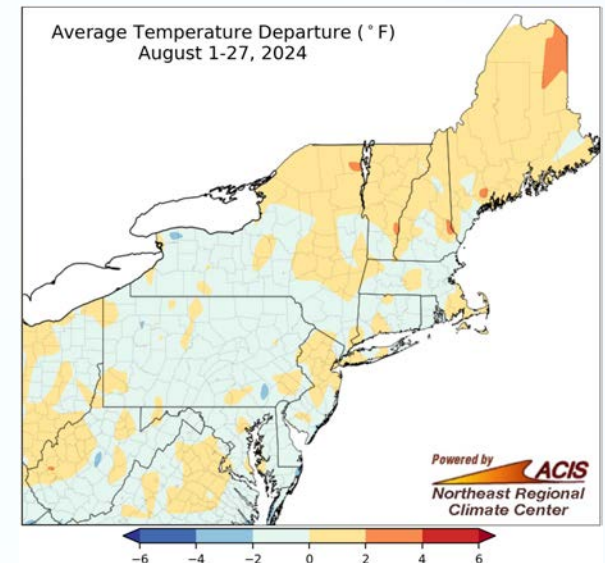
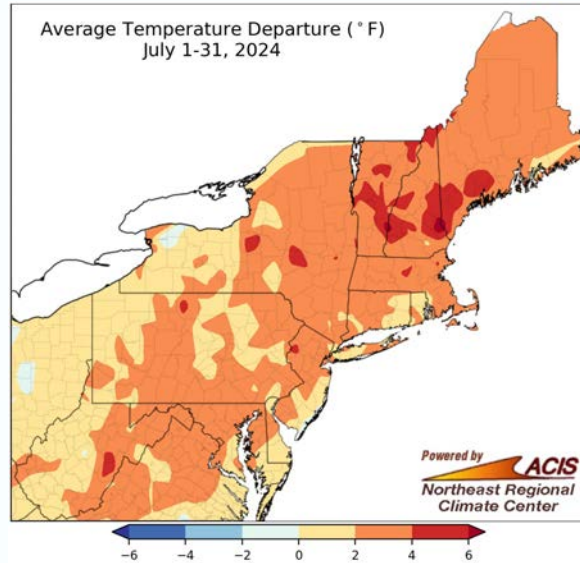
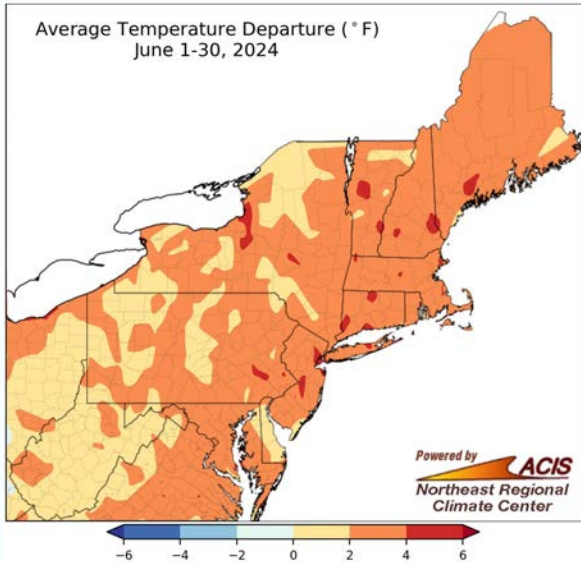


August Temperatures



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](#)

Zoom Out

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)

LOW MODERATE HIGH

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

Ernesto Brings Dangerous Waves & Rip Currents
Through Midnight Monday Night
Issued Aug 18, 2024 3:20 PM EDT

HIGH SURF ADVISORY
Through Midnight Monday Night
Breaking Waves 5-7ft in the surf zone will make hazardous surf conditions. Stay away from rock outcrops.

SMALL CRAFT ADVISORY
Through late Monday Night
Sea: 4-6 Feet
Period: 12-14 seconds
Swell Direction: South

Hazards:
High Surf Advisory
Small Craft Advisory

Storm Ernesto
August 18, 2024
27 Advisory 26
Storm Hurricane Center

Current information:
Center location 38.1 N 42.5 W
Maximum sustained wind 75 mph
Movement NNE at 18 mph
5:38 PM EDT 8/18/24

Forecast positions:
Rapid Cycle: 24 hours
Satellite: 24 hours
C: 20 mph
S: 39-73 mph, 10-14-110 mph, 10-14

Watches: High Surf Advisory
Warnings: Small Craft Advisory

Current wind field

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

Threat Risk

Moderate

High

Locations on map: Sandy Hook, Long Branch, Manasquan, Seaside Heights, Barnegat Light, Beach Haven, Atlantic City, Ocean City, Avalon, Cape May, Rehoboth Beach, Bethany Beach, Easton, Stevensville, Dover, Wilmington, Philadelphia, Trenton, Philadelphia, Wilmington, Betterton, Dover, Easton, Rehoboth Beach, Bethany Beach.

