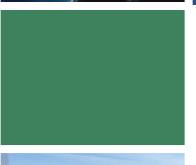


Presented to an advisory committee of the DRBC on October 15, 2025. Contents should not be published or re-posted in whole or in part without the permission of DRBC.



Hydrologic Conditions





Fanghui Chen
Senior Water Resource Engineer
Water Resource Operations

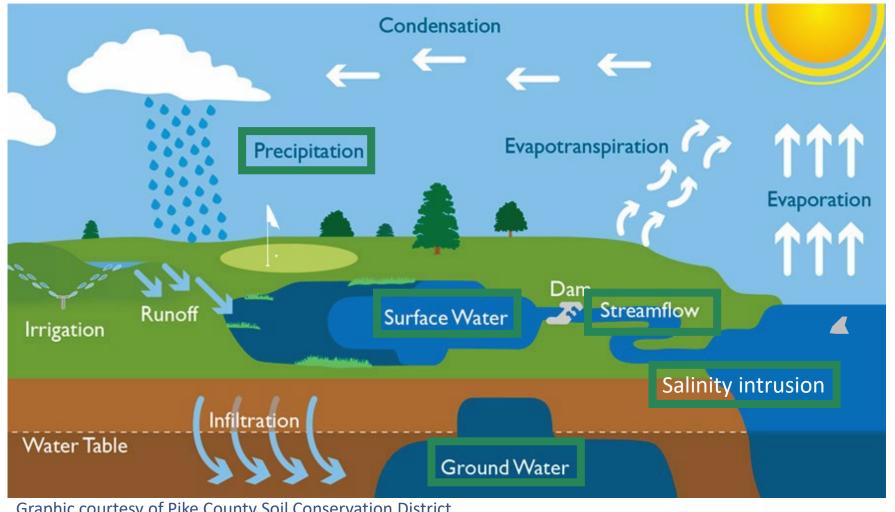
October 15th, 2025
Water Management Advisory
Committee Meeting





The Hydrologic Cycle

Water moves around the earth through air, soil, and over land.



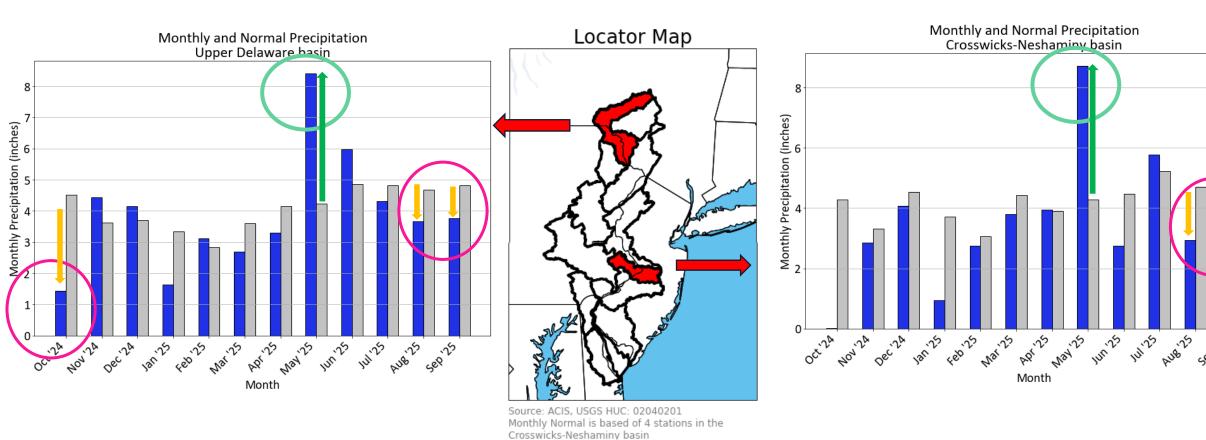




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Data Source: ACIS

Precipitation from October 2024 to September 2025 (past 365 days)

