## October Conditions & Northeast DEWS Discussion

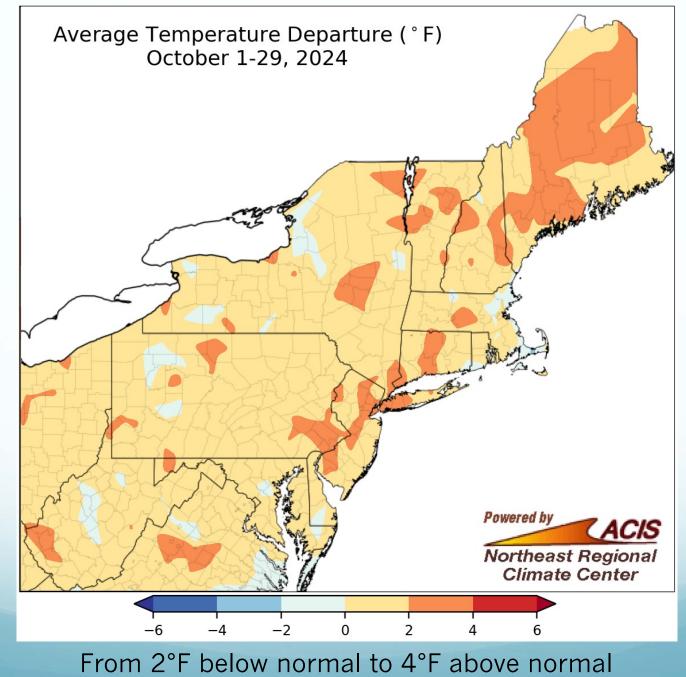
By: Samantha Borisoff, Climatologist Northeast Regional Climate Center