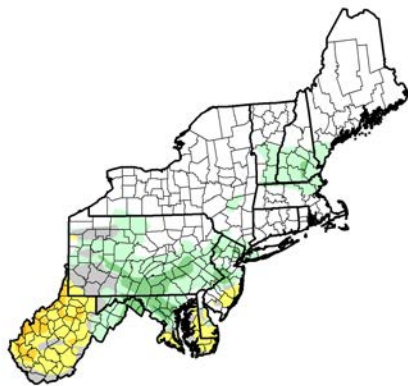
NWSMount Holly

weather.gov/phi



Drought Monitor

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

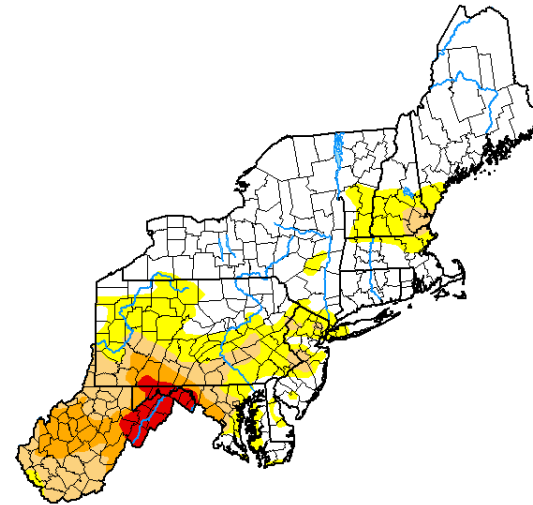


August 27, 2024
compared to
July 30, 2024

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>

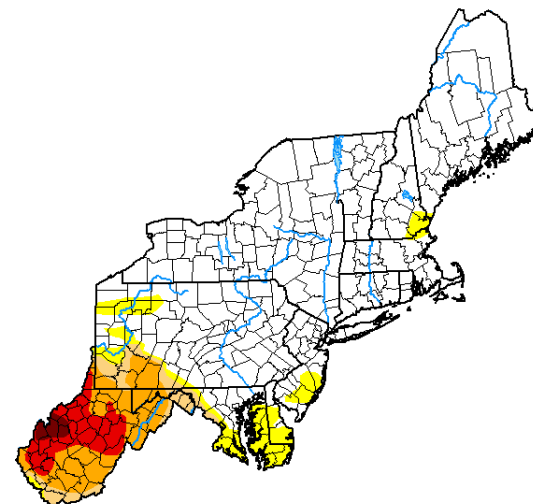
Author:

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>

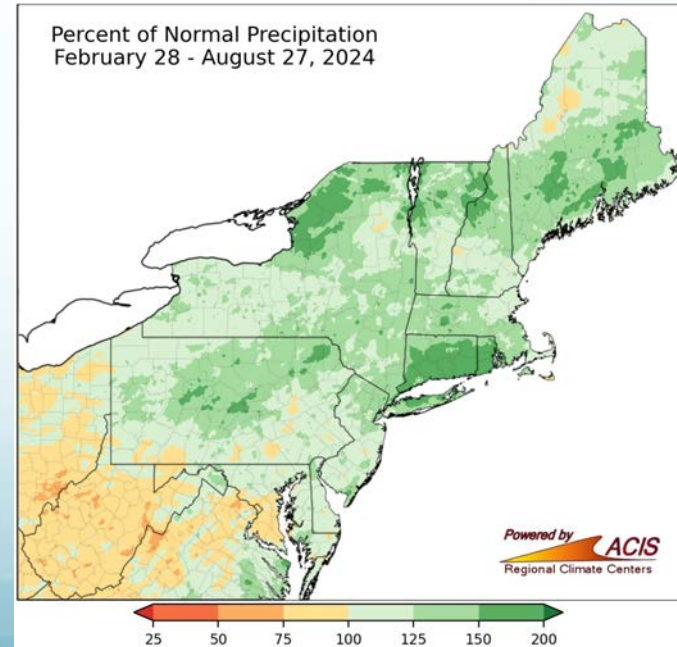
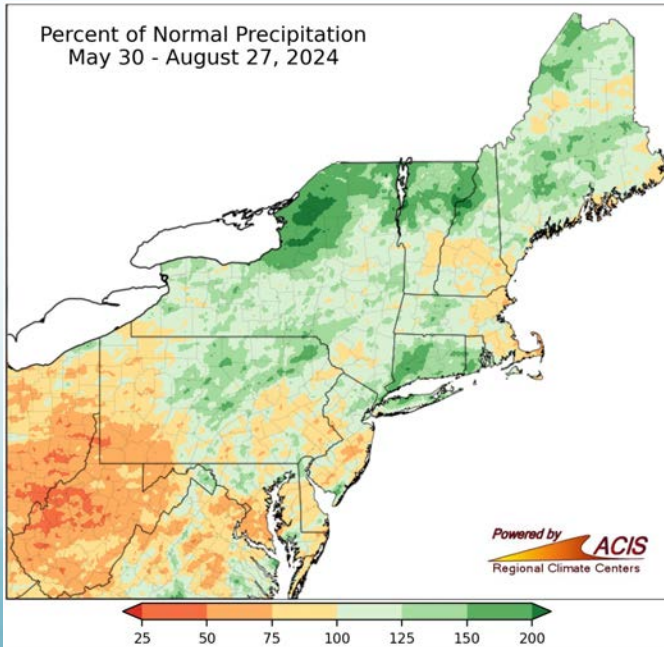
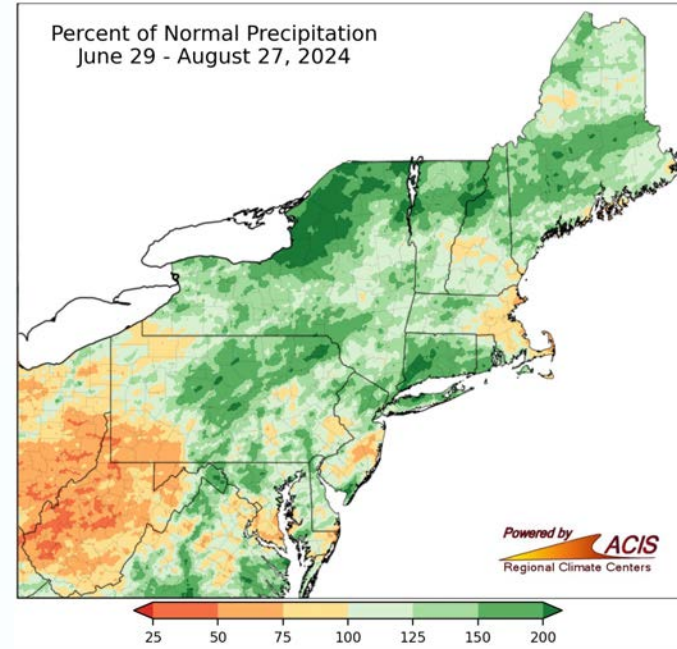
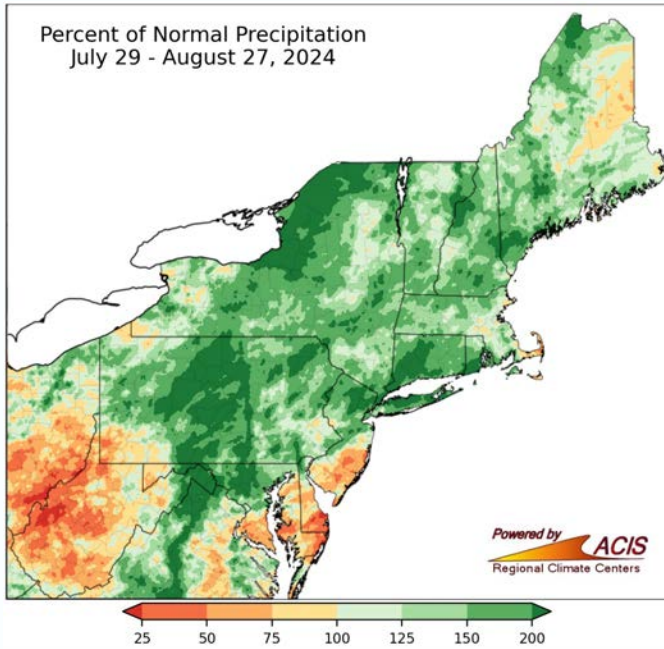
Author:

