

September Recap & Northeast DEWS Discussion

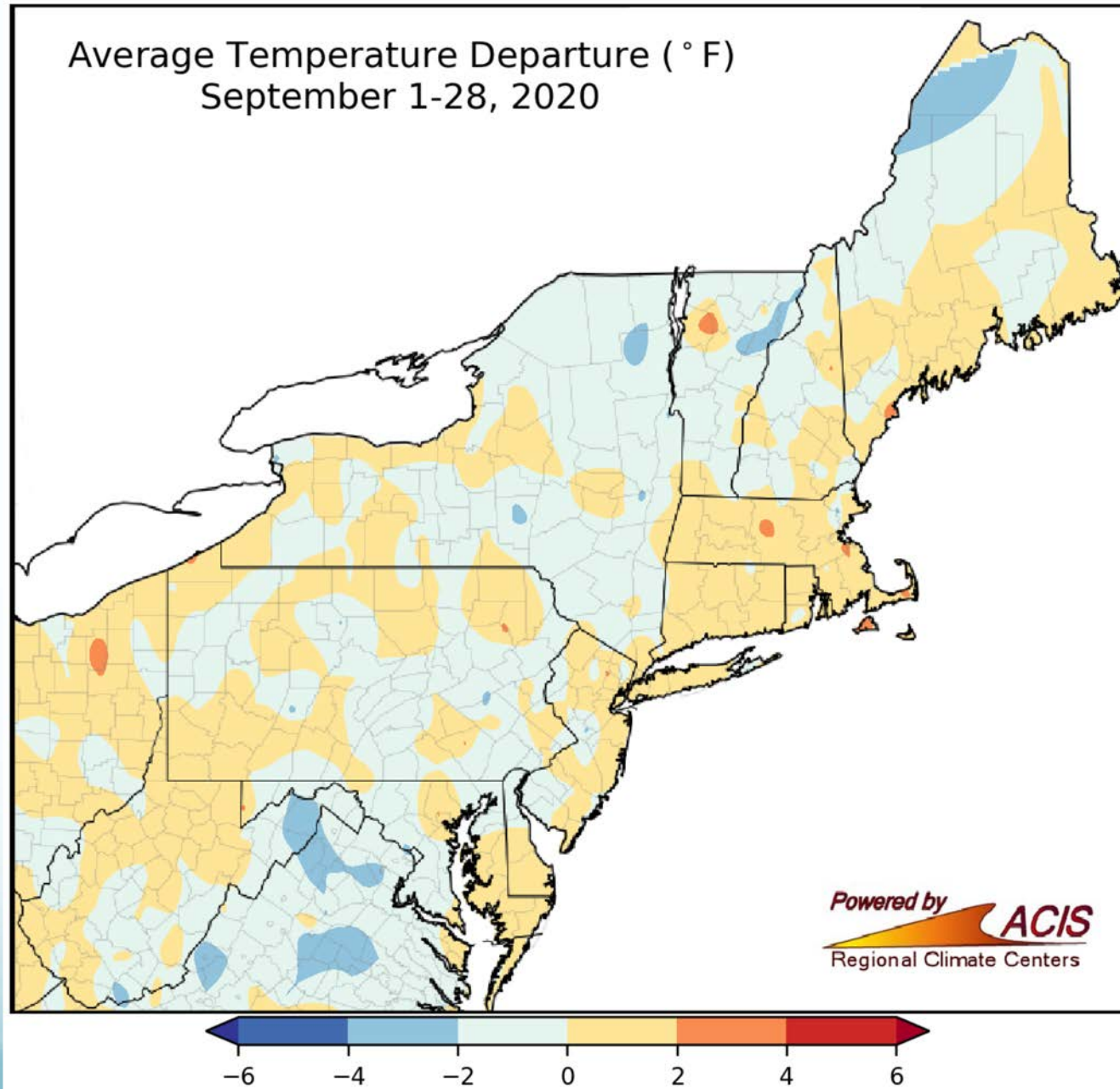
By: Samantha Borisoff, Climatologist
Northeast Regional Climate Center