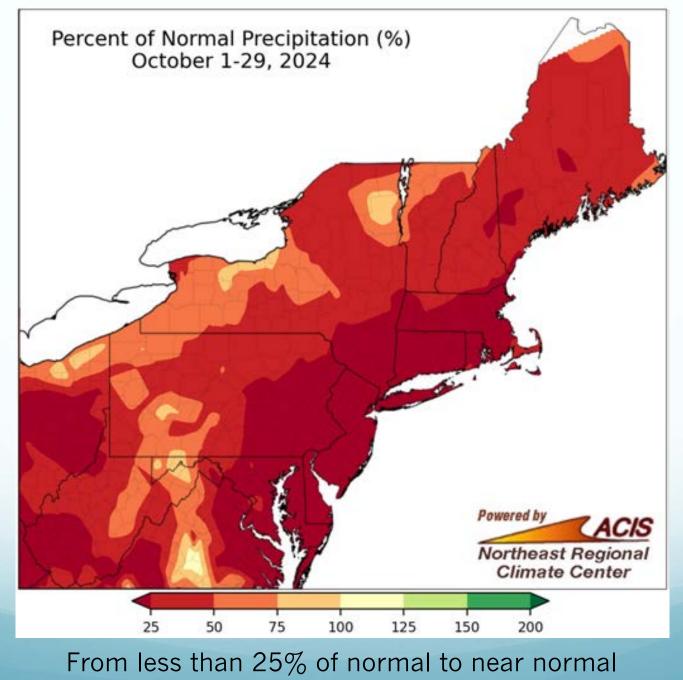




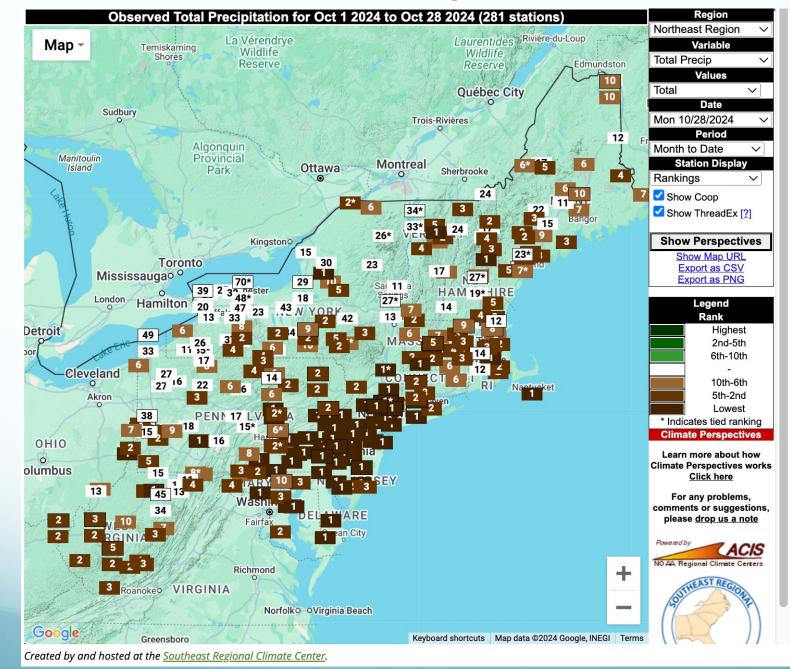
## **October Temperatures**



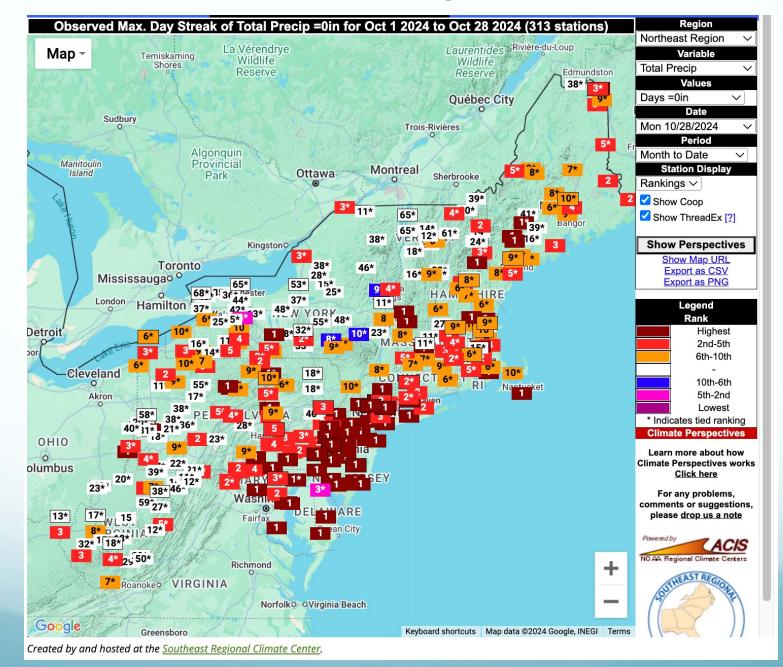














### Number of Consecutive Days Precipitation = 0 for Philadelphia Area, PA (ThreadEx)

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

Rank	Run Length	<b>Missing Days</b>	Dates		
1	32	0	2024-09-29 through 2024-10-30		
2	29	0	1874-10-11 through 1874-11-08		
3	28 0		1963-10-04 through 1963-10-31		
4	26 0		1886-09-30 through 1886-10-25		
5	25 0 20		2001-04-25 through 2001-05-19		
	Last value a	lso occurred in or	ne or more previous years.		
	Period	of record: 1871-	11-01 to 2024-10-30		

### Number of Consecutive Days Precipitation = 0 for Newark Area, NJ (ThreadEx)

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

Rank	Run Length	<b>Missing Days</b>	Dates
1	31	0	2024-09-30 through 2024-10-30
2	26	0	1949-05-30 through 1949-06-24
3	25	0	1939-11-06 through 1939-11-30
4	24	0	1995-08-16 through 1995-09-08
-	24	0	1980-01-23 through 1980-02-15
	Last value a	lso occurred in or	ne or more previous years.
	Period	d of record: 1931-	02-01 to 2024-10-30

### Time Series Summary for Philadelphia Area, PA (ThreadEx)

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

Rank	Year-Month	Total Precipitation	Missing Count
1	2024-10	Т	1
2	1963-10	0.09	0
-	1924-10	0.09	0
4	1949-06	0.11	0
5	1884-09	0.20	0

### Time Series Summary for Islip Area, NY (ThreadEx)

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

Rank	Year-Month	Year-Month Total Precipitation	
1	2024-10	0.12	1
2	2000-10	0.18	0
-	1964-08	0.18	0
4	2013-10	0.22	0
5	2024-09	0.24	0
-	1963-10	0.24	0

### Time Series Summary for New York-Central Park Area, NY (ThreadEx)

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

Rank	Year-Month	Total Precipitation	Missing Count
1	2024-10	0.01	1
2	1949-06	0.02	0
3	1963-10	0.14	0
4	1995-08	0.18	0
5	1884-09	0.21	0

Sites also seeing all-time driest month (through 10/28): Wilmington, Atlantic City, Newark, LaGuardia Airport, and Allentown

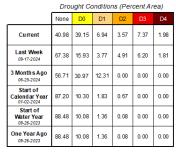


# **Drought Monitor**

U.S. Drought Monitor Northeast

Northeast

#### September 24, 2024 (Released Thursday, Sep. 26, 2024) Valid 8 a.m. EDT



Intensity: None None D2 Severe Drought D0 Abnormally Dry D3 Extreme Drought D1 Moderate 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.asp

Author: Brad Rippey U.S. Department of Agriculture



droughtmonitor.unl.edu

#### October 29, 2024 (Released Thursday, Oct. 31, 2024) Valid 8 a.m. EDT

	Droi	Drought Conditions (Percent Area)							
	None	None D0 D1 D2 D3 D4							
Current	21.01	40.71	23.05	10.42	4.14	0.67			
Last Week 10-22-2024	36.05	34.69	17.58	6.87	4.14	0.67			
3 Month s Ago 07-30-2024	60.02	19.18	12.02	6.07	2.70	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 10-01-2024	45.94	34.77	9.37	4.97	4.27	0.67			
One Year Ago 10-31-2023	82.70	15.28	1.75	0.27	0.00	0.00			

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

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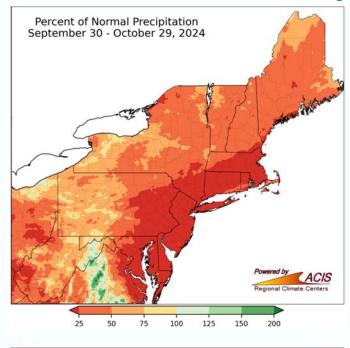
Author: Brian Fuchs National Drought Mitigation Center