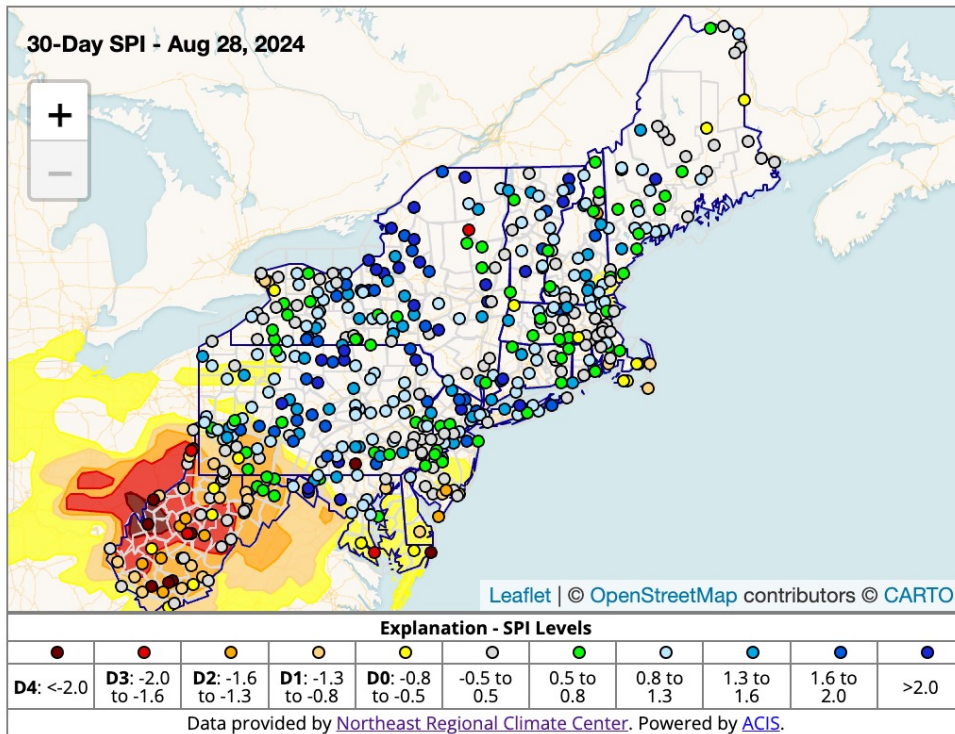
Richard Heim
NCEI/NOAA



droughtmonitor.unl.edu

Precipitation





Standardized Precipitation Index

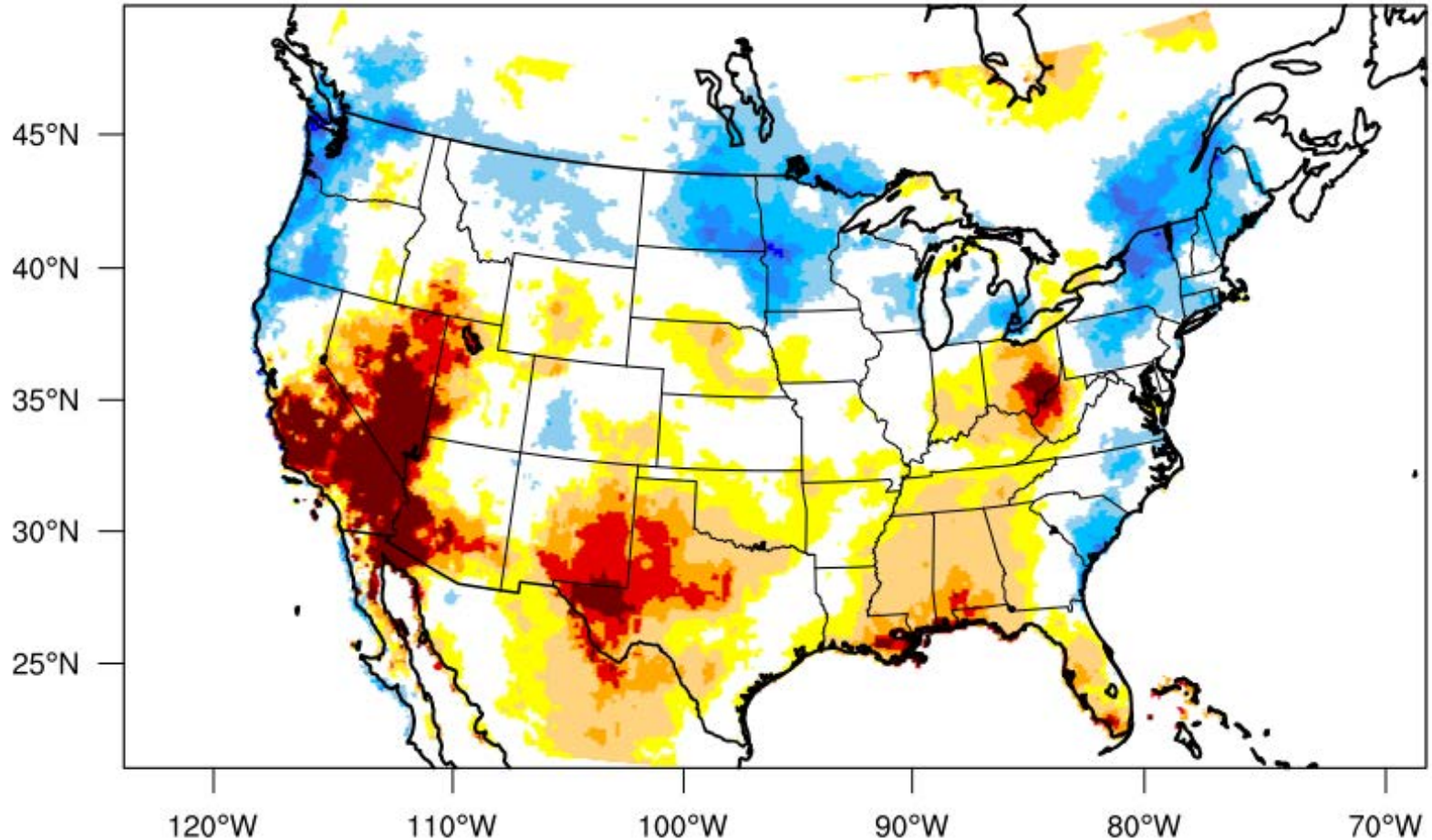


