Hydrologic Conditions

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Water Resource Operations

September 10th, 2025
DRBC 3Q Commission Meeting

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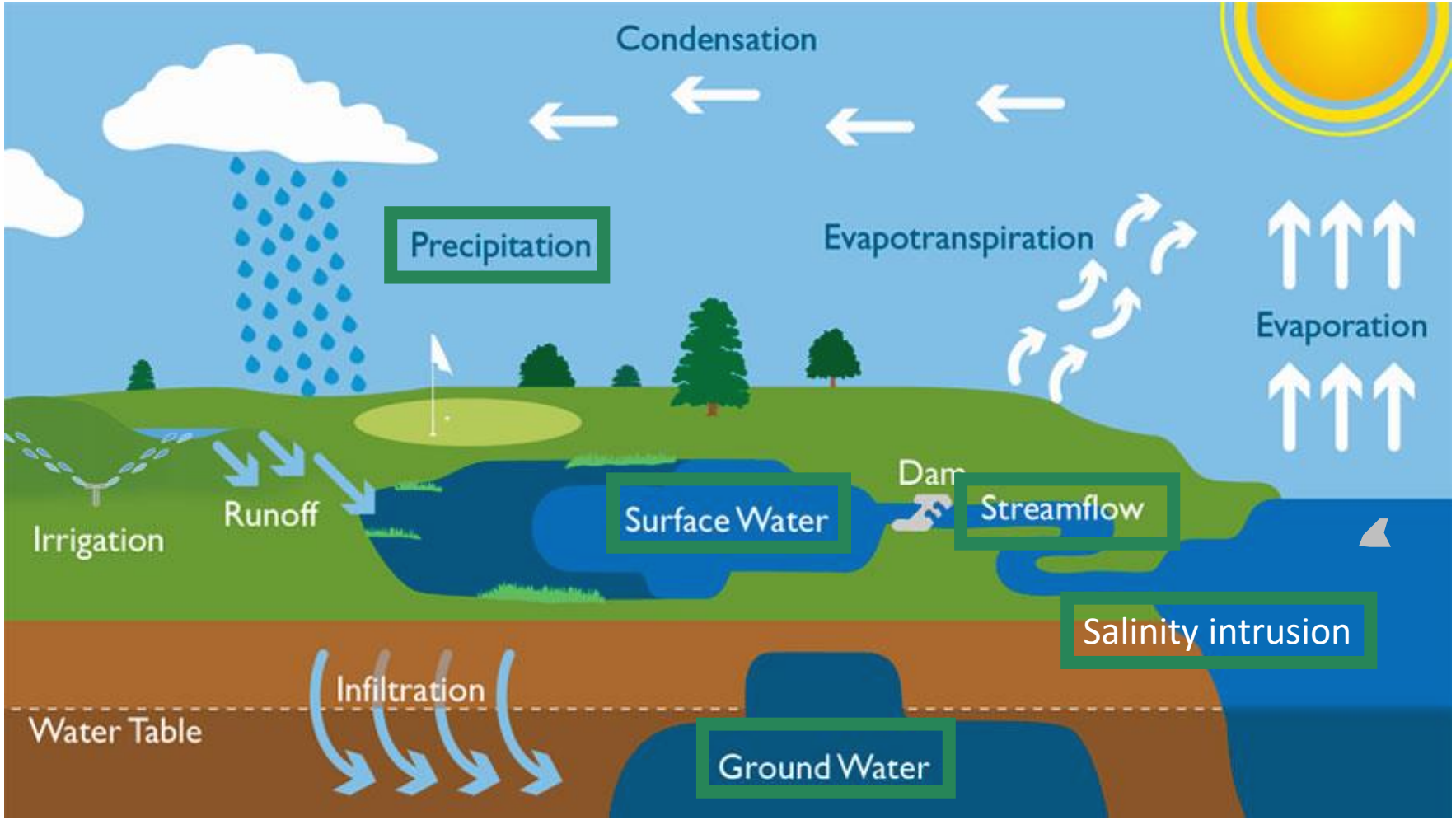
The Hydrologic Cycle