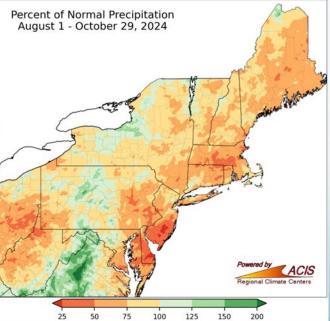


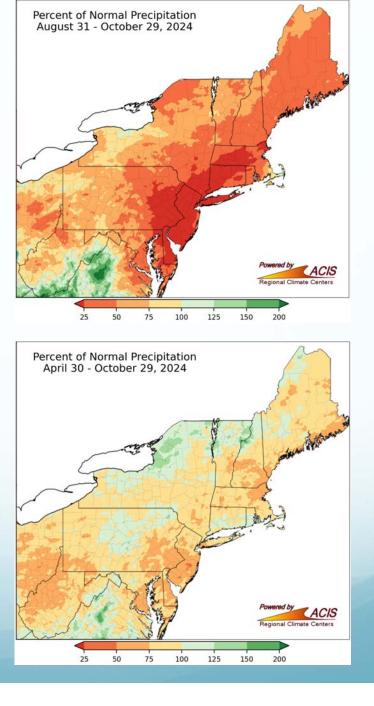
U.S. Drought Monitor Class Change - Northeast Climate Region 5 Week U.S. Drought Monitor 5 Class Degradation 4 Class Degradation 3 Class Degradation 2 Class Degradation 1 Class Degradation No Change 1 Class Improvement 2 Class Improvement October 29, 2024 3 Class Improvement compared to 4 Class Improvement September 24, 2024 5 Class Improvement droughtmonitor.unl.edu