Precipitation



Evap. Demand Drought Index

3-week EDDI categories for August 24, 2024



Drought categories



Wetness categories



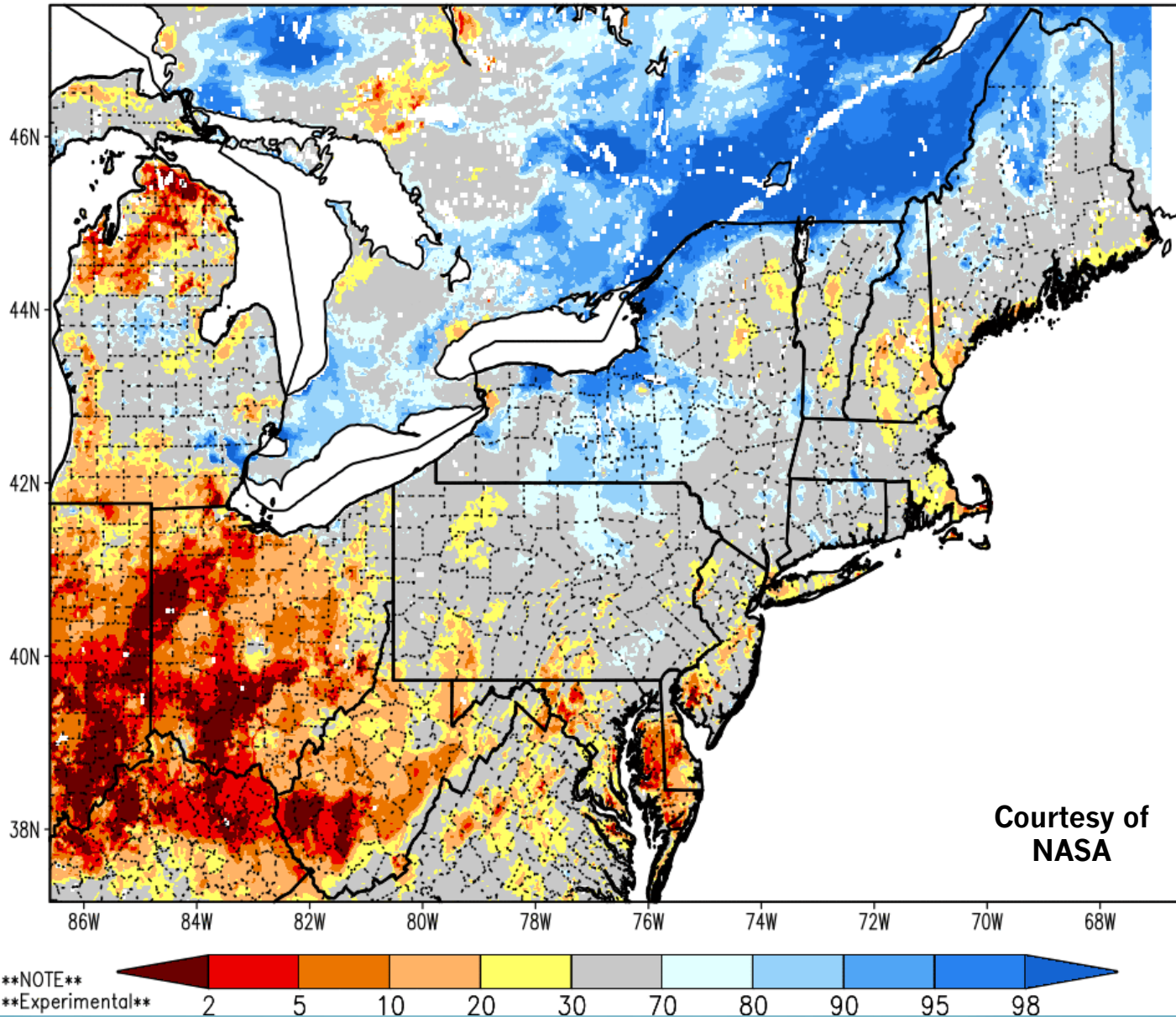