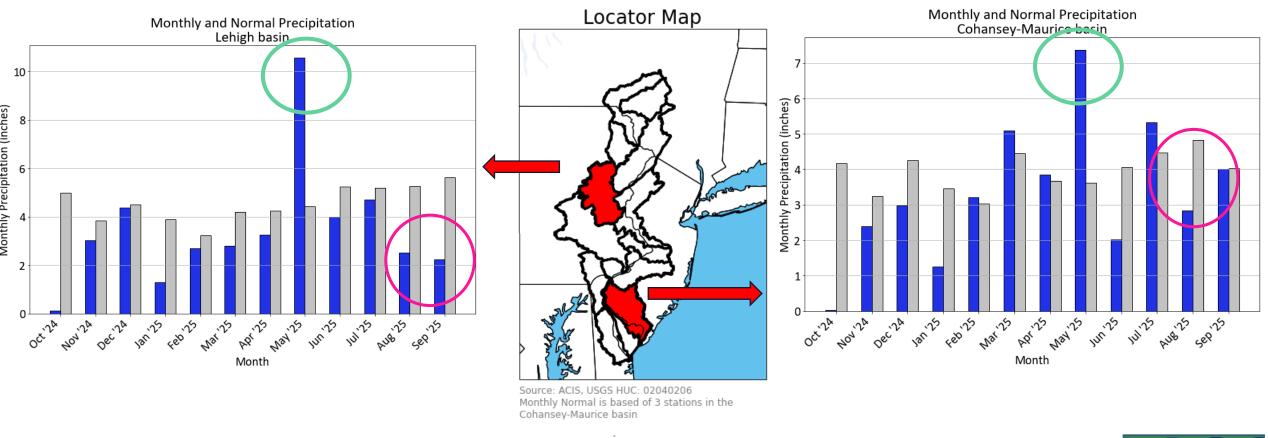


Monthly Observed Precipitation
Monthly Normal (1991 - 2022)



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Precipitation from October 2024 to September 2025 (past 365 days)



Monthly Observed Precipitation

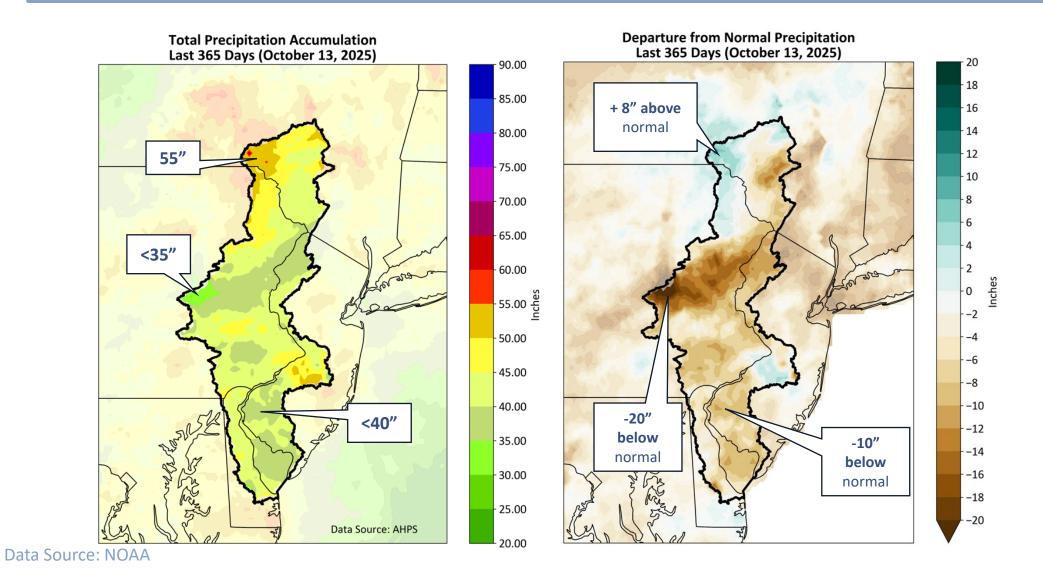
Monthly Normal (1991 - 2022)

Data Source: ACIS



Cumulative Precipitation over the last 365 days Reference date: October 13, 2025

Most of the basin has received below normal precipitation except for the north.



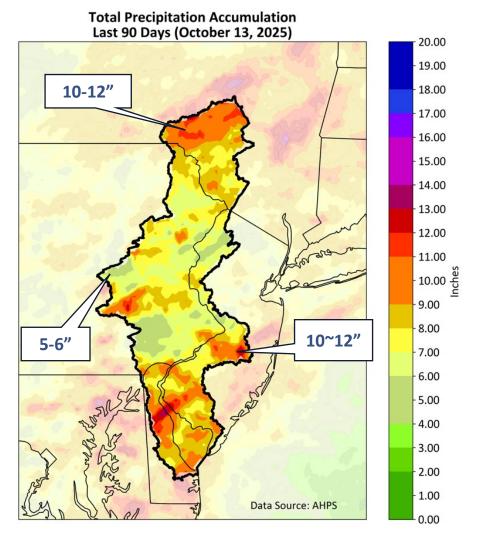


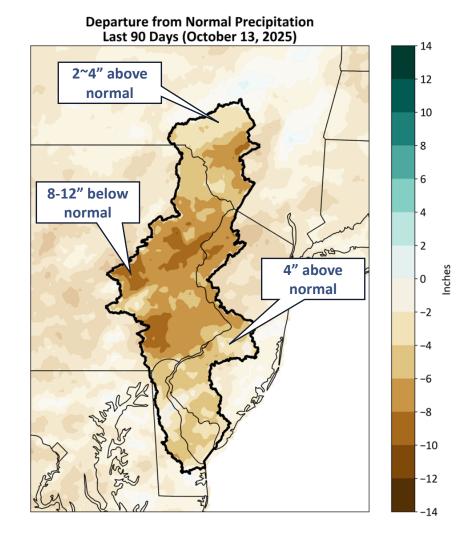
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Cumulative Precipitation – Last 90 days

Reference date: October 13, 2025

The last three-month period shows below normal condition for the entire basin.