Northeast Regional
Climate Center



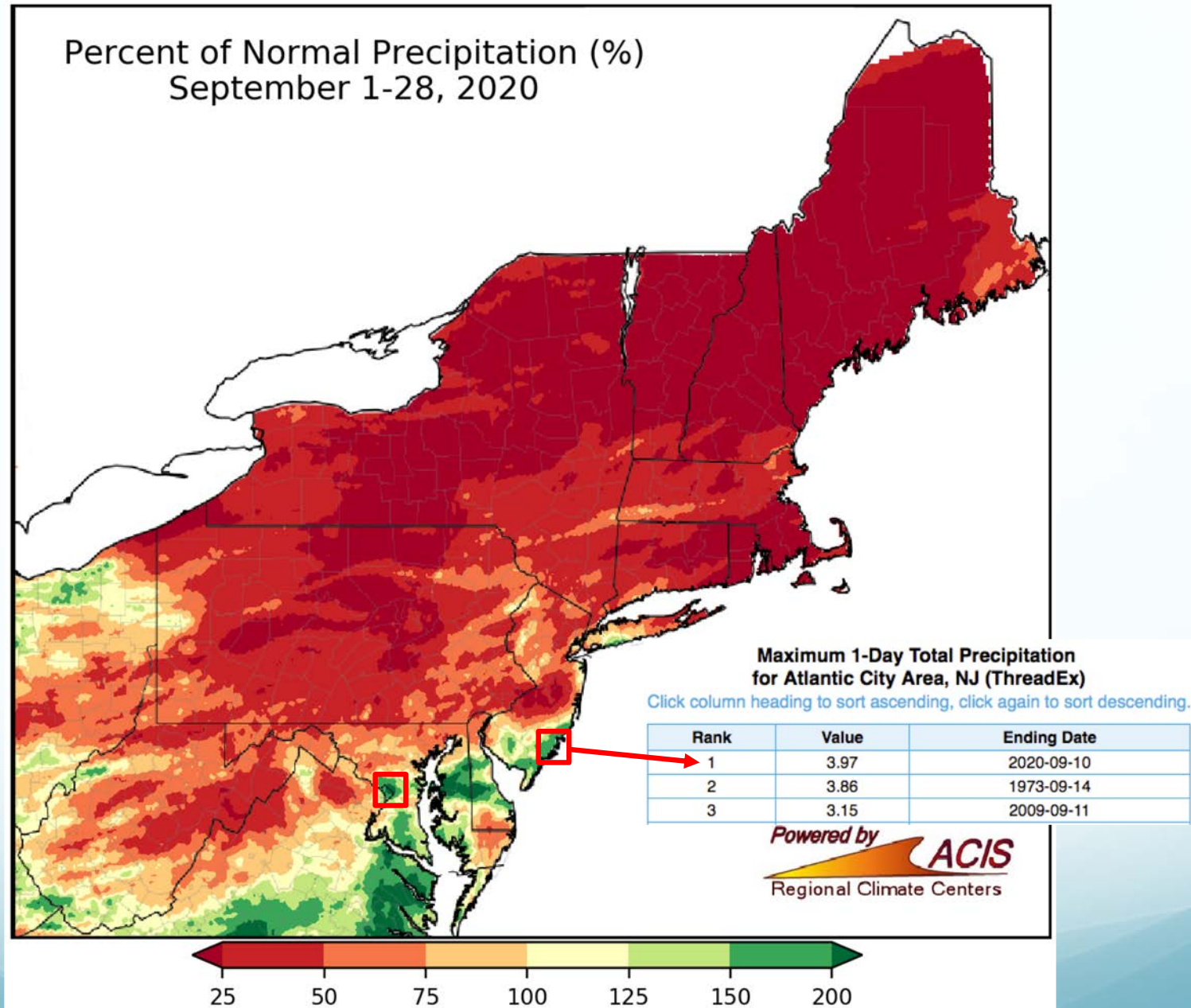
September Temperatures



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



September Precipitation

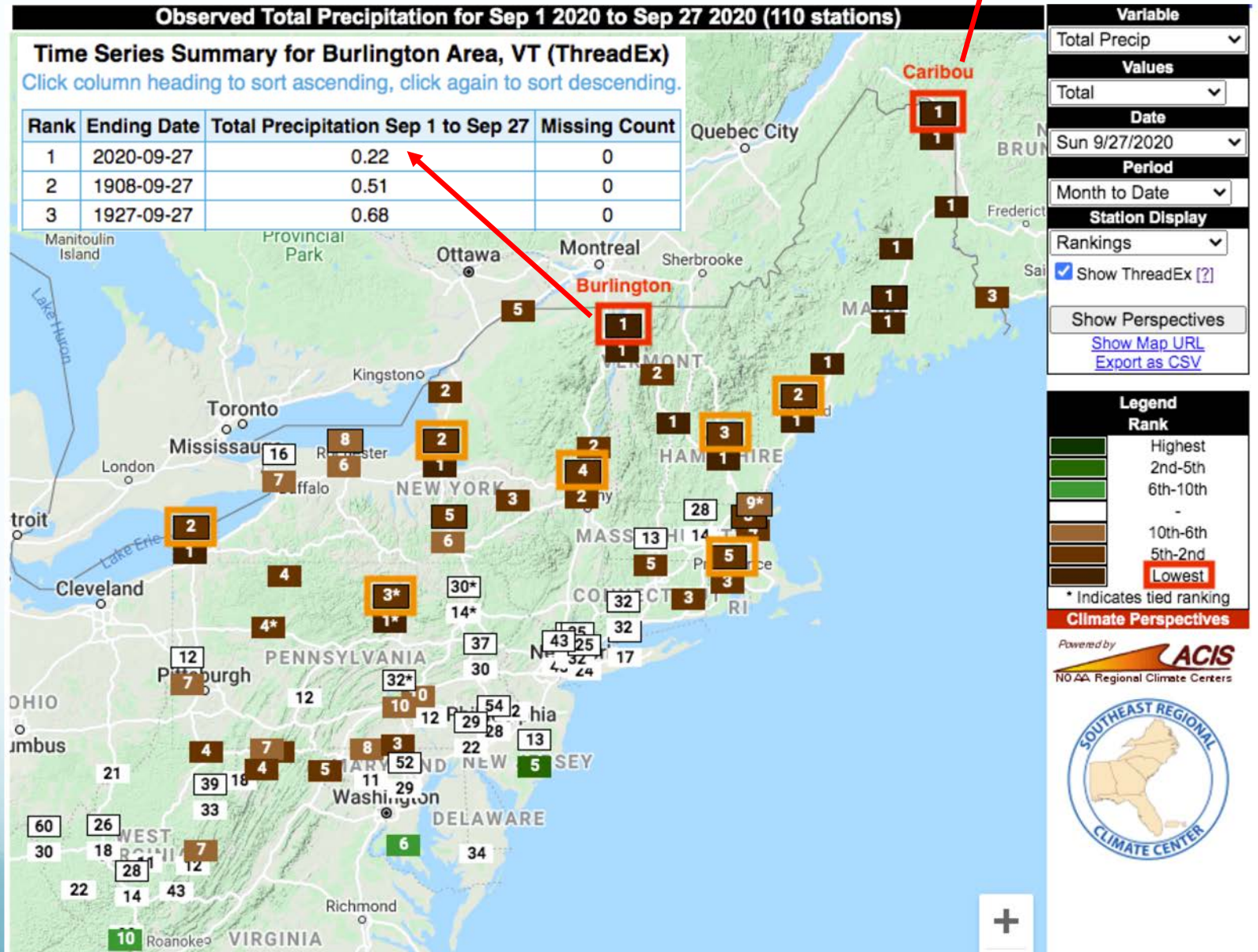


From less than 25% of normal to more than 200% of normal

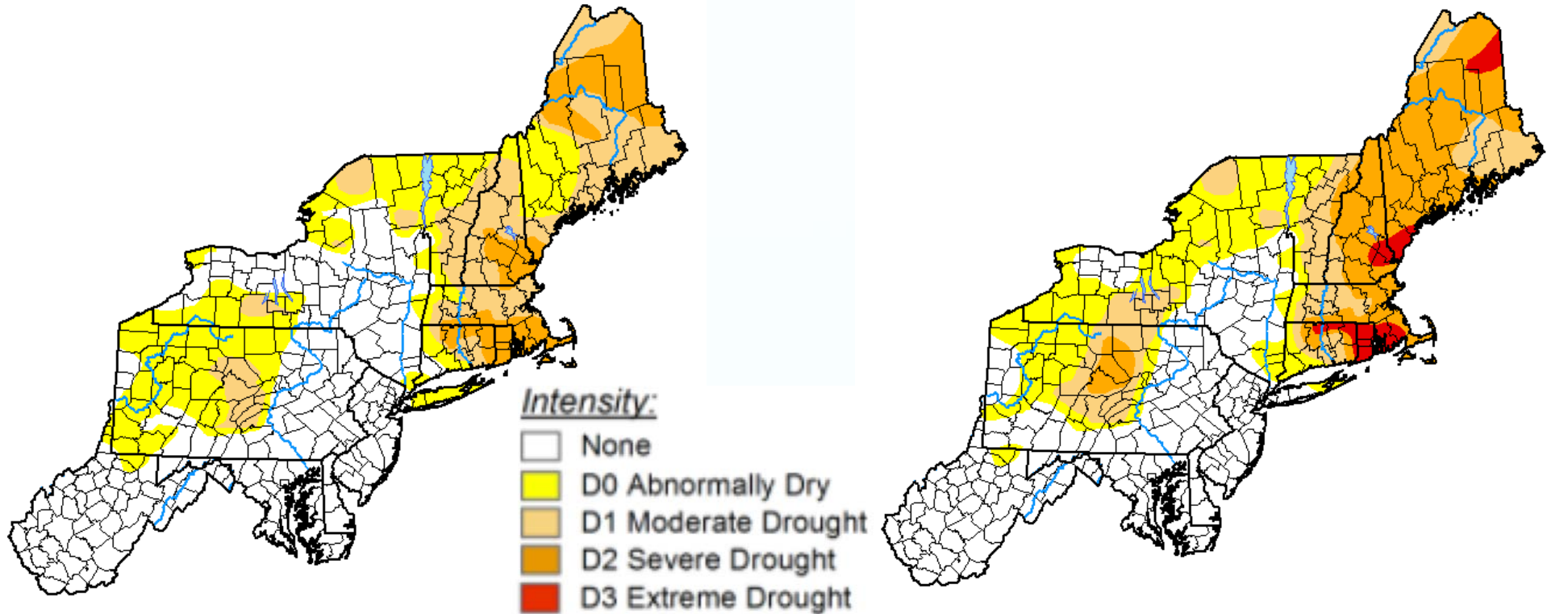
September Precipitation

Time Series Summary for Caribou Area, ME (ThreadEx)
 Click column heading to sort ascending, click again to sort descending.

Rank	Ending Date	Total Precipitation Sep 1 to Sep 27	Missing Count
1	2020-09-27	0.11	0
2	1968-09-27	0.61	0
3	2003-09-27	0.76	0



Drought Monitor



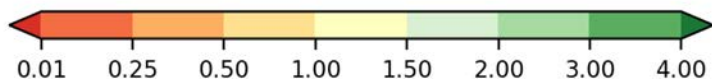
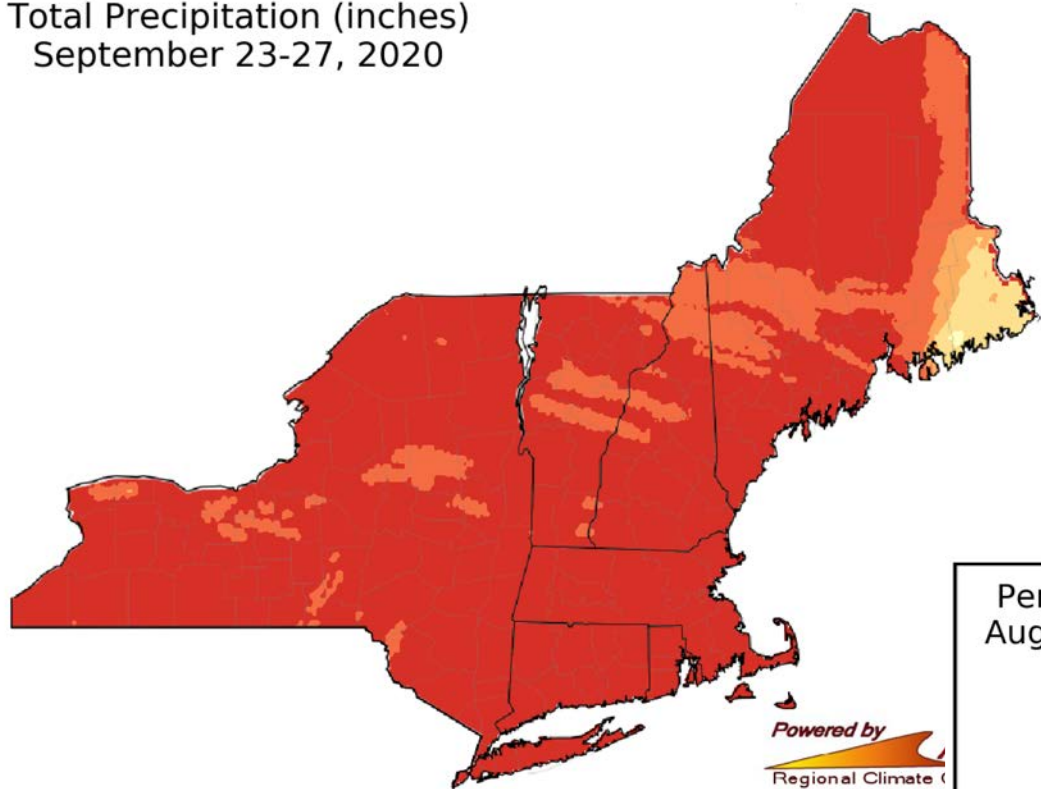
September 1:
28% of the region was in a
severe or moderate drought
26% was abnormally dry

September 22:
37% of the region was in an extreme,
severe, or moderate drought
21% was abnormally dry