100% 98% 95% 90% 80% 70% 30% 20% 10% 5% 2% 0%

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

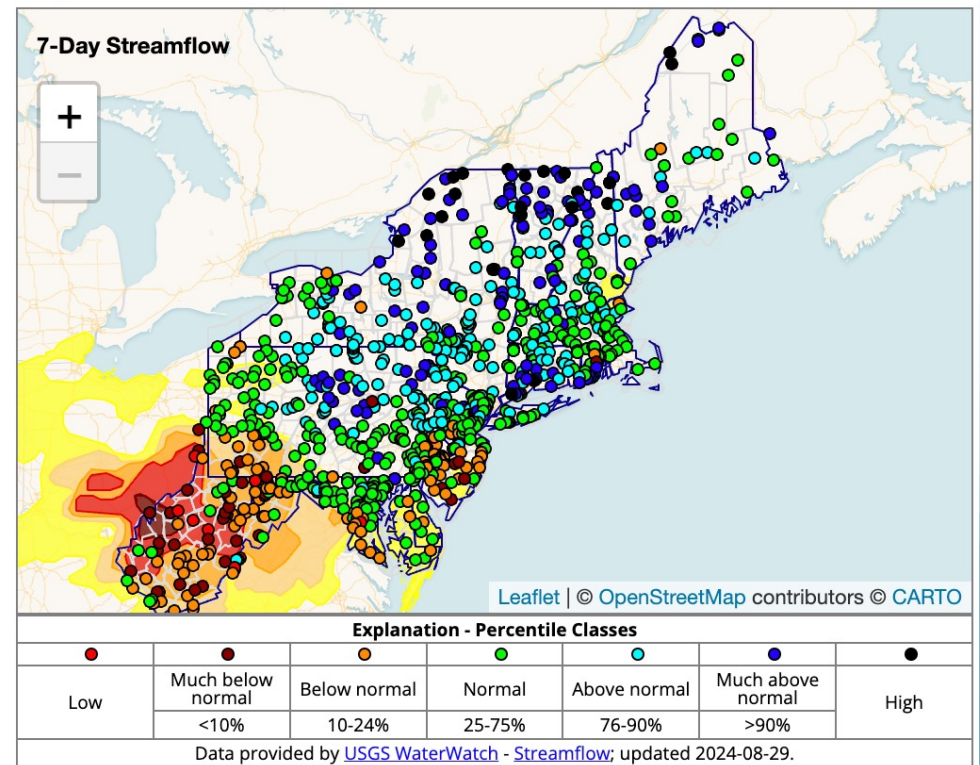
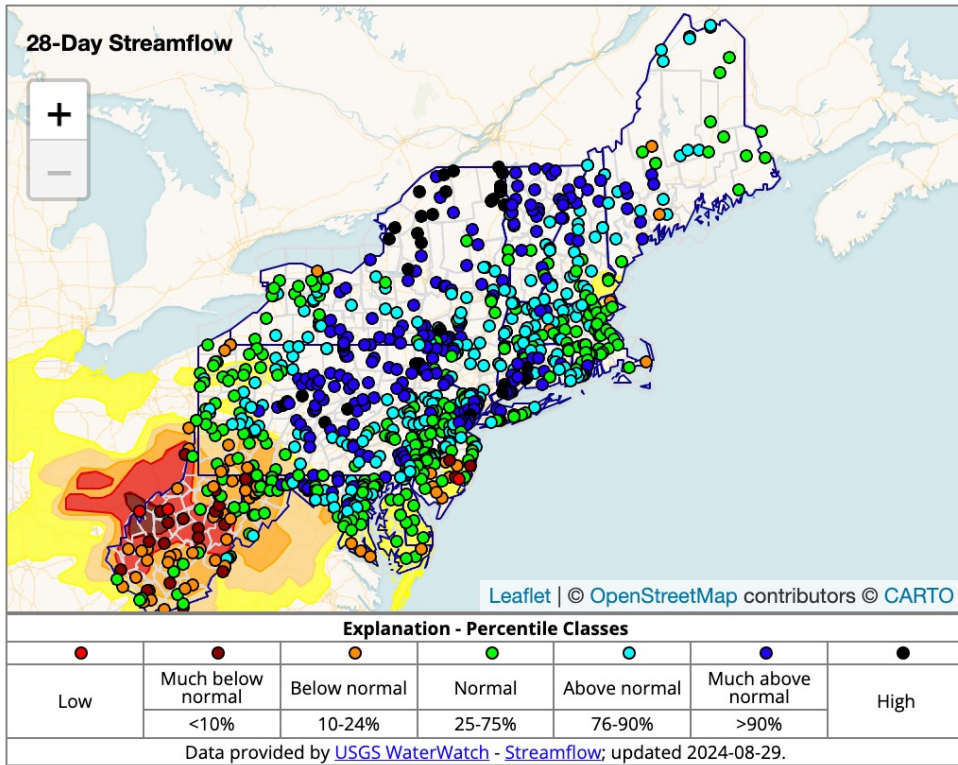