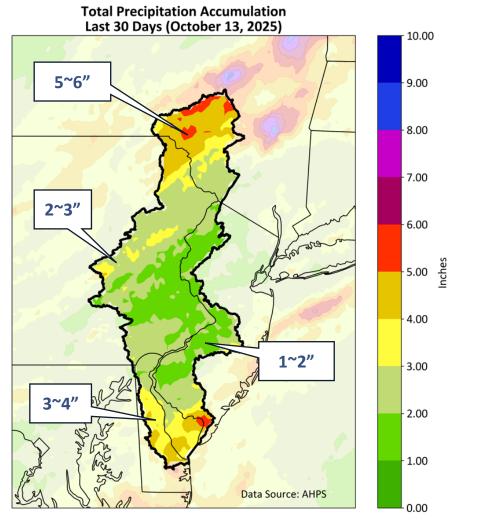
Data Source: NOAA

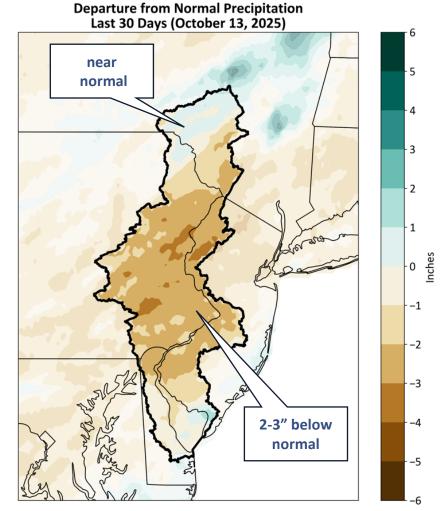


Cumulative Precipitation – Last 30 days

Reference date: October 13, 2025

It was below normal in the middle of the basin during the last 30 days.