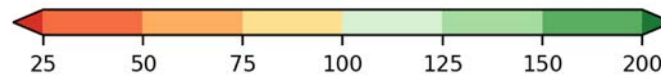
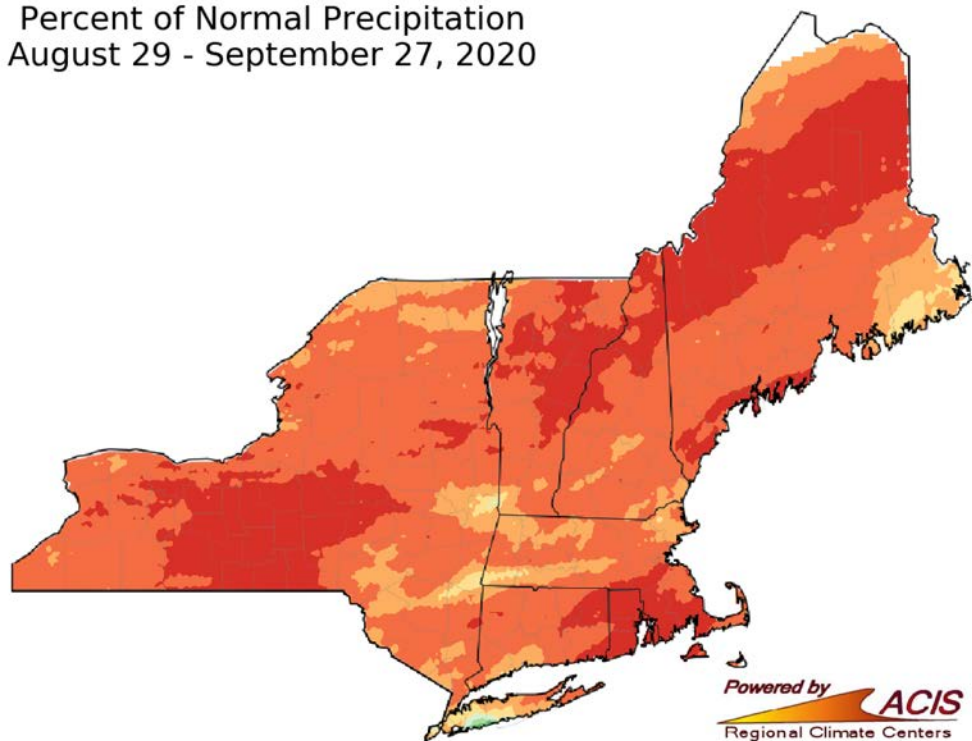


Precipitation

Total Precipitation (inches)
September 23-27, 2020

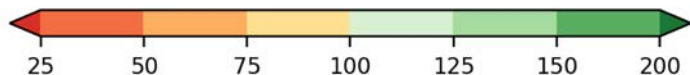
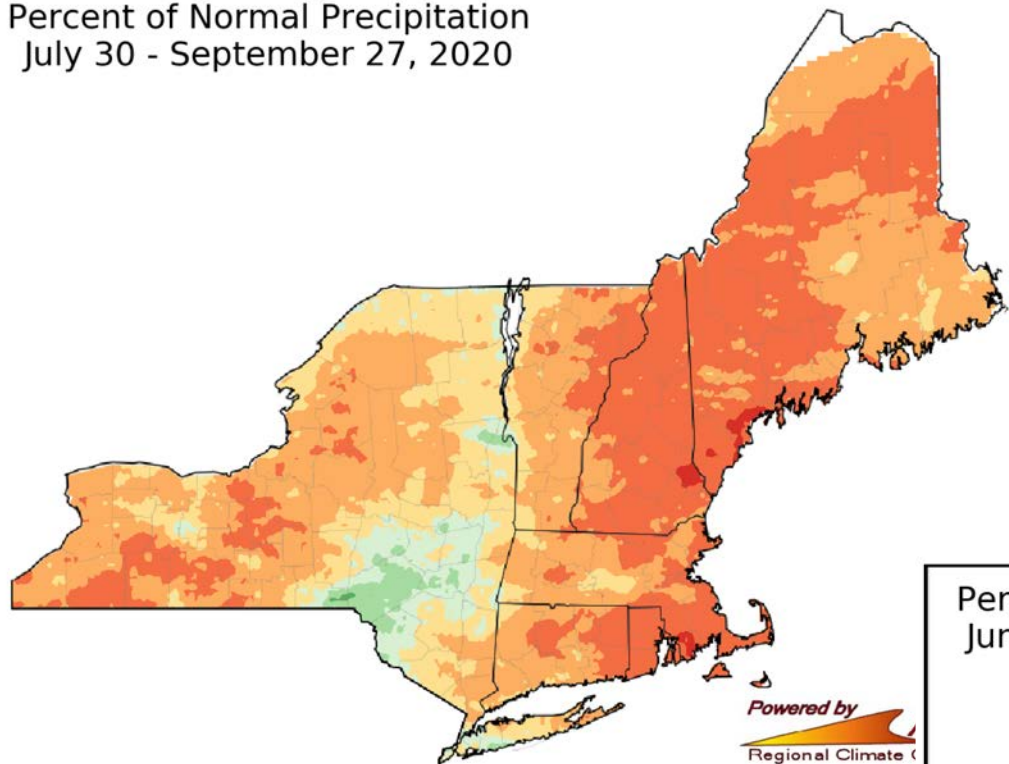


Percent of Normal Precipitation
August 29 - September 27, 2020

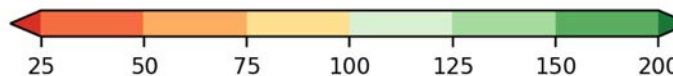
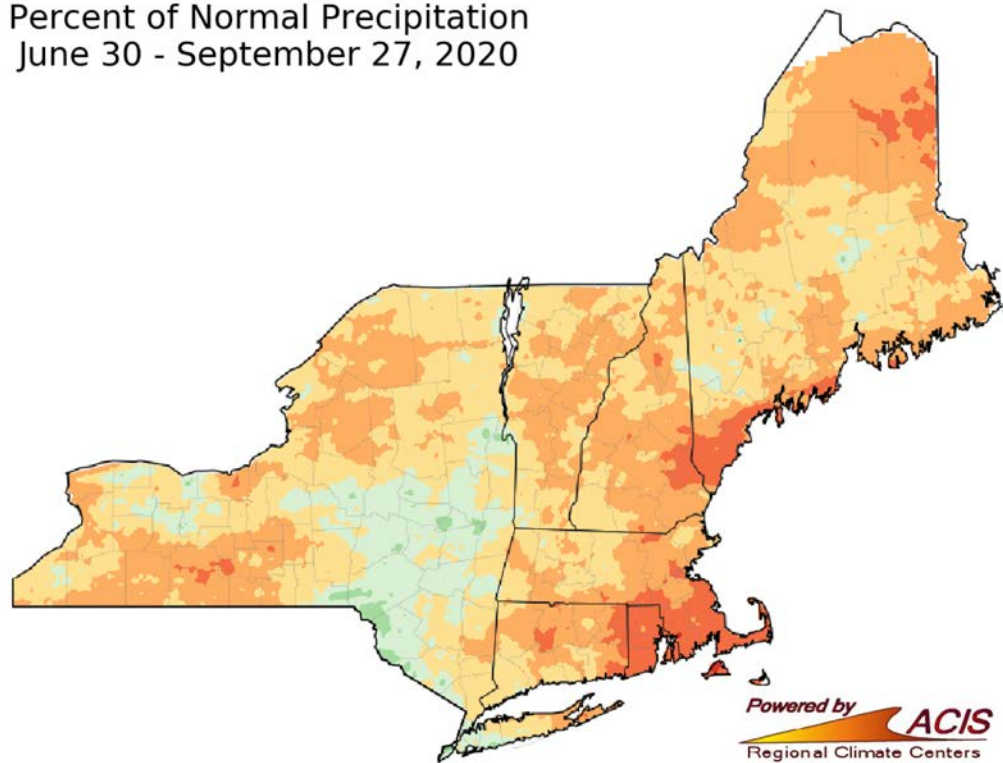


Precipitation

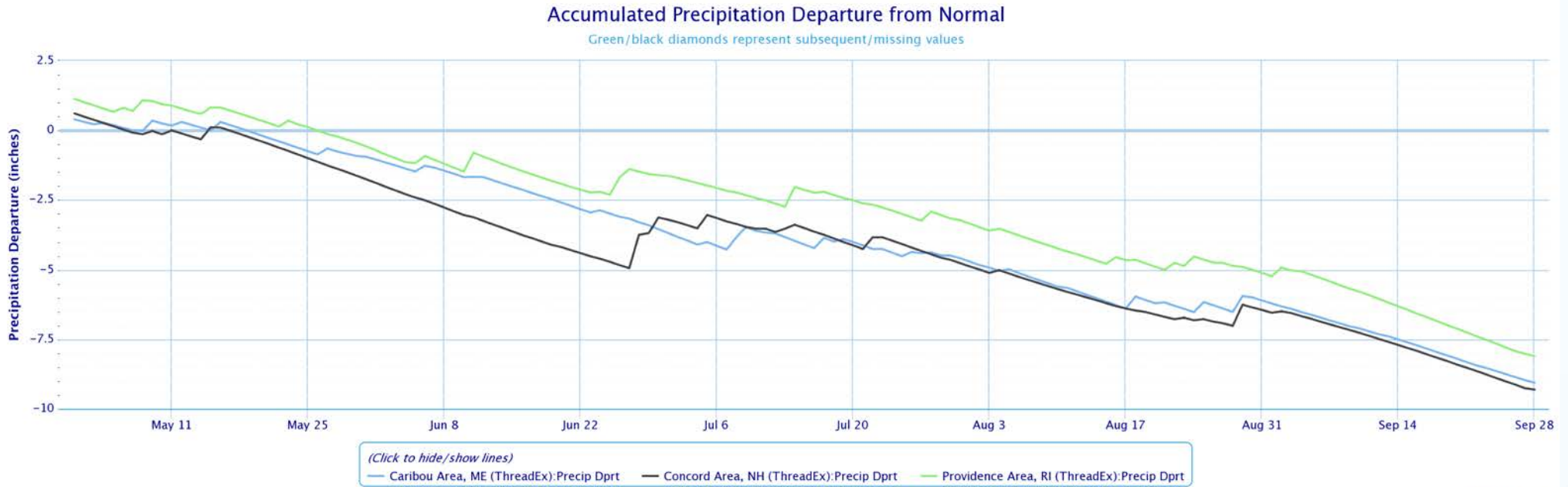
Percent of Normal Precipitation
July 30 - September 27, 2020