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



Graphic courtesy of Pike County Soil Conservation District

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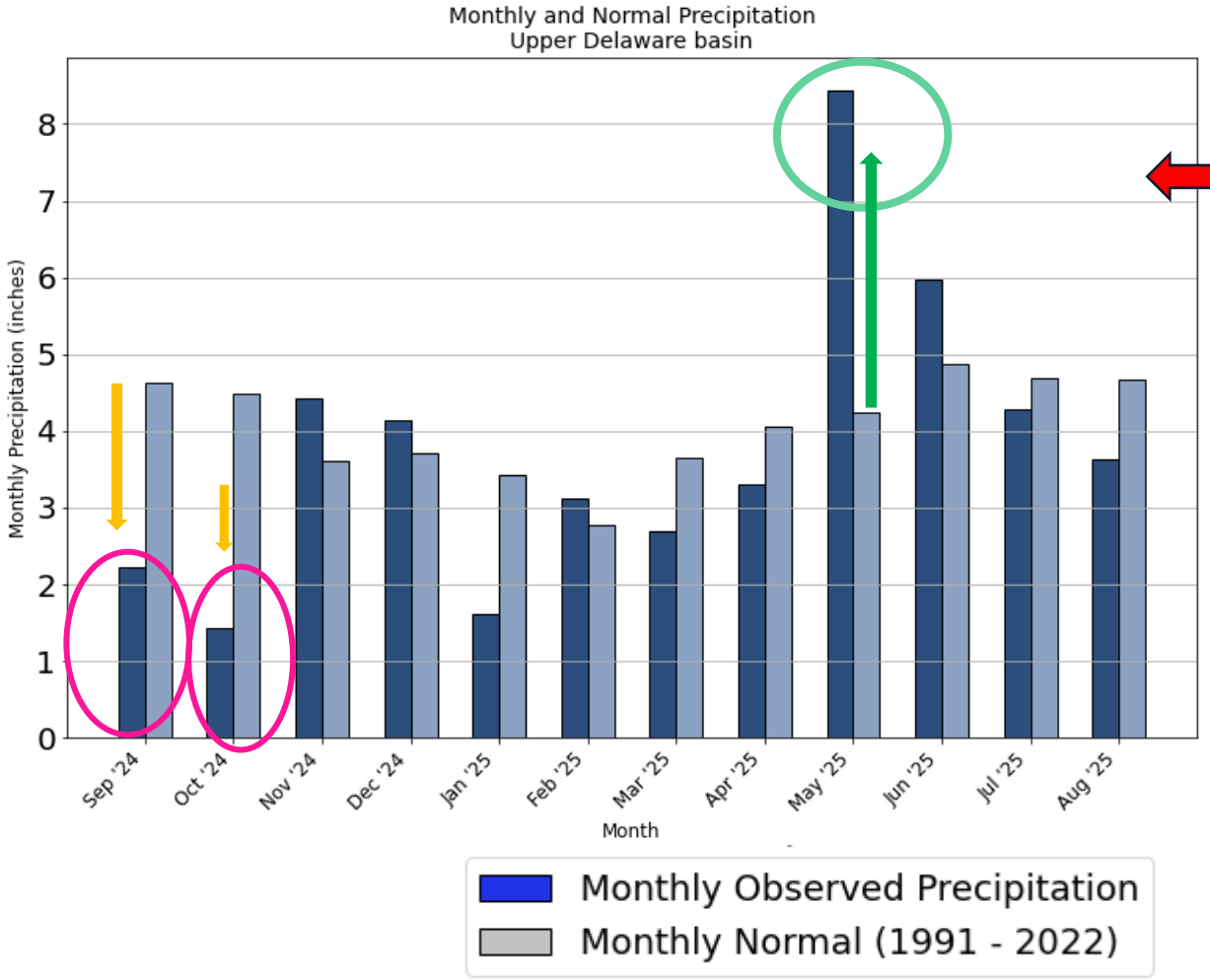
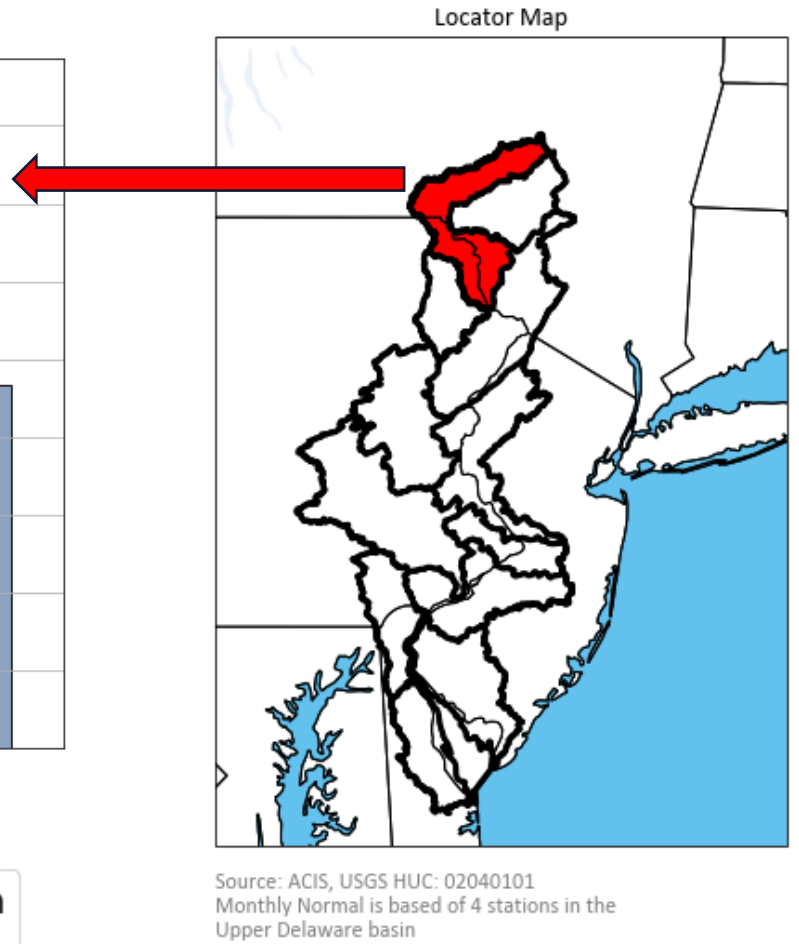
Precipitation between September 2024 to August 2025, Upper Basin
(past 365 days)

July and August both had below normal observed precipitation.