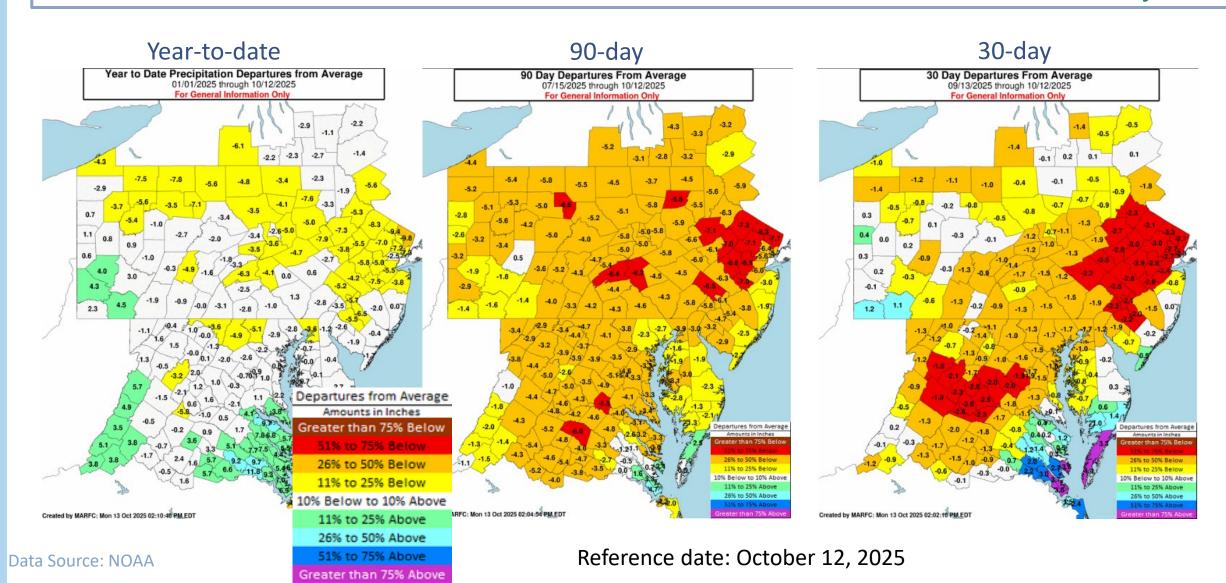


Data Source: NOAA

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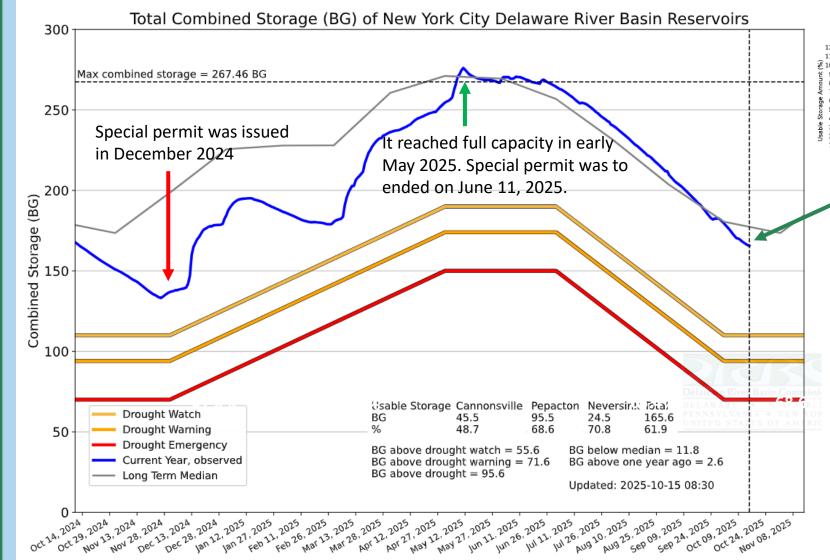
Precipitation Departures Summarized by County

Conditions have deteriorated across much of the Mid-Atlantic in the last 30 days.

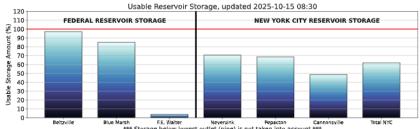


New York City Reservoir Storage

NYC combined storage met the desired target on June 1st 2025



<u>Usable Reservoir Storage</u>



October 15, 2025

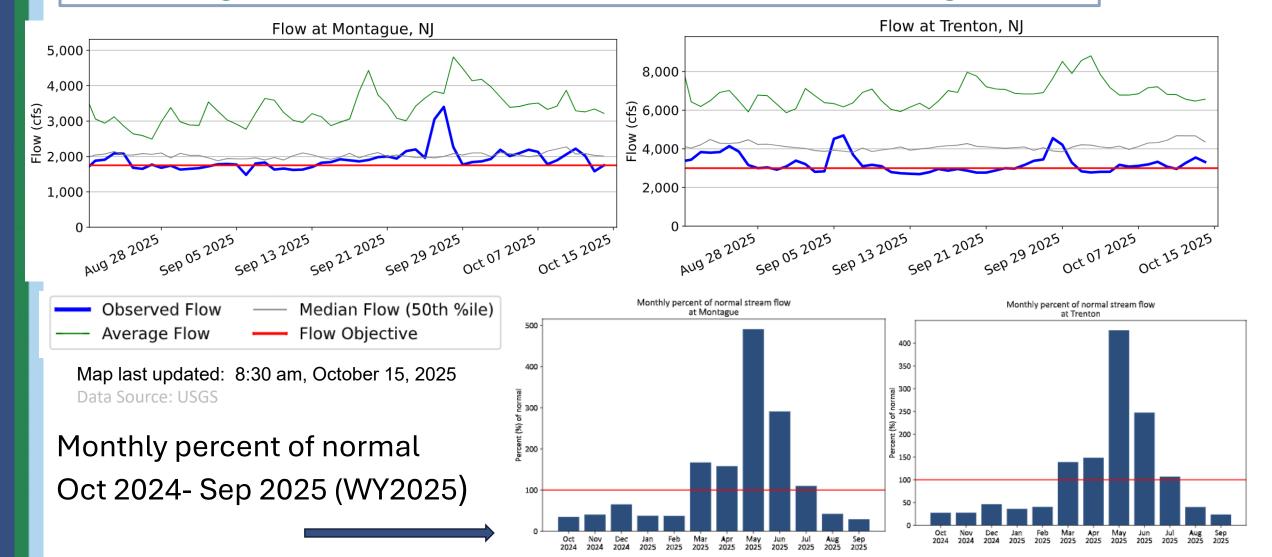
The combined storage in the New York City DRB reservoirs 165.6 BG, which is 61.9 percent of the combined capacity.

The combined storage is 55.6 BG above drought watch, 11.8 BG below the long-term median, and 2.6 BG above this time last year.



Streamflow Condition along Delaware River Mainstem

Flows along the mainstem remain below normal since mid-August 2025.





Monthly Streamflow for September 2025

Most tributaries have recovered to normal or above normal conditions with recent precipitation.