Percent of Normal Precipitation
June 30 - September 27, 2020



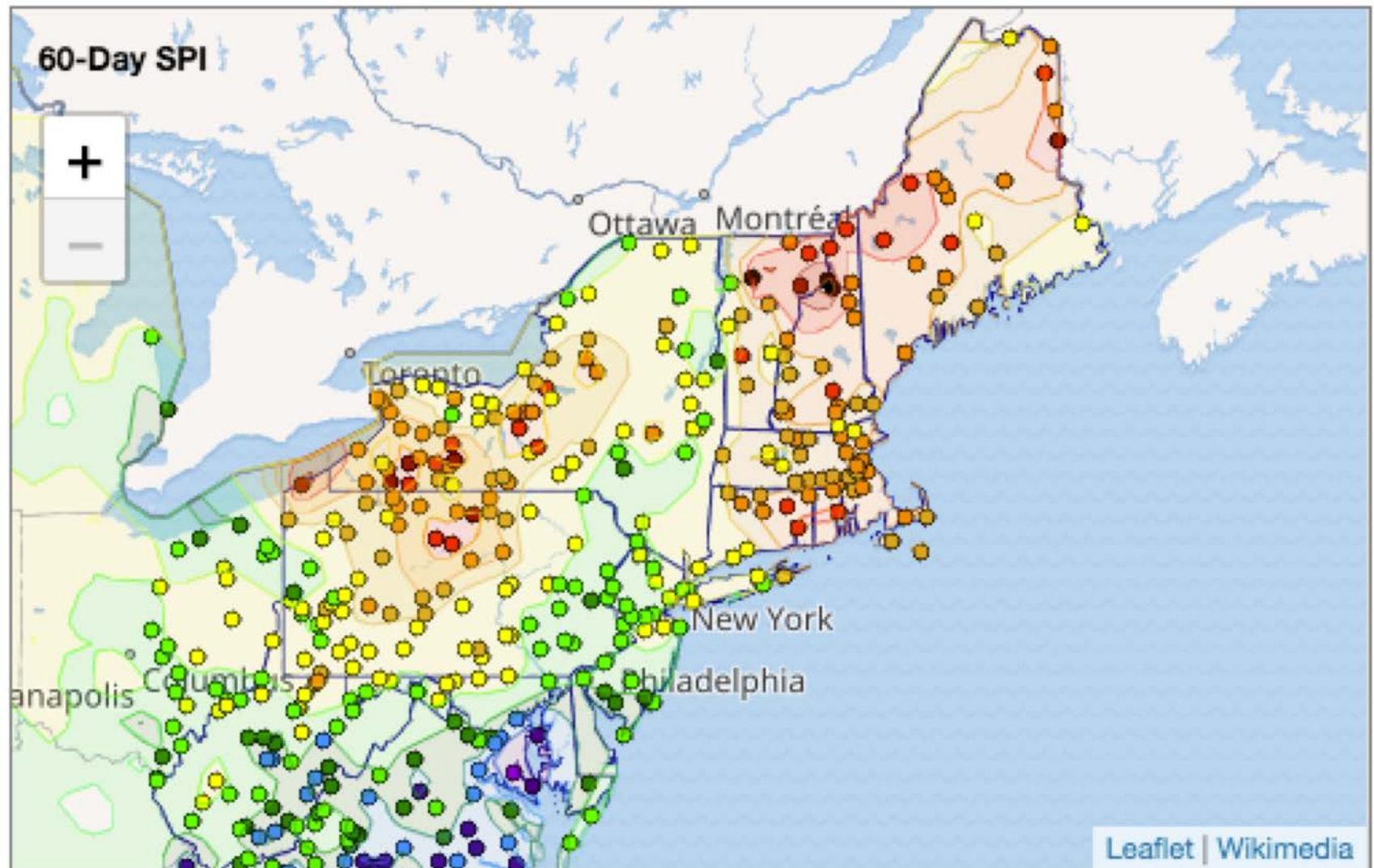
Precipitation



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Standardized Precip Index



Explanation - SPI Levels

●	●	●	●	●	●	●	●	●	●	●	●
<-3.0	-3.0 to -2.5	-2.5 to -2.0	-2.0 to -1.5	-1.5 to -1.0	-1.0 to 0.0	0.0 to 1.0	1.0 to 1.5	1.5 to 2.0	2.0 to 2.5	2.5 to 3.0	>3.0

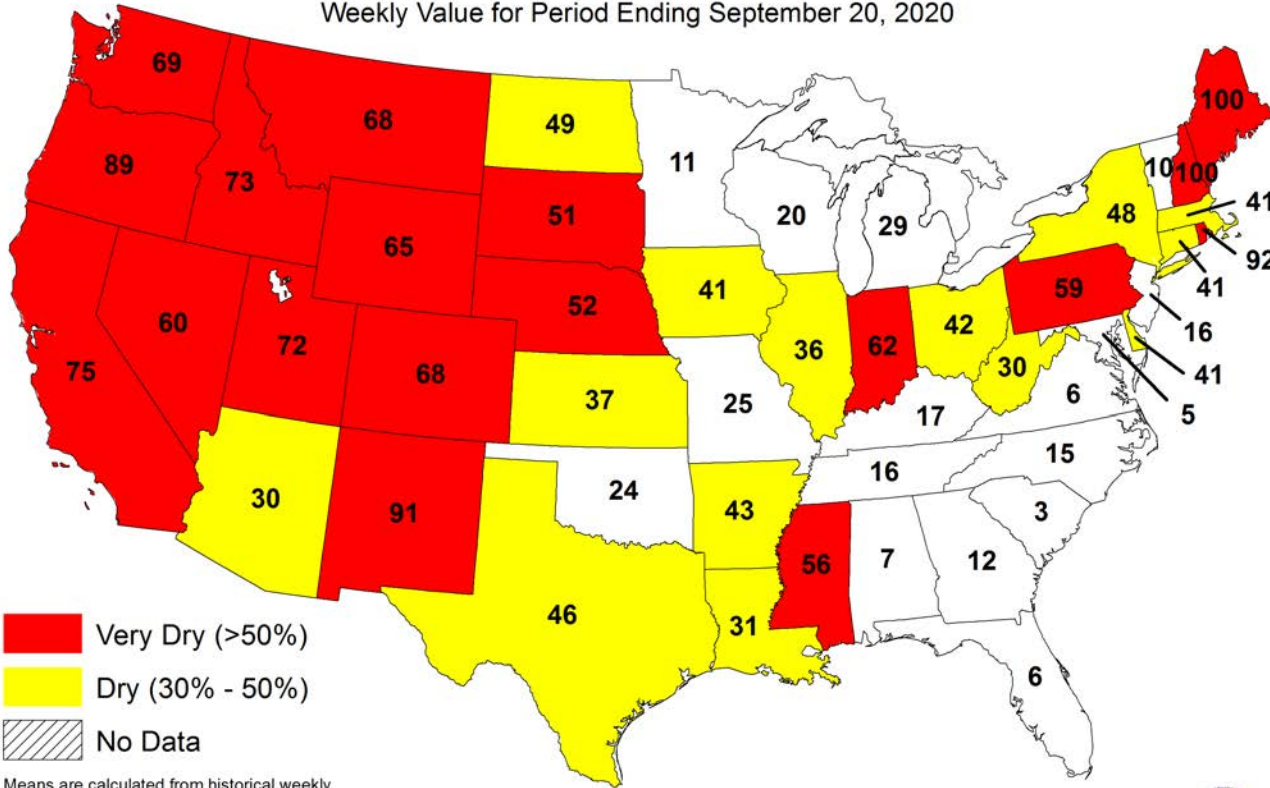
Data provided by [High Plains Regional Climate Center](#); updated 2020-09-28.



Soil Moisture

USDA Topsoil Moisture by Short-Very Short
Percent of State Area

Weekly Value for Period Ending September 20, 2020

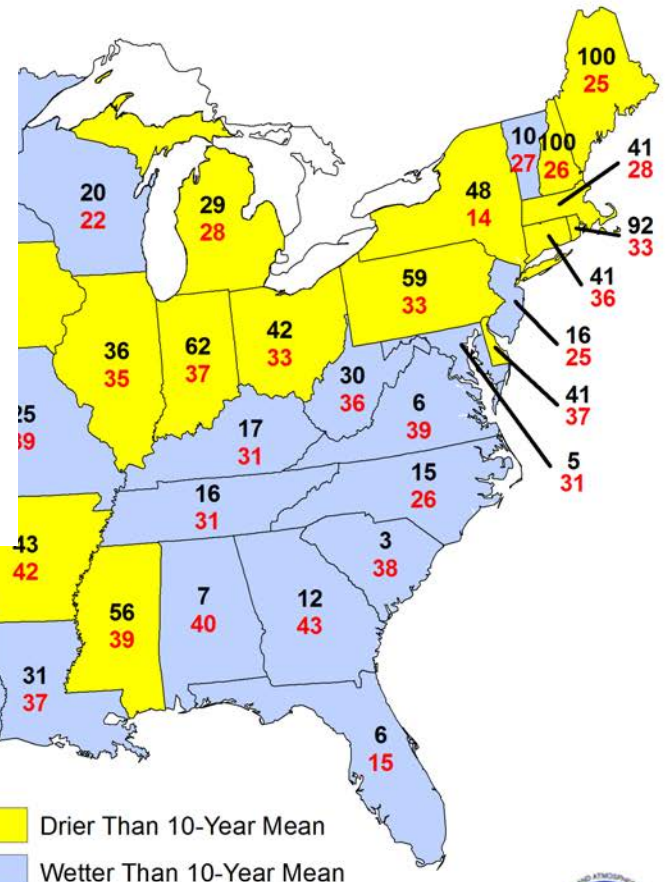


- Very Dry (>50%)
- Dry (30% - 50%)
- No Data

Means are calculated from historical weekly data published by USDA/NASS using the closest date to the equivalent date for this year.