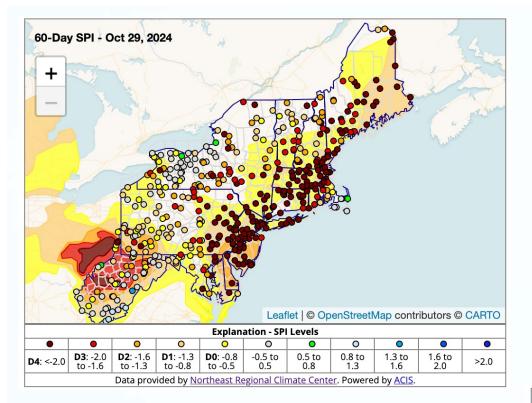
# Precipitation



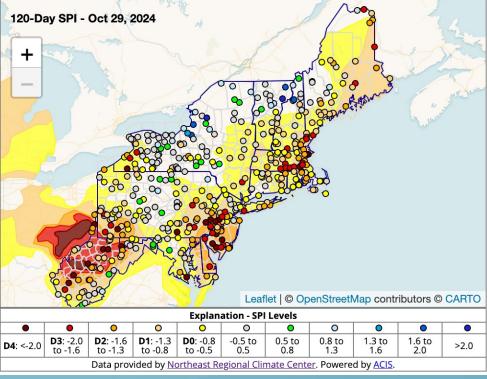






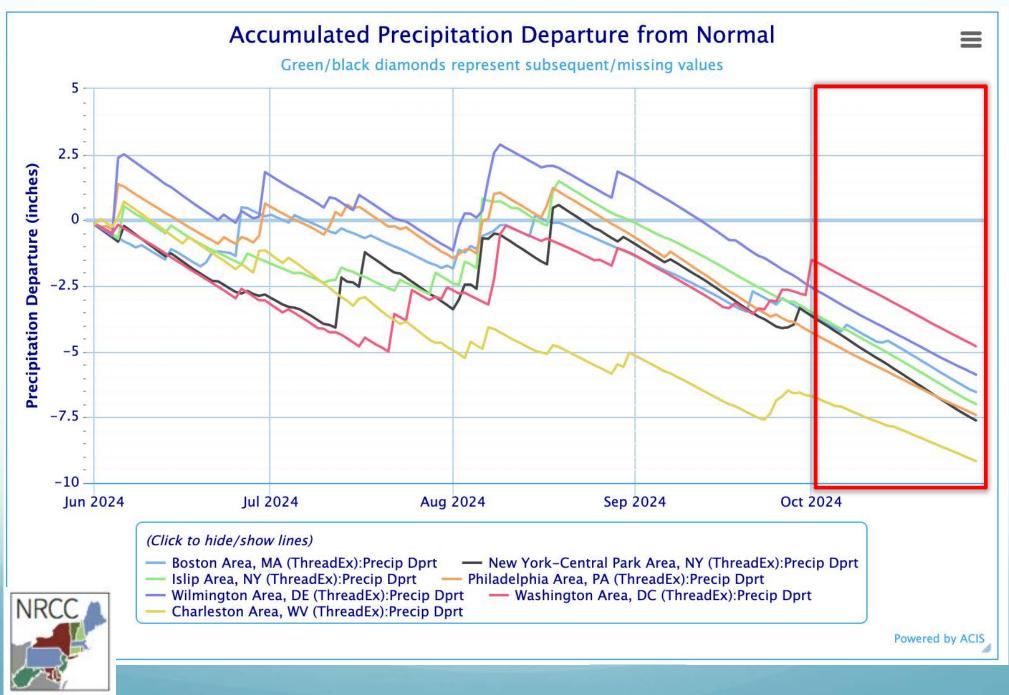


# Standardized Precipitation Index

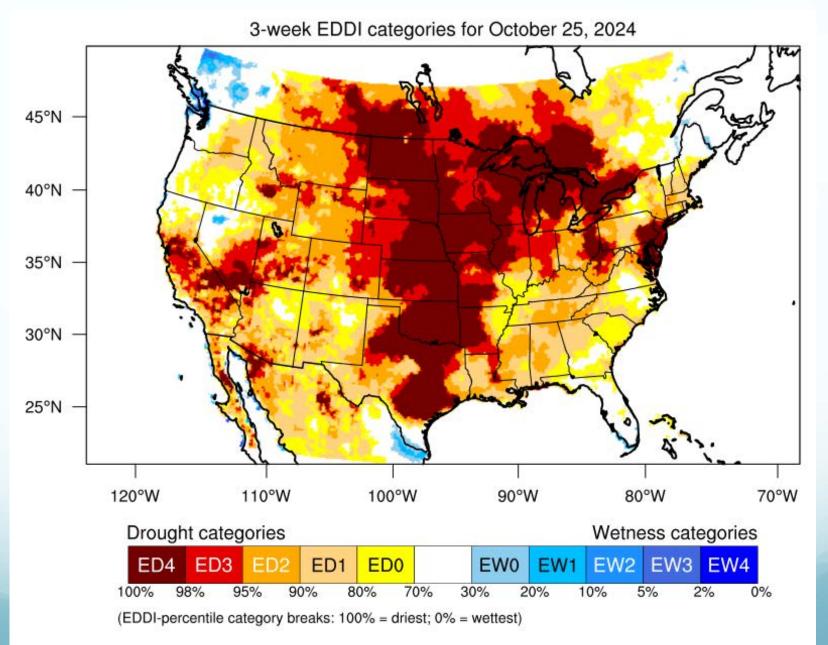




# Precipitation



# Evap. Demand Drought Index

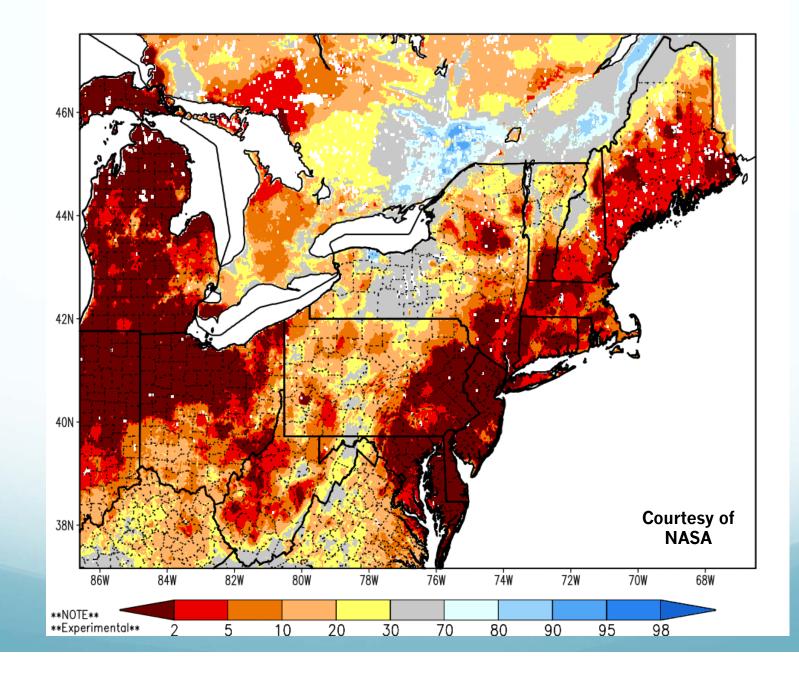


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Generated by NOAA/ESRL/Physical Sciences Laboratory

### Soil Moisture

SPoRT-LIS 0-100 cm Soil Moisture percentile valid 31 Oct 2024





# **Drought Impacts**

### Farmers face challenging drought conditions across the Garden State



By Trish Hartman ( Monday, October 21, 2024 6:48PM

### Delmarva Drought Takes Toll on Christmas Tree Farms Ahead of Holiday Season

Jack Ford Oct 21, 2024

WBOC

Farms in Philadelphia region feeling impacts of drought: "We've never seen it this dry"



By Madeleine Wright, Ross DIMattei October 21, 2024 / 6:37 PM EDT / CBS Philadelphia