Flow Conditions on average:

Upper Basin: Normal or below Normal

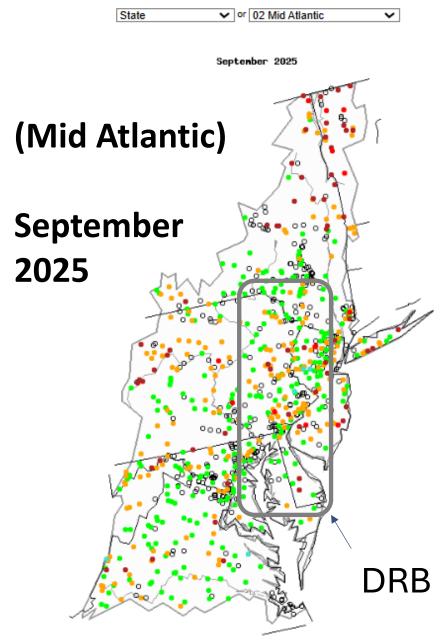
Central Basin: Normal or below Normal

Lower Basin: Normal or below Normal

Explanation - Percentile classes										
			•			•	0			
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked			
Low	Much below normal	Below normal	Normal	Above normal	Much above normal					

Data Source: USGS, Water Watch, https://waterwatch.usgs.gov/index.php?r=02&id=mv01d

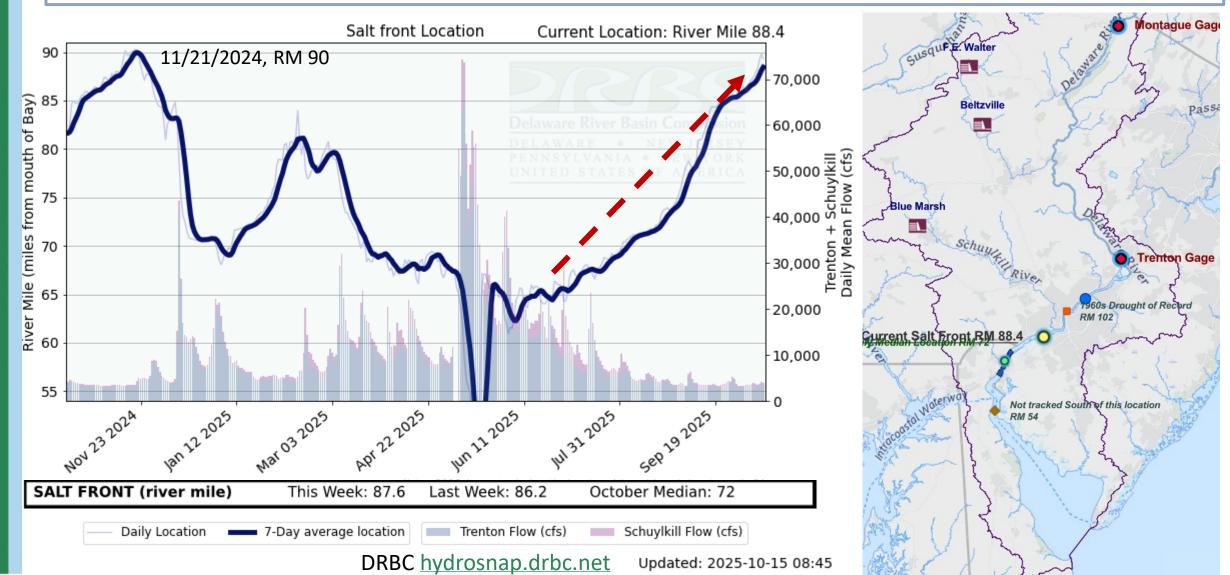
Map of monthly streamflow compared to historical streamflow for the month of the year (Mid Atlantic)



Salt Front Location

October 15, 2025

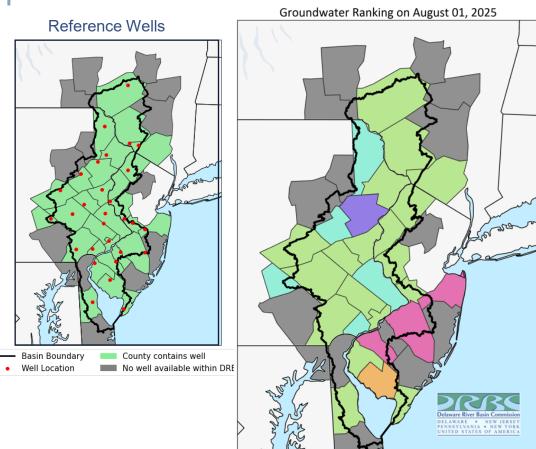
Salt front has been in the normal range since the beginning of this year.