Soil Moisture

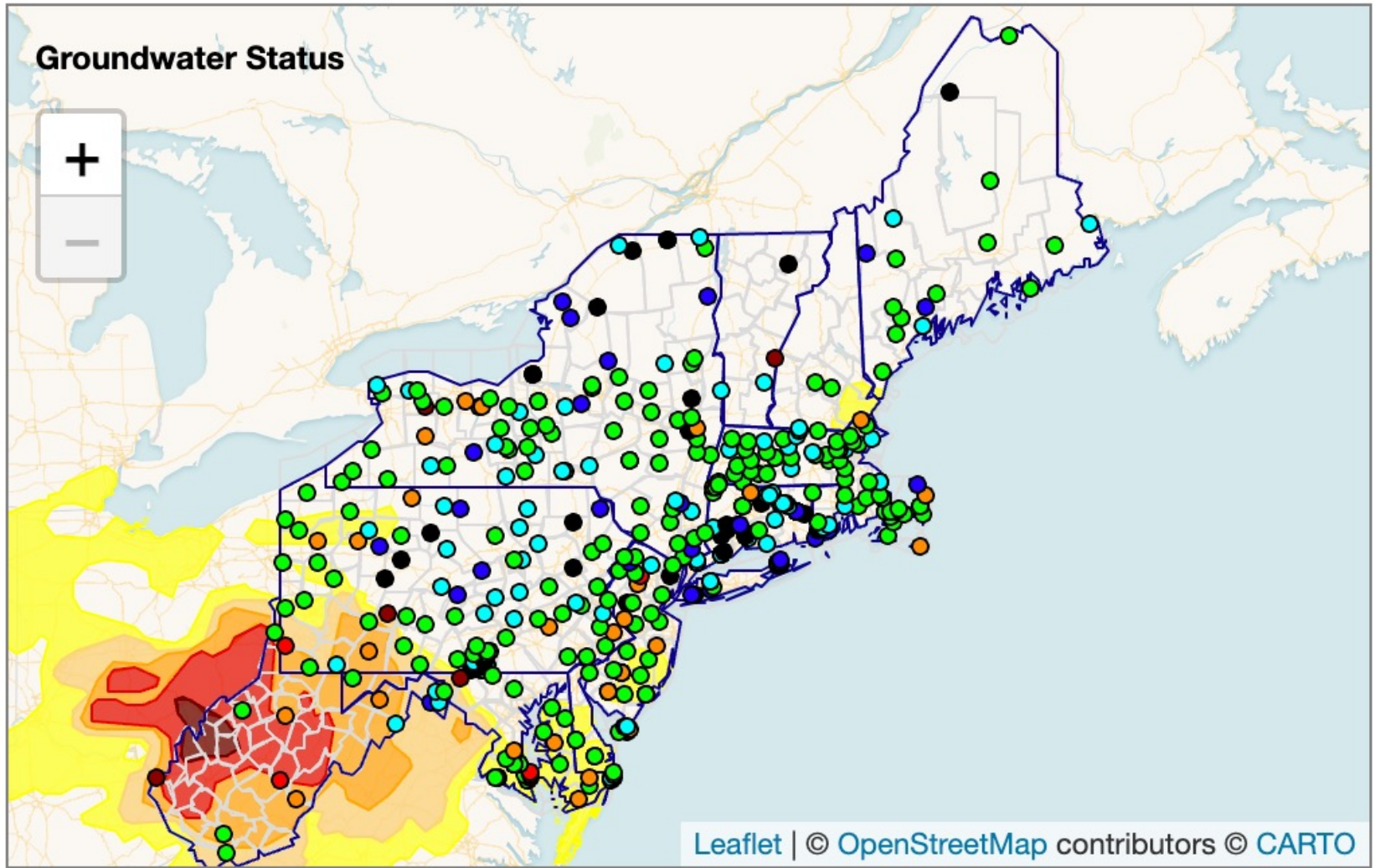
SPoRT-LIS 0-100 cm Soil Moisture percentile valid 29 Aug 2024