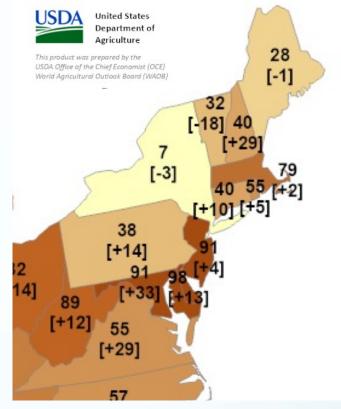


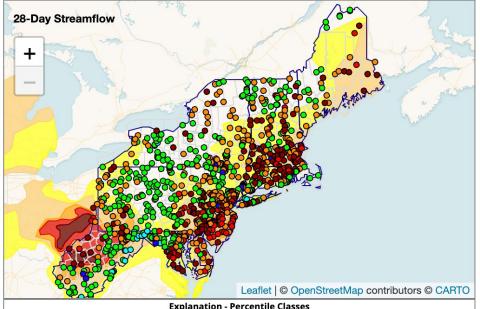
Crop/Livestock	Very Poor	Poor	Fair	Good	Excellent
	%	%	%	%	%
Corn	24	63	13	:	. <del></del>
Hay	32	66	2	-	-
Pasture	51	45	4	-	-
Soybeans	27	65	8	-	-
Cattle & Calves	9	20	55	16	-
Sheep & Lambs	7	18	57	18	-
- Represents zero.			•	•	

WV - CROP and LIVESTOCK CONDITIONS for week ending 10/27/24

### **Topsoil Moisture** Percent Short to Very Short

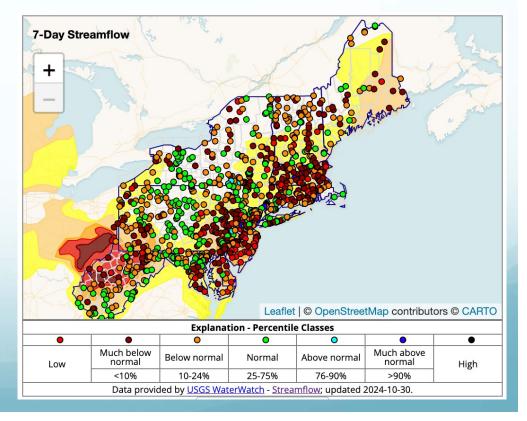
Week Ending - October 27, 2024





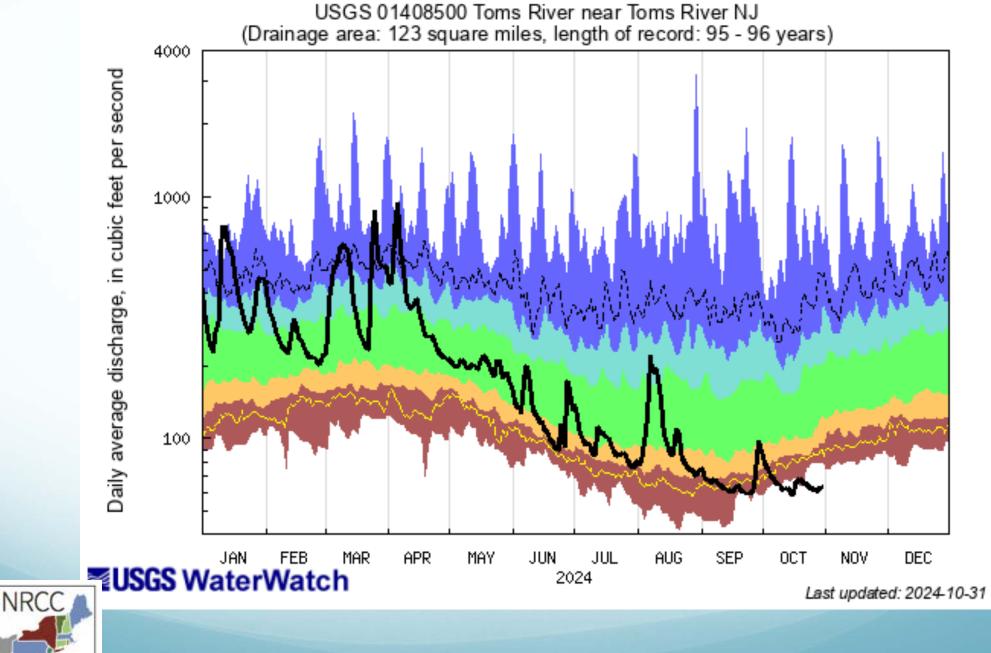
Explanation - Percentile Classes									
۲	•	0	0	0	•	•			
Low	Much below normal	Below normal	Normal	Above normal	Much above normal	High			
	<10%	10-24%	25-75%	76-90%	>90%	Ū			
	Data provid	led by <u>USGS Wat</u>	erWatch - Strea	<u>mflow;</u> updated 2	2024-10-30.				