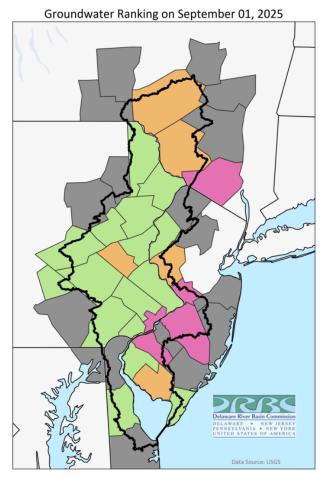


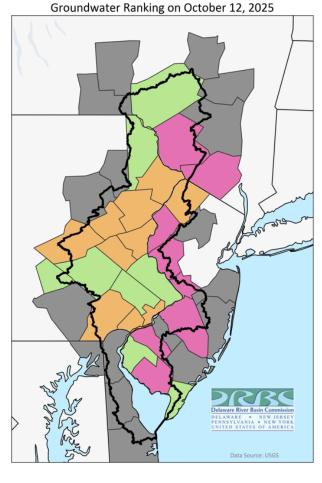


Groundwater Levels

Groundwater levels have lowered gradually following two abnormal dry months in Early October.

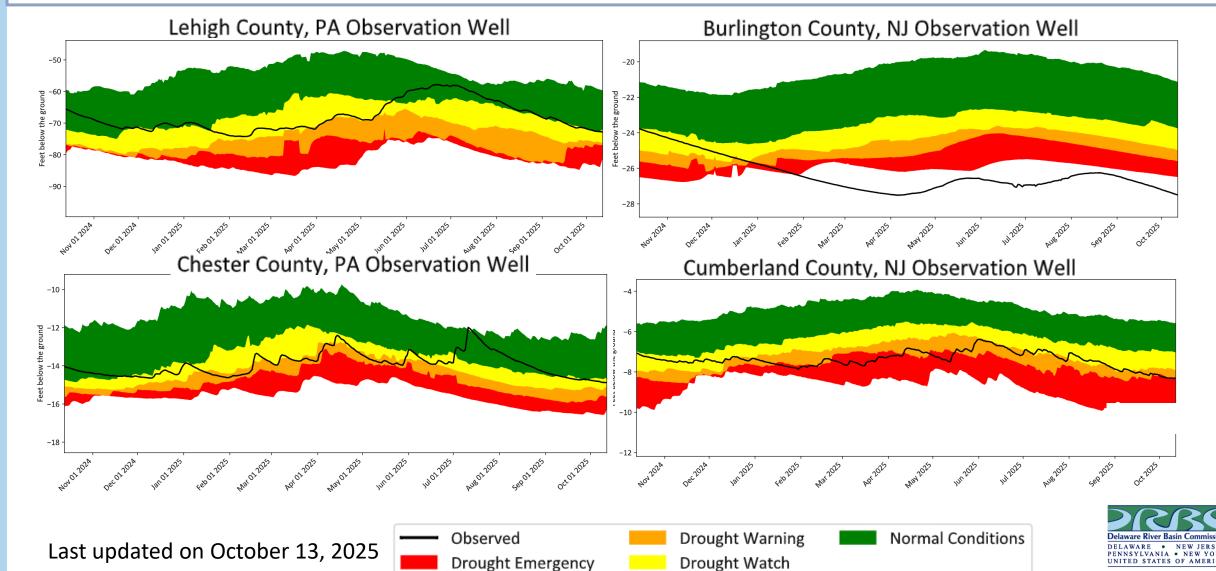






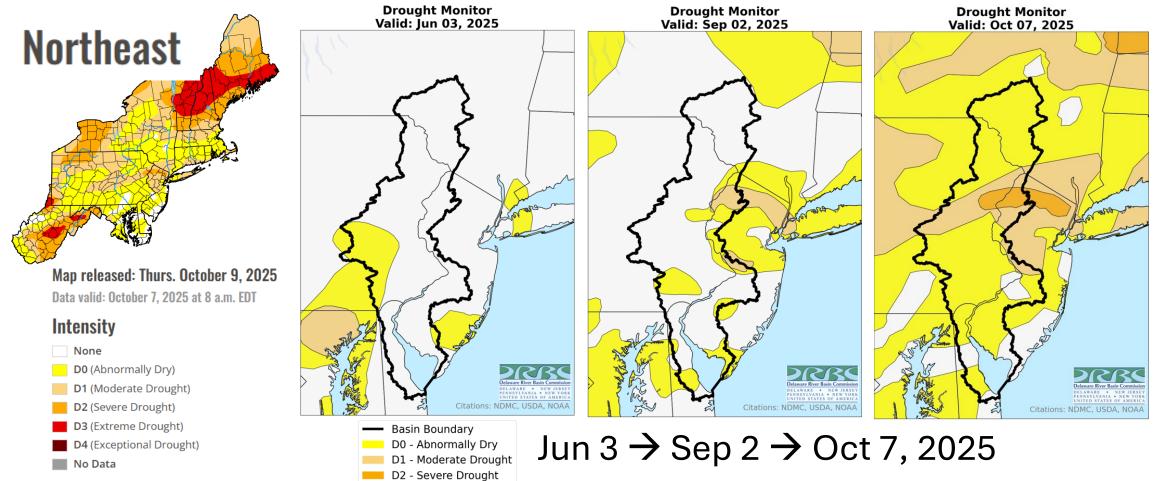
Groundwater Levels

Groundwater levels show a delayed and slow recovery flowing May rainfall events.