Results are based on the short and very short percentages of topsoil moisture (upper 6 inches) reported by the USDA. Reports are based on subjective observations.

Short-Very Short
mean
September 20, 2020



Current
10-Year Mean

Means are calculated from historical weekly data published by USDA/NASS using the closest date to the equivalent date for this year.

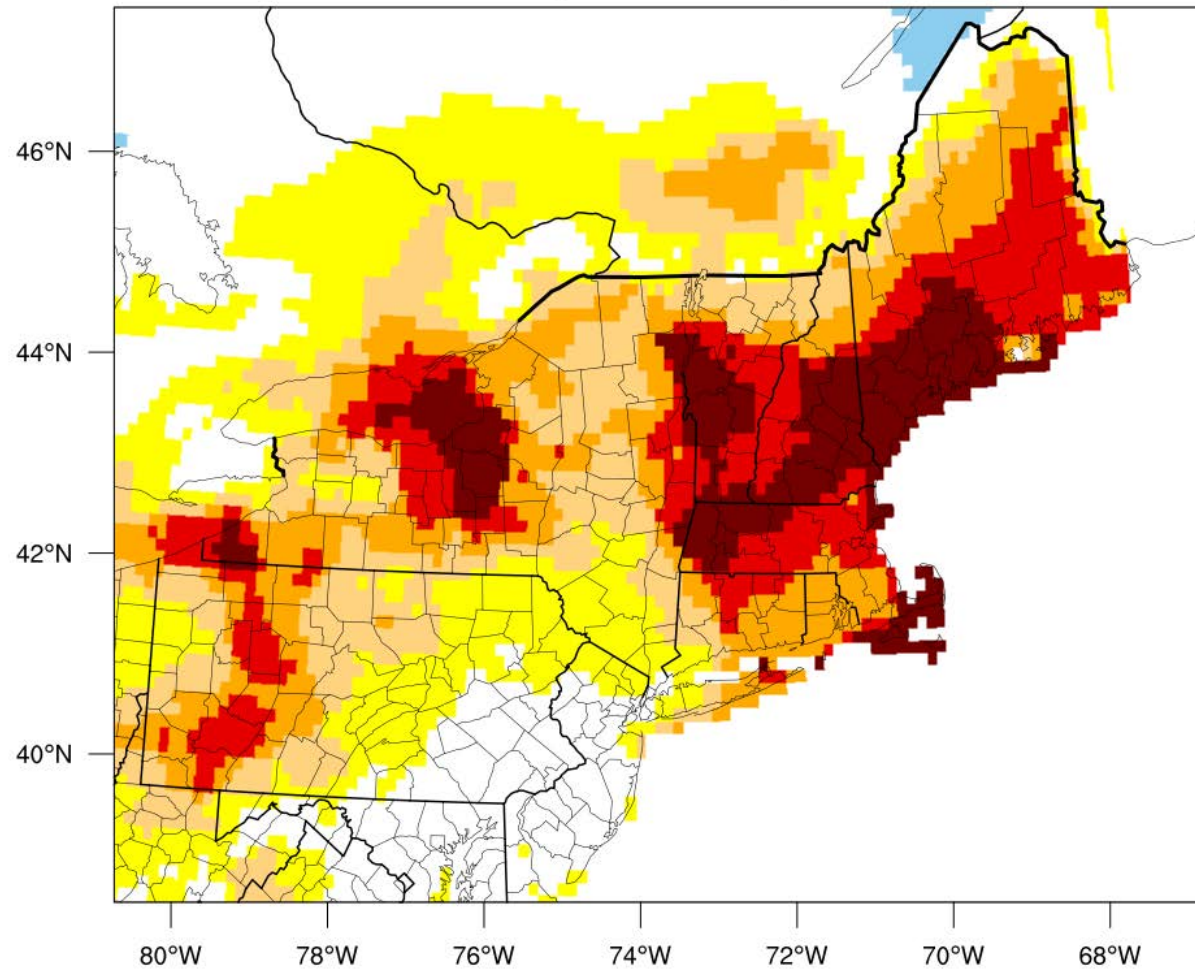
Results are based on the short and very short percentages of topsoil moisture (upper 6 inches) reported by the USDA. Reports are based on subjective observations.

- Drier Than 10-Year Mean
- Wetter Than 10-Year Mean
- Equal to 10-Year Mean
- Insufficient Data



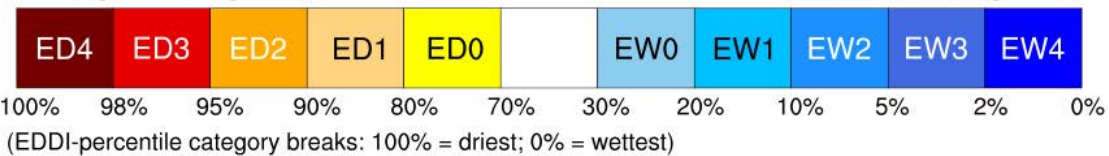
Evap. Drought Demand Index

3-week EDDI categories for September 23, 2020



Drought categories

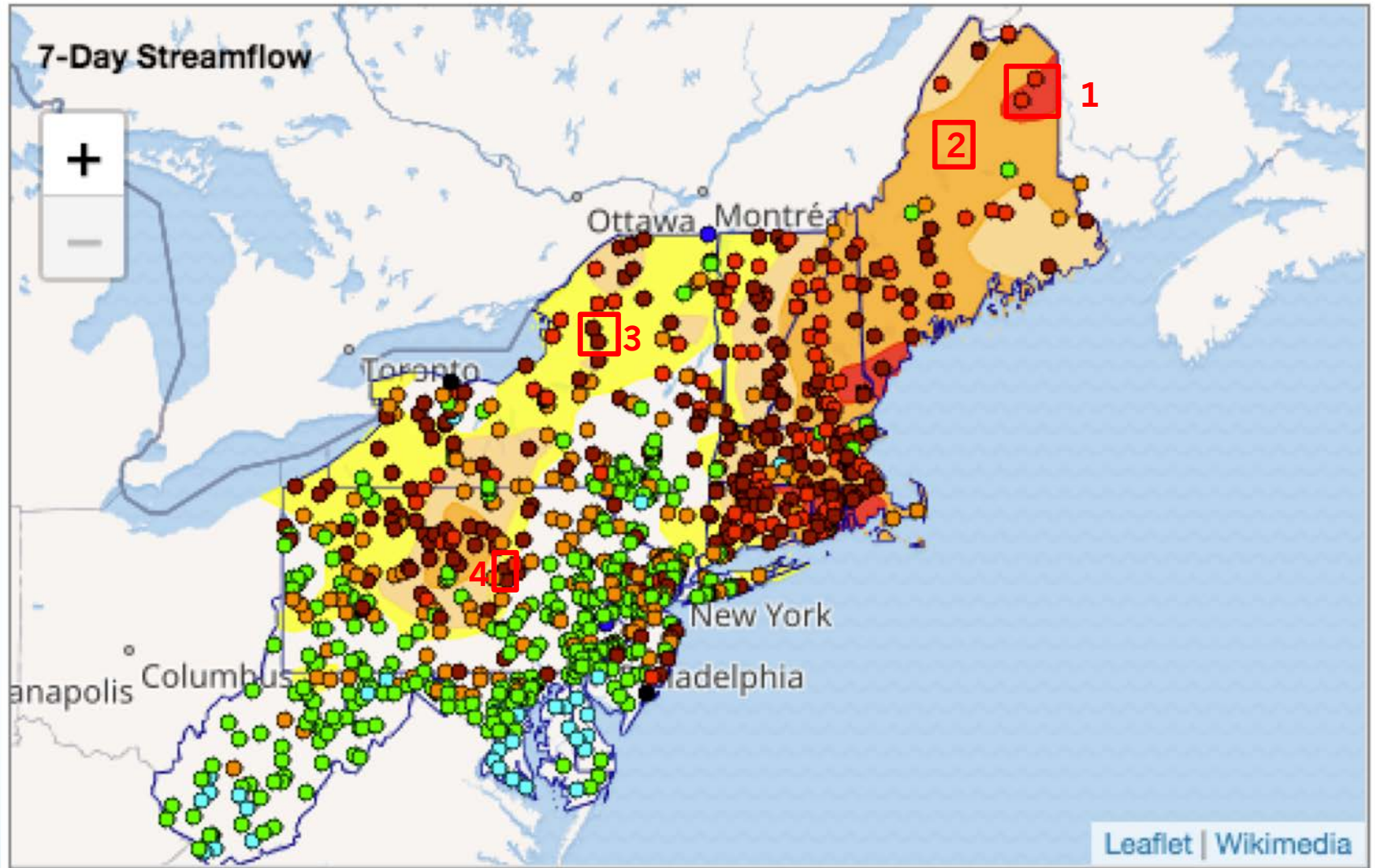
Wetness categories



Generated by NOAA/ESRL/Physical Sciences Laboratory



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 WaterWatch - Streamflow](#); updated 2020-09-28.