# Streamflow

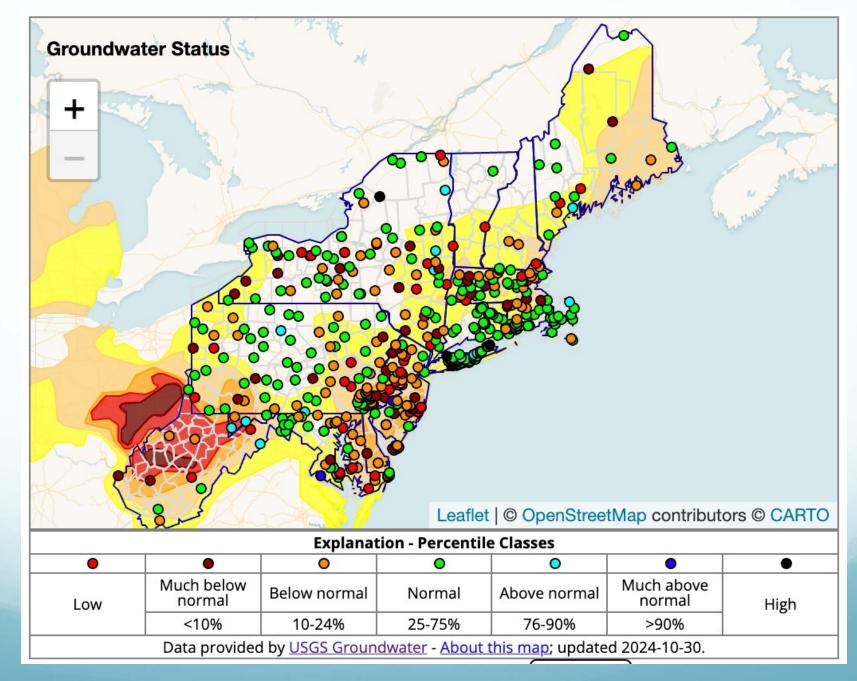




### Streamflow

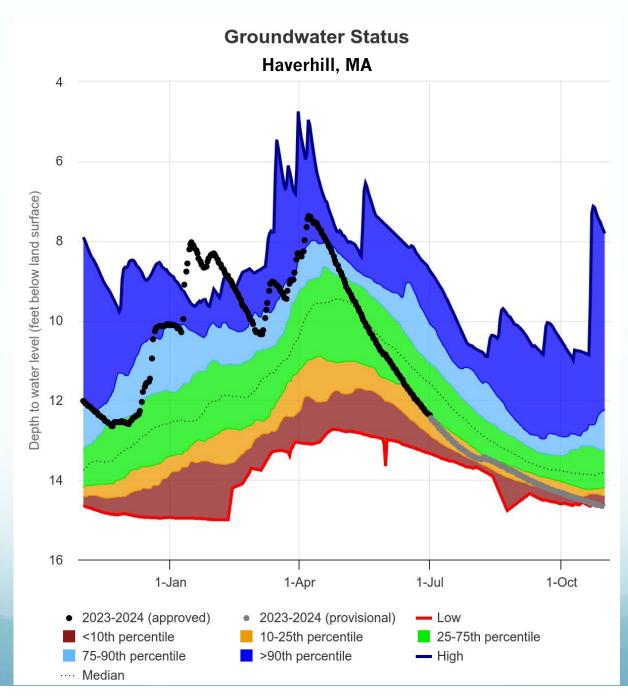


## Groundwater



NRCC

### Groundwater





# **Drought Impacts**

# Watering restrictions in Worcester: Mild drought hits the region



Henry Schwan

Worcester Telegram & Gazette

Published 4:58 p.m. ET Oct. 22, 2024 Updated 6:25 a.m. ET Oct. 24, 2024

## Mandatory water conservation notice issued for Reading area customers

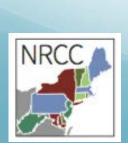
Caitlin Rearden Oct 17, 2024 🔍 0

WFMZ

Home - Hopewell Township News

Posted on: October 25, 2024

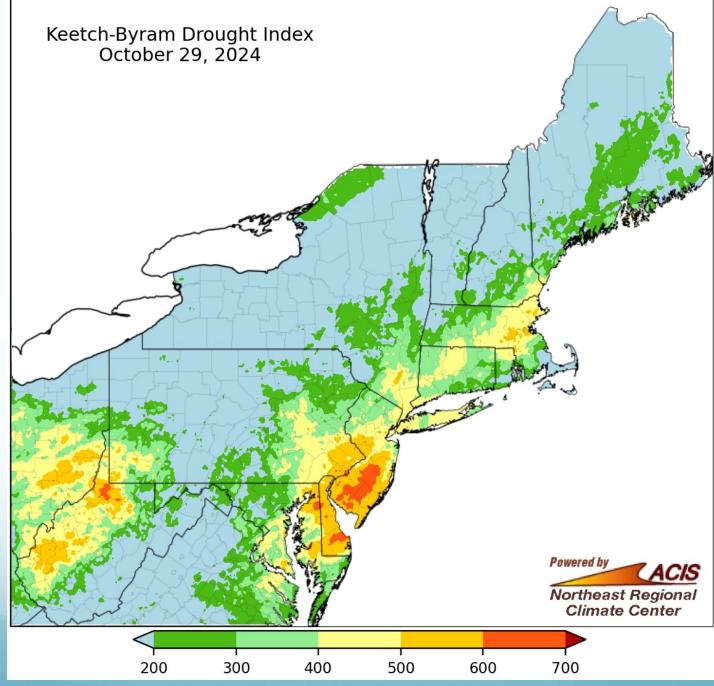
**Urgent Request for Water Conservation in Hopewell Township** 



### Delawareans Asked to Reduce Outdoor Water Use under Statewide Drought Watch

Sean Curtis Oct 25, 2024 Updated Oct 25, 2024

## Wildfire Risk





### Salem HS dismissed early as dozens of brush fires bring smoky skies to state

BY STEVE COOPER, 7 NEWS WHDH

OCTOBER 29, 2024

'Severe' Drought In Montgomery County, Burn Bans In Place

Historically dry conditions, made worse by conditions fostered by climate change, has exacerbated the severe wildfire risk.