Drought Monitor

Continued dry weather in the Northeast led to widespread worsening of drought and abnormal dryness.





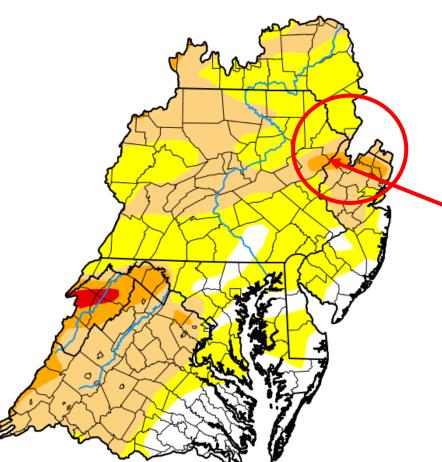
Data Source: USDM

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Drought Monitor

U.S. Drought Monitor Middle Atlantic RFC

Areas of moderate and severe drought expanded in northeast Pennsylvania, northern New Jersey, southern New York



October 7, 2025

(Released Thursday, Oct. 9, 2025) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

		None	D0	D1	D2	D3	D4
	Current	14.99	42.60	36.24	5.48	0.69	0.00
	Last Week 09-30-2025	23.45	44.72	27.42	3.73	0.69	0.00
	3 Months Ago 07-08-2025	93.98	4.55	1.47	0.00	0.00	0.00
	Start of Calendar Year 01-07-2025	25.13	23.73	27.84	19.94	3.36	0.00
	Start of Water Year 10-01-2024	54.31	31.90	10.79	2.52	0.47	0.00
	One Year Ago	48.21	36.90	12.77	1.67	0.46	0.00

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:

Intensity:

None

D0 Abnormally Dry

D1 Moderate Drought

Curtis Riganti

National Drought Mitigation Center









D2 Severe Drought

D3 Extreme Drought

D4 Exceptional Drought

droughtmonitor.unl.edu





Drought Status

Dry conditions in the fall 2024 led to a drought watch or warning in the Basin states.

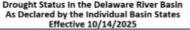
DROUGHT STATUS

Normal

Drought Watch

Drought Warning

Drought Emergency





NJ: Drought Watch

DE: Normal

NY: Watch

PA: Normal; 2 DRB counties in

Drought Watch

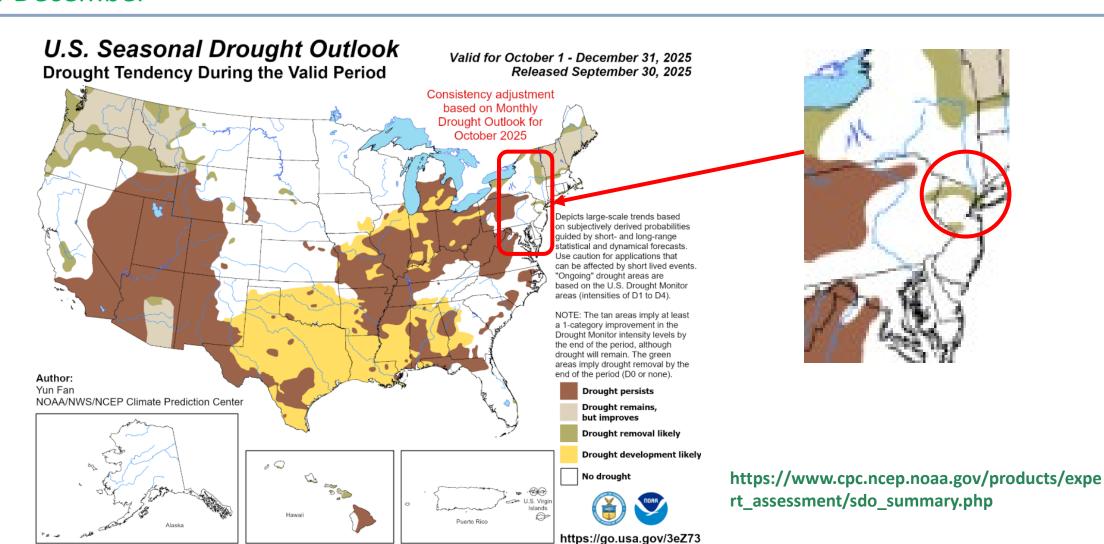
Map last updated on 10/14/2025.