Streamflow



Groundwater



Explanation - Percentile Classes

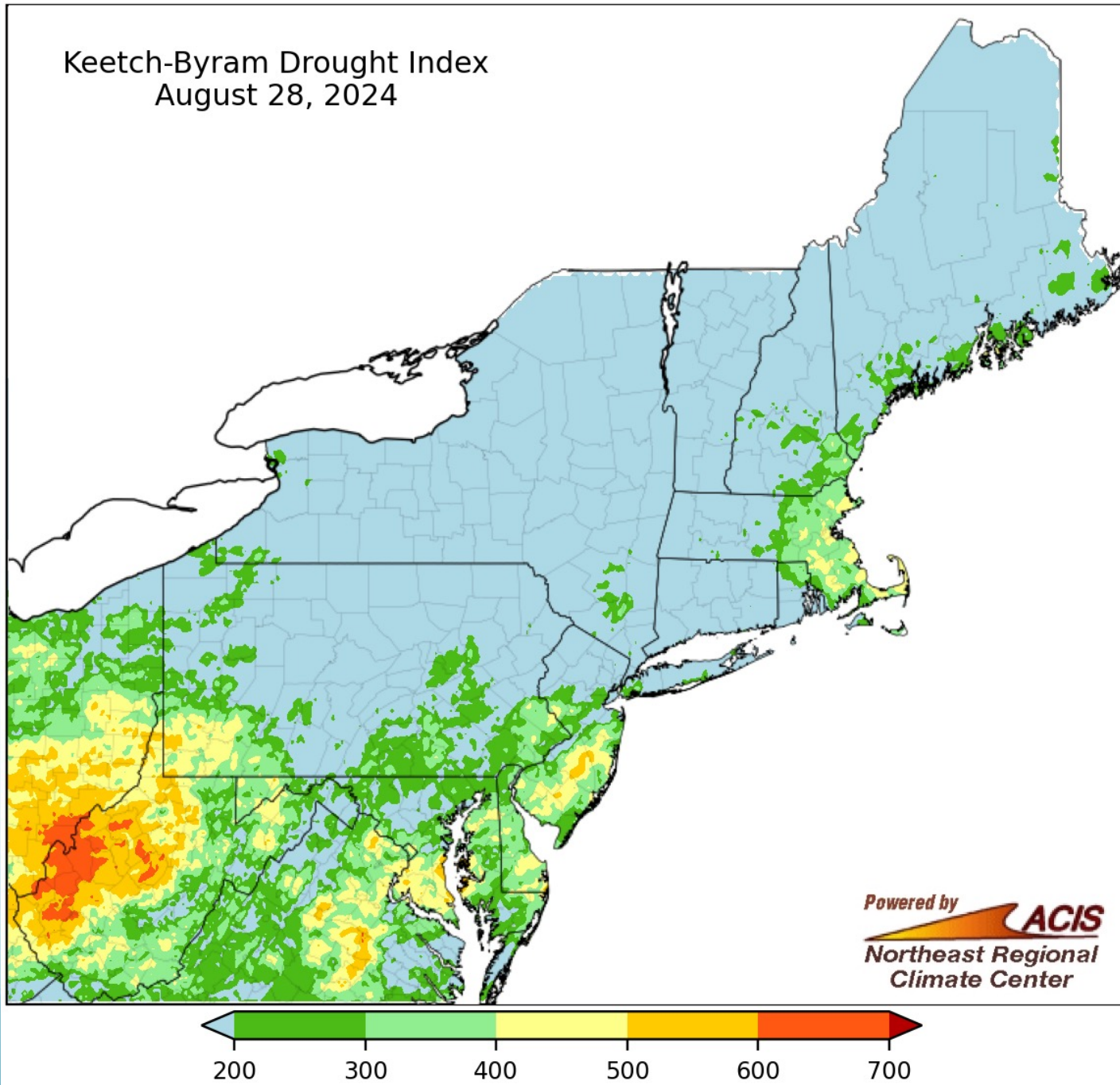
Low	Much below normal	Below normal	Normal	Above normal	Much above normal	High
	<10%	10-24%	25-75%	76-90%	>90%	

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



Wildfire Risk

Keetch-Byram Drought Index
August 28, 2024



Drought Impacts

LOCAL NEWS

'We need immediate help': USDA says help for farmers during drought is available

by: Lane Ball
Posted: Aug 26, 2024 / 11:31 PM EDT
Updated: Aug 26, 2024 / 11:31 PM EDT

WOWK

West Virginia grapples with widespread drought, impacting local agriculture

by DANIEL BURBANK | Wed, August 7th 2024 at 10:27 PM
Updated Thu, August 8th 2024 at 8:11 AM



A dying sunflower in Charleston (WCHS).



TOPICS: WEST VIRGINIA DROUGHT FARMERS AGRICULTURE RAINFALL CROPS | >



KANAWHA COUNTY, W.Va. (WCHS) — More than 97% of West Virginia in some form of drought at the moment. Several agriculture producers said it impacted crop sizes and are hoping for more rain.