Justin Heinze, Patch Staff 🕑

Posted Mon, Oct 28, 2024 at 10:47 am ET

### N.J. orders fire restrictions in all 21 counties amid worsening drought, spike in forest fires

Updated: Oct. 23, 2024, 7:10 a.m. | Published: Oct. 22, 2024, 5:03 p.m.

NJ.com

# Vermont issues statewide burn ban due to high wildfire risk

Vermont Public | By Liam Elder-Connors Published October 29, 2024 at 3:48 PM EDT

### DELAWARE NEWS



### Burning Ban State Fire Marshal | Date Posted: Tuesday, October 15, 2024

**Drought Impacts** 

# Dry conditions contributed to dozens of forest fires over the

weekend

WGME

NYS Department of Environmental Conservation 🔮

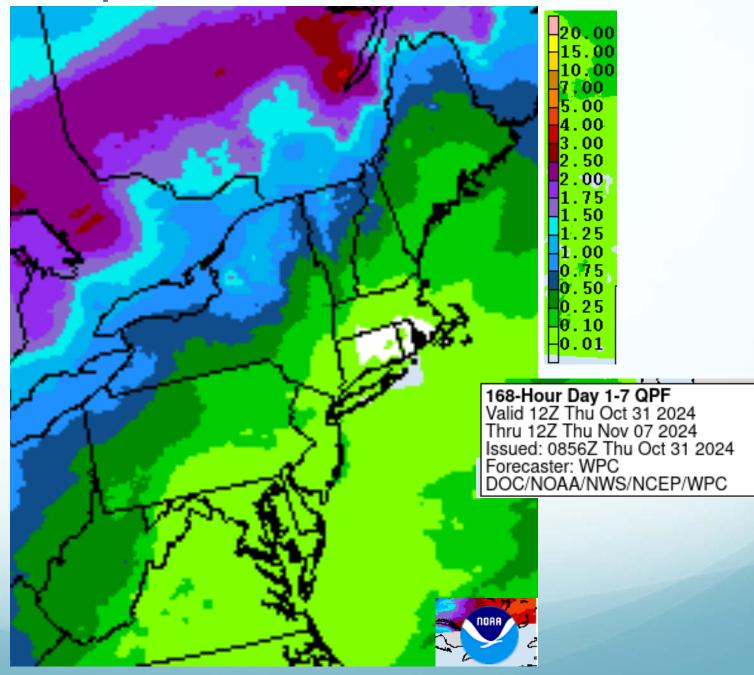
Due to dry and windy conditions, the entire state is under 'High' fire danger conditions. Small fires can spread easily and turn into uncontrolled wildfires. If you don't have to burn, please don't. If you do, keep your fire small, and make sure it's contained to a fire pit. clear all flammable material at least three feet around the pit. All fires must be attended until out COLD.

A reminder, burning garbage or leaves is prohibited year-round in New York State.

An updated fire danger map is available on the DEC website: https://dec.ny.gov/environmentalprotection/wildfires/fire-danger-map