DRBC's flow management operations normal



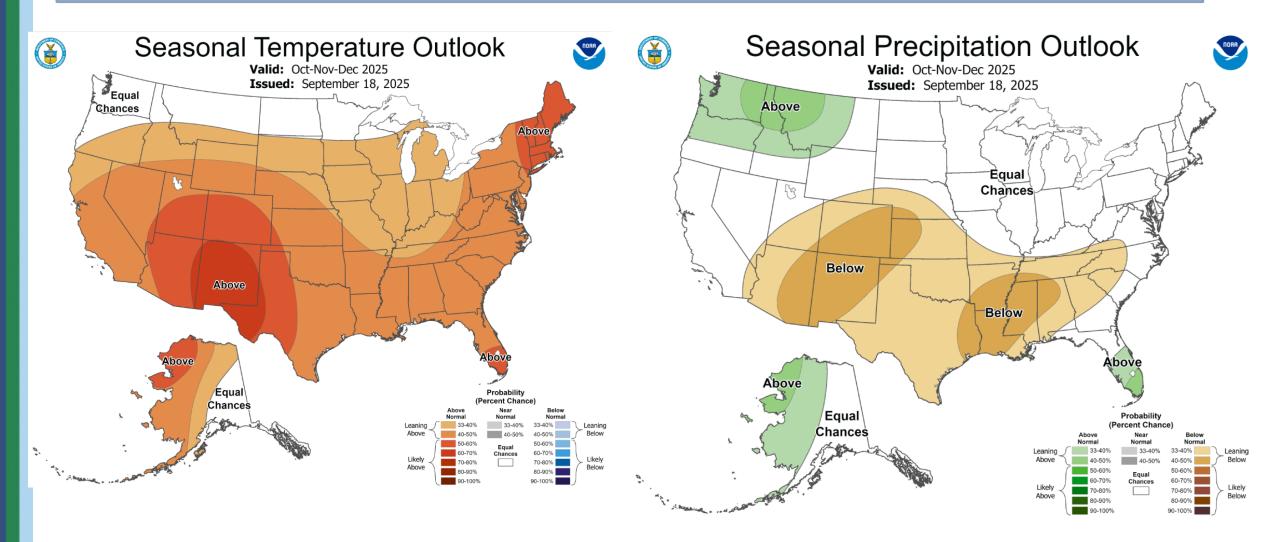
NOAA Seasonal Drought Outlook: October 1 – December 31, 2025

Delaware River Basin is expected to largely remain free of drought conditions through the end of December



NOAA Seasonal Outlook – Oct-Nov-Dec 2025

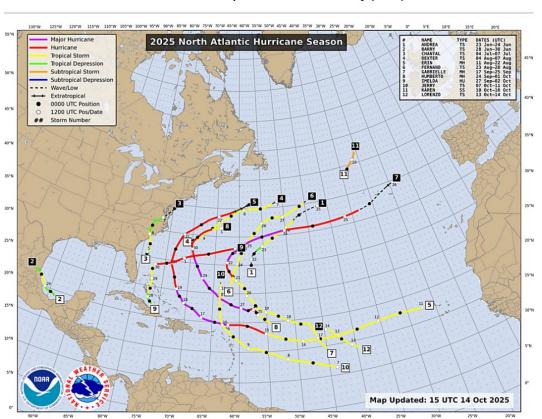
Warmer-than-normal temperatures with equal chances for precipitation



Hurricane Season – A summary at end of September 2025

This hurricane season has gone quiet, but the season is expected to remain active for the rest of the year





For the first time in 10 years, **no** hurricane has made landfall in the United States through the end of September.

Through the end of September, nine named storms and three hurricanes (1 Cat 4, 2 Cat5) have formed, but all intensified in the central Atlantic Ocean, far from land.

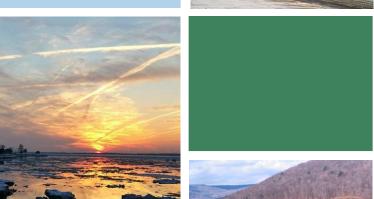
Source: NOAA/NHC https://www.nhc.noaa.gov/data/tcr/



Hydrologic conditions summary



 After more than two months of dry conditions, a hydrologic drought has developed across many parts of the Basin, resulting in reduced streamflow and declining groundwater levels.



- A significant salinity intrusion has been observed in the Delaware Estuary due to the prolonged period of low flow conditions on the Delaware River mainstem.
- The three-month outlook indicates warmer-than-average temperatures this fall and an equal chance of above- or below-normal precipitation.

Enjoy the Fall Season!