Streamflow



Maine Forest Rangers
@MaineRangers

2

1

Low water for pumping out of Pine Stream in Chesuncook Township. #MEfire



Aroostook River in Washburn, ME
Photo courtesy of James Sinko

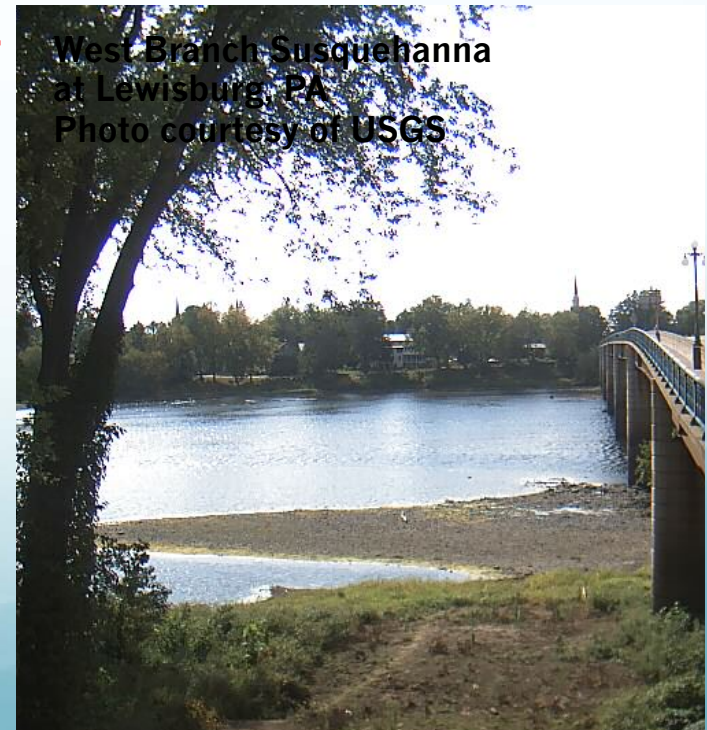
3

Black River near Lowville, NY
Photo courtesy of Nichelle Swisher

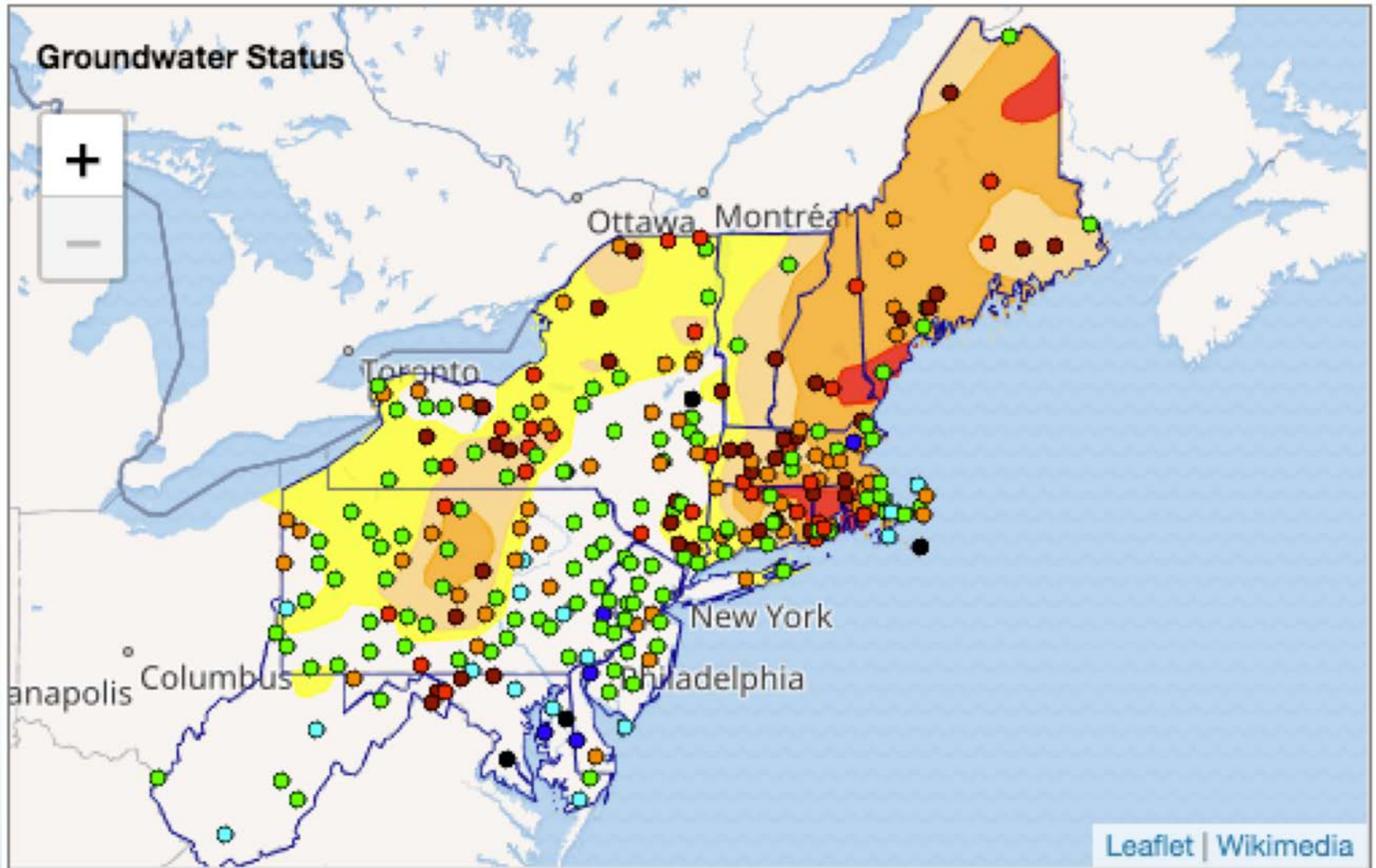


4

West Branch Susquehanna
at Lewisburg, PA
Photo courtesy of USGS



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 Watch](#) - [CRN](#); updated 2020-09-28.



Impacts

Much of New England is seeing an unusually high number of fires or atypical fire behavior. Maine has seen 1,000 wildfires this year, its greatest number in 20 years.

The Aroostook River at Masardis and Washburn dropped to an all-time record low flow in September.

There have been reports of dry wells across northern New England.

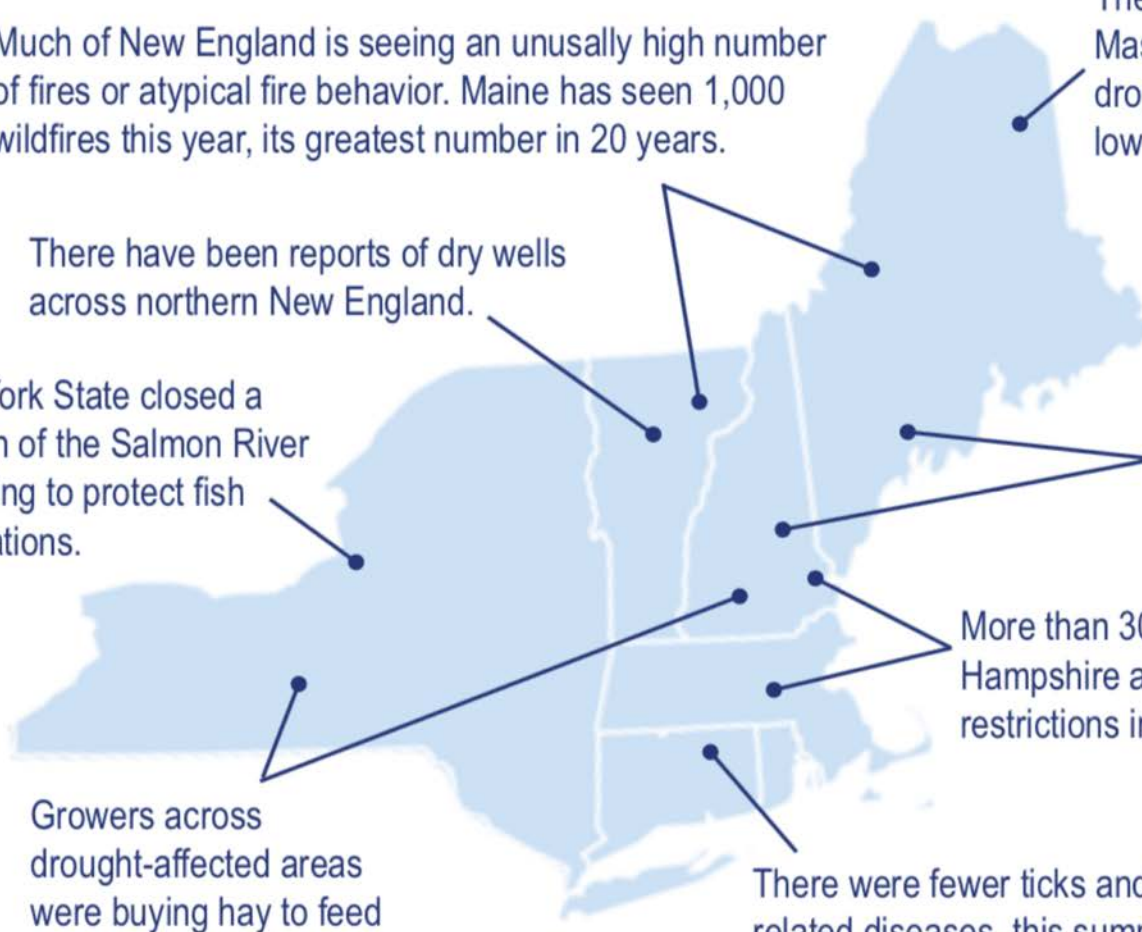
Crop yields were reduced by as much as 60% in parts of Maine. Similar damage was noted in New Hampshire.

New York State closed a section of the Salmon River to fishing to protect fish populations.