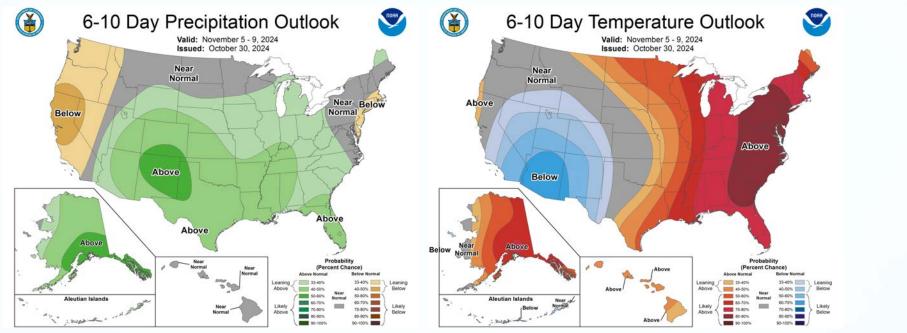


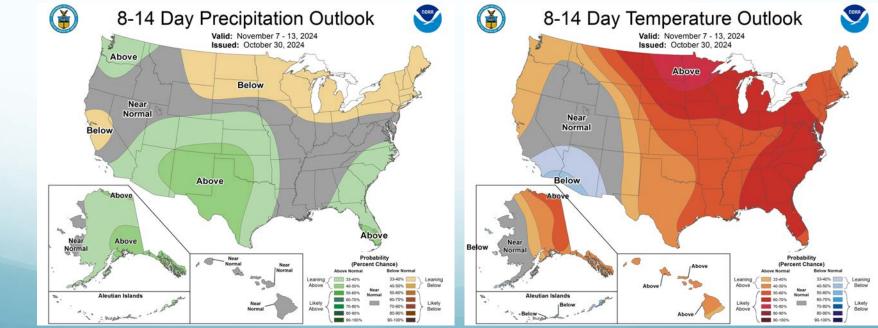
### **Precipitation Forecast**





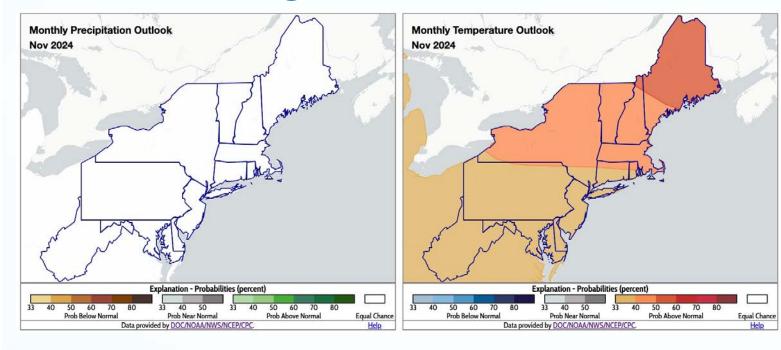
## Short-term Outlooks

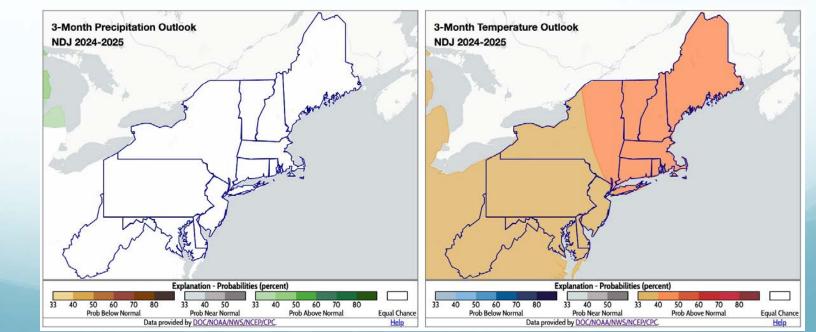






## Monthly & 3-Month Outlooks



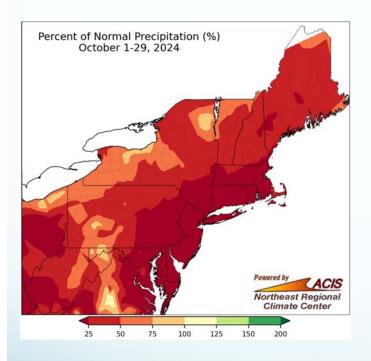




# Summary

### October-to-date conditions:

- Near- or above-normal temperatures
- Extremely dry month; possibly all-time record dry for some locations





### Drought:

- Significant increase in drought coverage and abnormal dryness
- Drought-related impacts on crops, water levels, fire risk, etc.

### Outlooks:

- Limited precipitation over the next week or two does not look good for drought relief
- Above-normal temperatures are favored for the entire region in the short term periods
- Nov and Nov-Jan: no clear indication for precipitation; above-normal temperatures expected for entire region

# La Niña Outlook

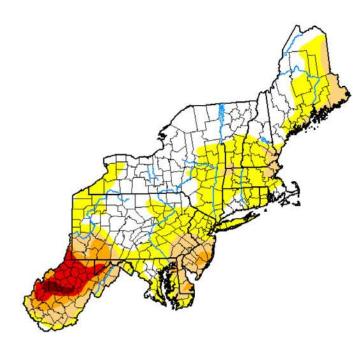
### La Niña Impacts and Outlook

**Potential Winter Impacts** 

### **Drought Relief**

With drought conditions in place in the Northeast, this winter's La Niña could have implications for precipitation patterns across the region. During La Niña episodes, the Ohio Valley tends to be wetter, with the signal most pronounced during the three-month period of February through April. If this pattern of increased precipitation were to emerge, it would be beneficial for easing drought conditions in areas such as West Virginia and southwestern Pennsylvania. Conversely, portions of eastern Maryland, Delaware, eastern Pennsylvania, and New Jersey experiencing drought could see dry conditions persist as southeastern parts of the region tend to be drier than normal

### **U.S. Drought Monitor** Northeast



### October 15, 2024

**Northeast Region** 

November 2024

(Released Thursday, Oct. 17, 2024) Valid 8 a.m. EDT

	Drought Conditions (Percent Area)							
	None	D0	D1	D2	D3	D4		
Current	39.19	37.50	13.59	4,90	4, 14	0.67		
Last Week 10-08-2024	41.17	37.40	12.32	4.30	<b>4</b> .14	0.67		
3 Month s Ago 07-16-2024	61.64	18.98	10.31	7.33	1.73	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 10-01-2024	45.94	34.77	9.37	4.97	4.27	0.67		
One Year Ago 10-17-2023	83.01	14.48	2.24	0.27	0.00	0.00		

#### Intensity:

None



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### Author:

Brian Fuchs National Drought Mitigation Center





droughtmonitor.unl.edu



### https://lanina.nrcc.cornell.edu/

# **Contact Information**

nrcc@cornell.edu

# Upcoming Webinars

- Thursday, November 21 at 9:30am EST
  - Use of NOAA Radar Data to Analyze Extreme Precip
- Thursday, December 19 at 9:30am EST
  - ENSO & Winter Outlook
- Thursday, January 30 at 9:30am EST
  - TBD



### www.nrcc.cornell.edu