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

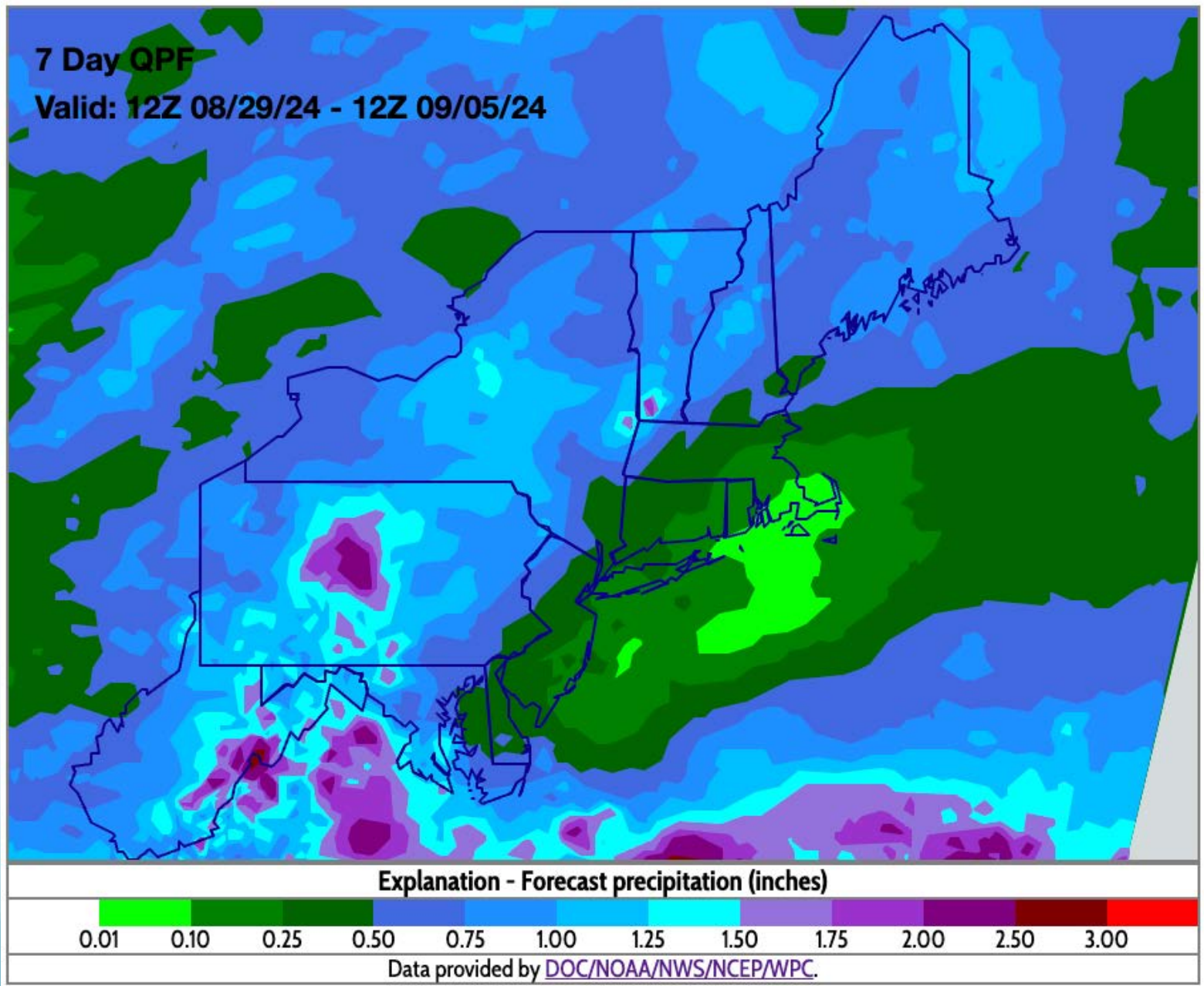
- Please refer to your municipality and/or water provider for mitigation information.



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

National Weather Service
Charleston, WV

Precipitation Forecast



Short-term Outlooks



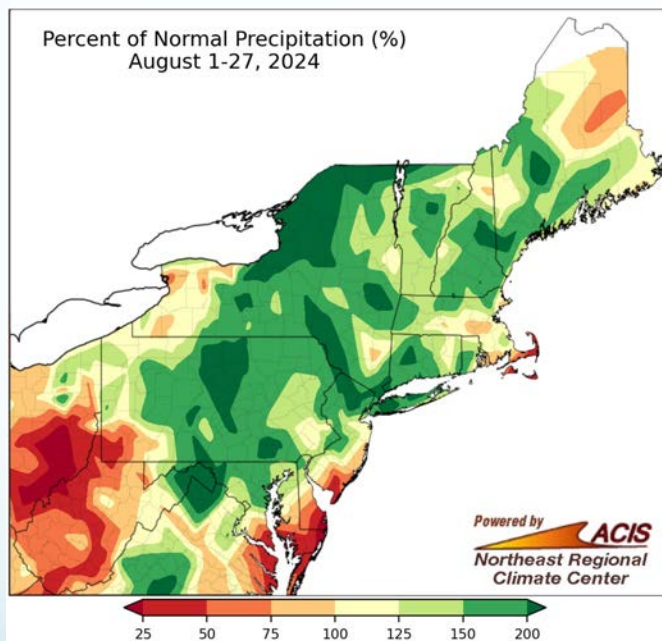
Monthly & 3-Month Outlooks



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