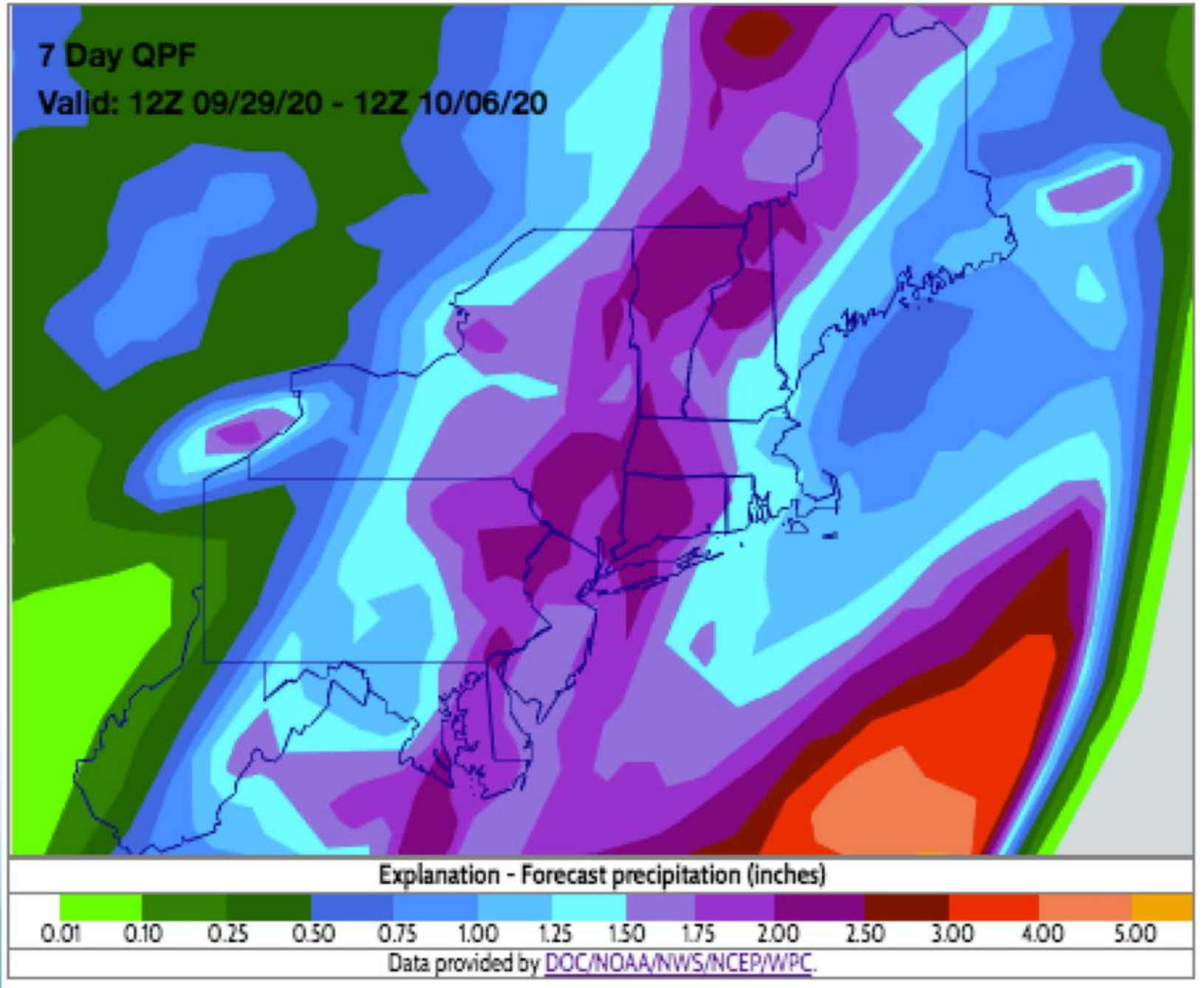
More than 300 water suppliers in New Hampshire and Massachusetts had restrictions in place.

Growers across drought-affected areas were buying hay to feed livestock this winter.

There were fewer ticks and mosquitoes, and insect-related diseases, this summer in New England.



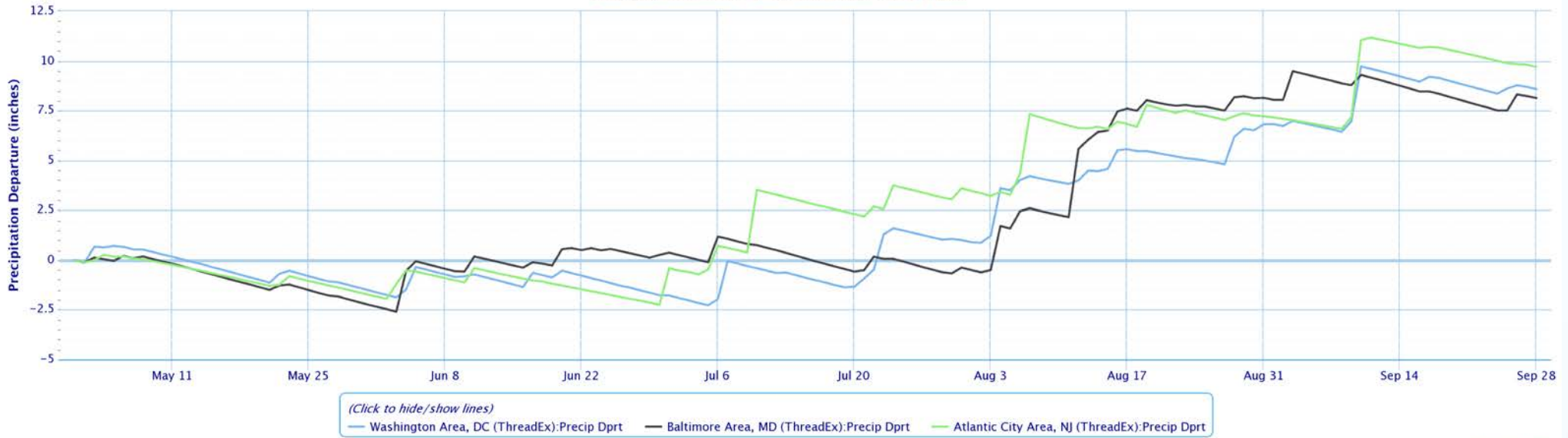
Precipitation Forecast



Precipitation

Accumulated Precipitation Departure from Normal

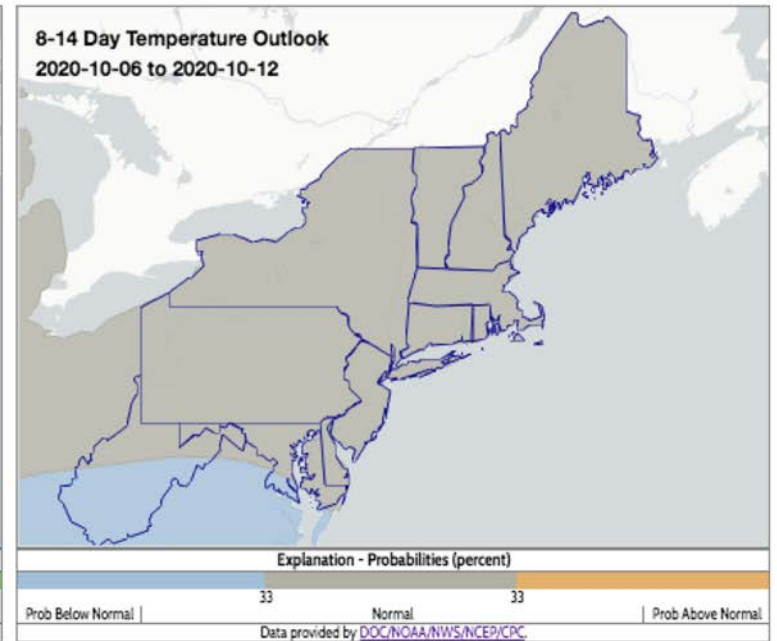
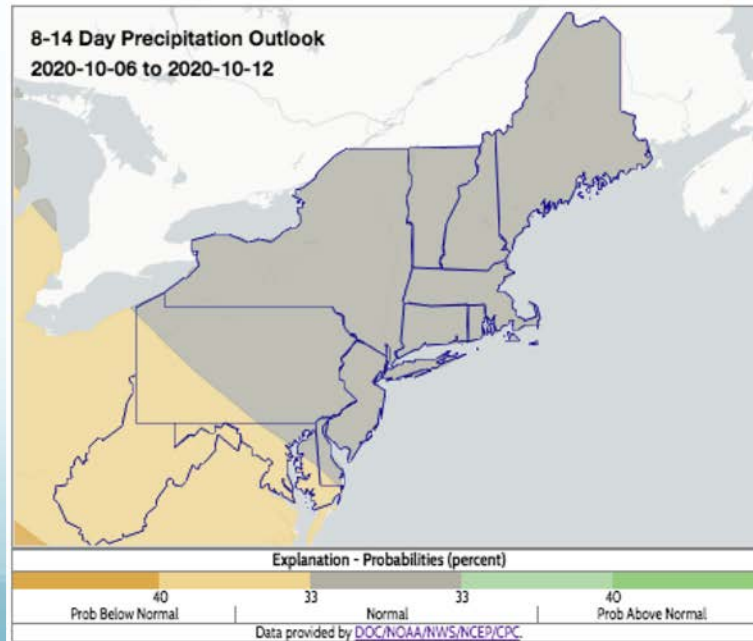
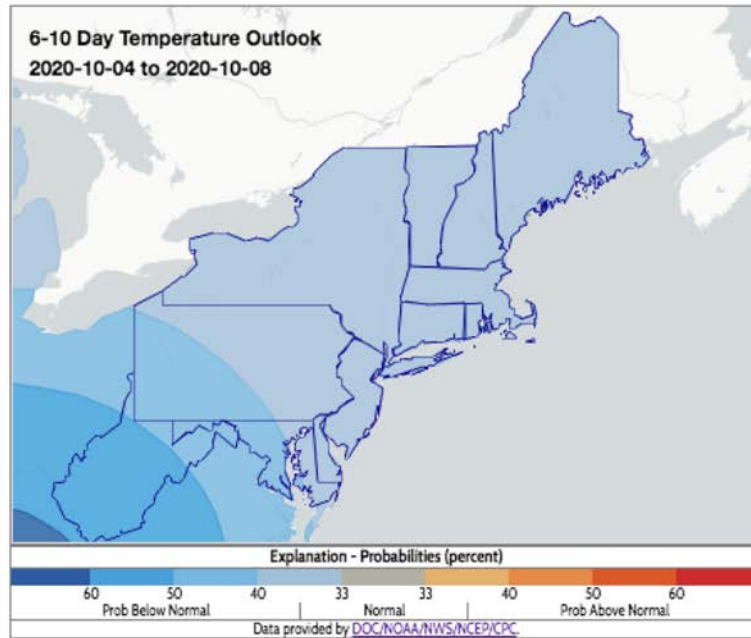
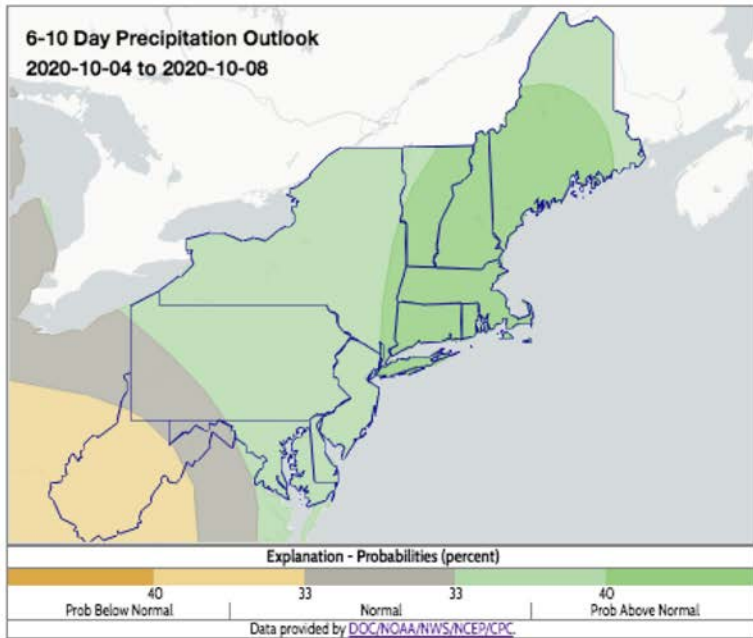
Green/black diamonds represent subsequent/missing values



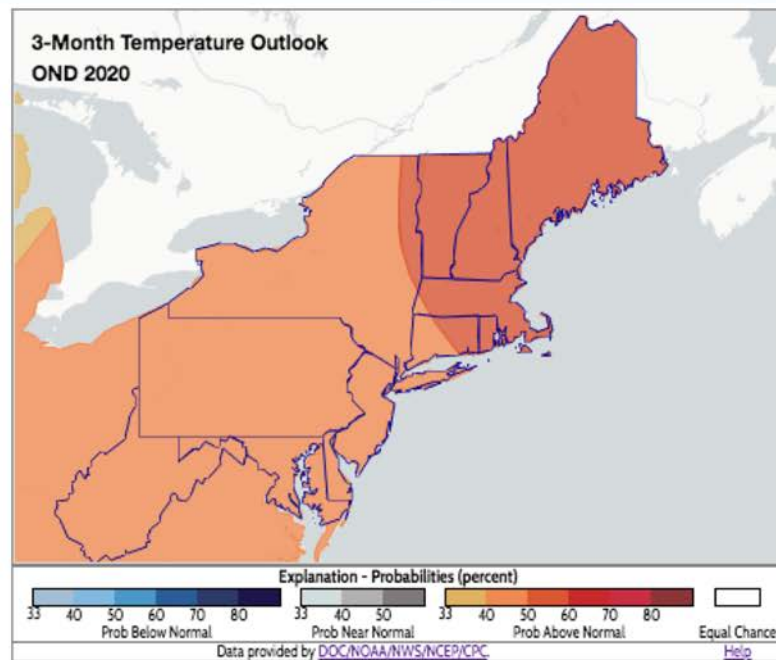
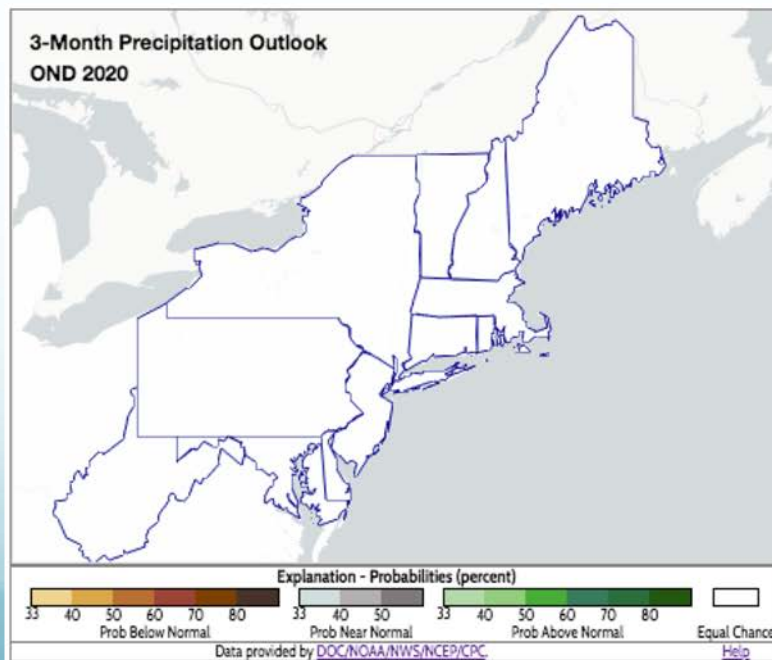
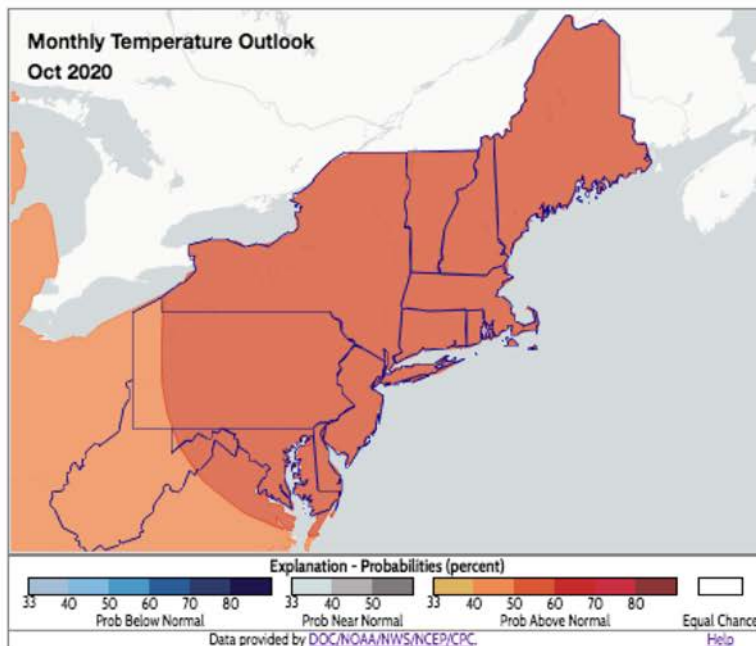
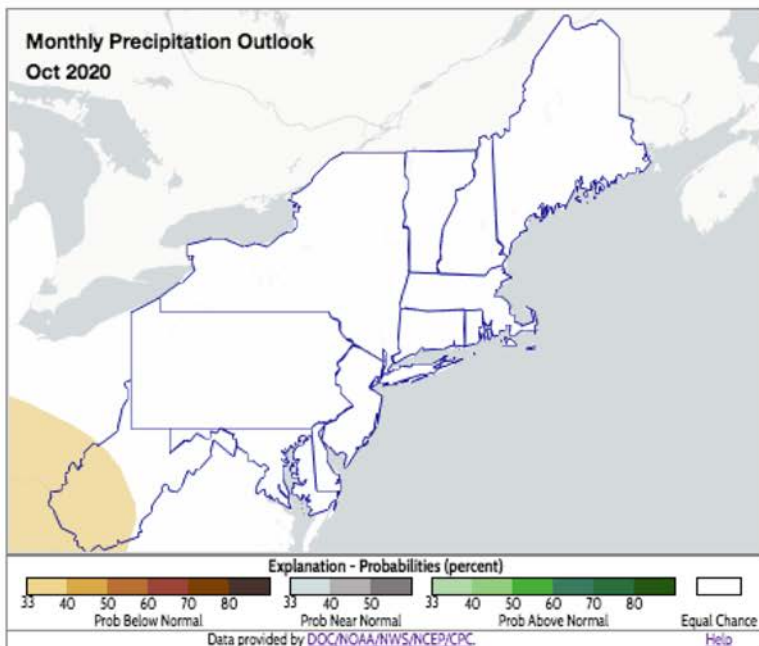
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Short-term Outlooks



Monthly & 3-Month Outlooks



Contact Information

- nrcc@cornell.edu
- 607-255-1751

Upcoming Webinars

- Thursday, October 29 at 9:30am
 - Drought projects
- Thursday, November 19 at 9:30am
 - ENSO and winter outlooks
- Thursday, December 17 at 9:30am
 - High tide flooding report



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