Source: ACIS, USGS HUC: 02040101
Monthly Normal is based of 4 stations in the Upper Delaware basin

Data Source: ACIS

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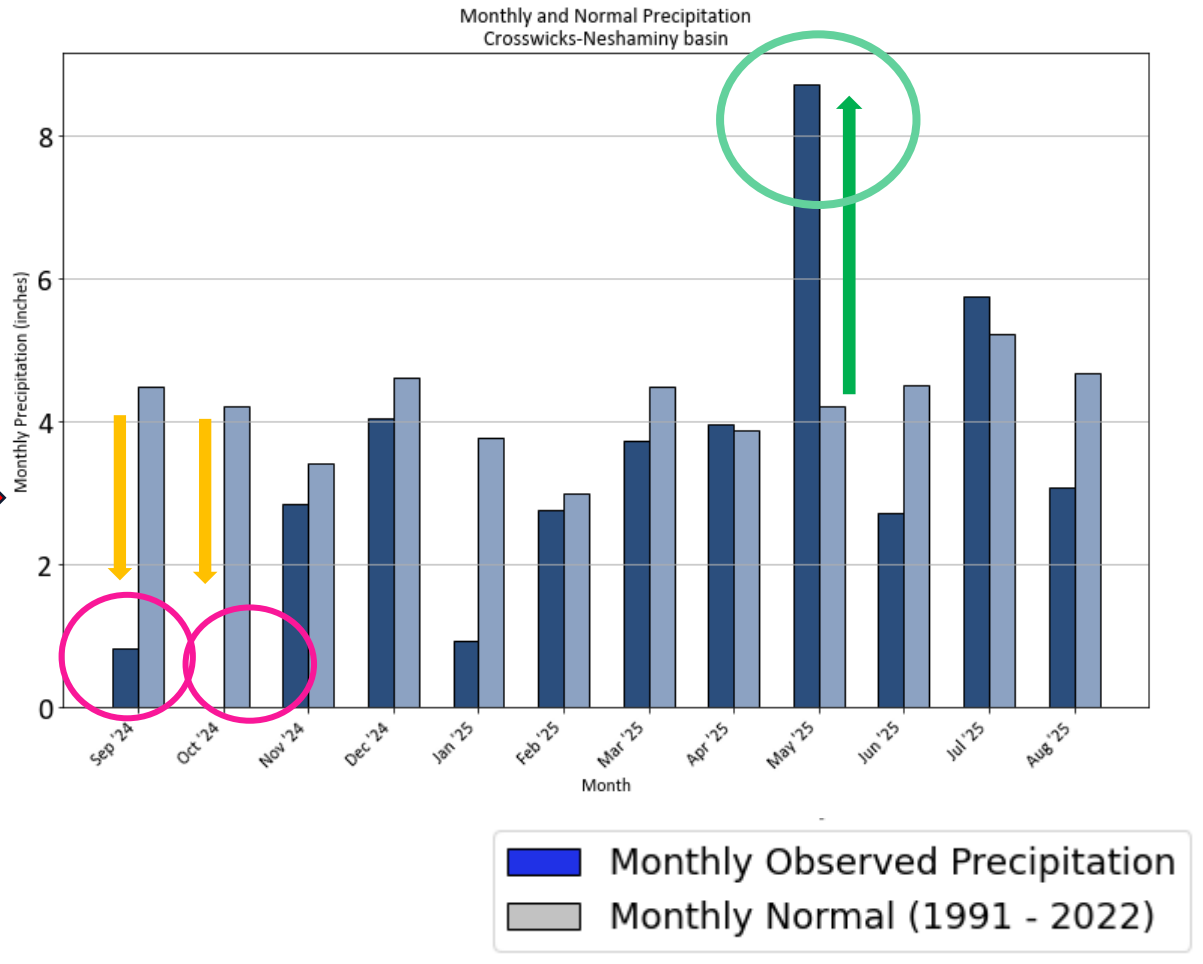
Precipitation between September 2024 to August 2025, Middle Basin
(past 365 days)

June and August had below normal recorded precipitation.

Source: ACIS, USGS HUC: 02040201
Monthly Normal is based of 5 stations in the Crosswicks-Neshaminy basin



Data Source: ACIS

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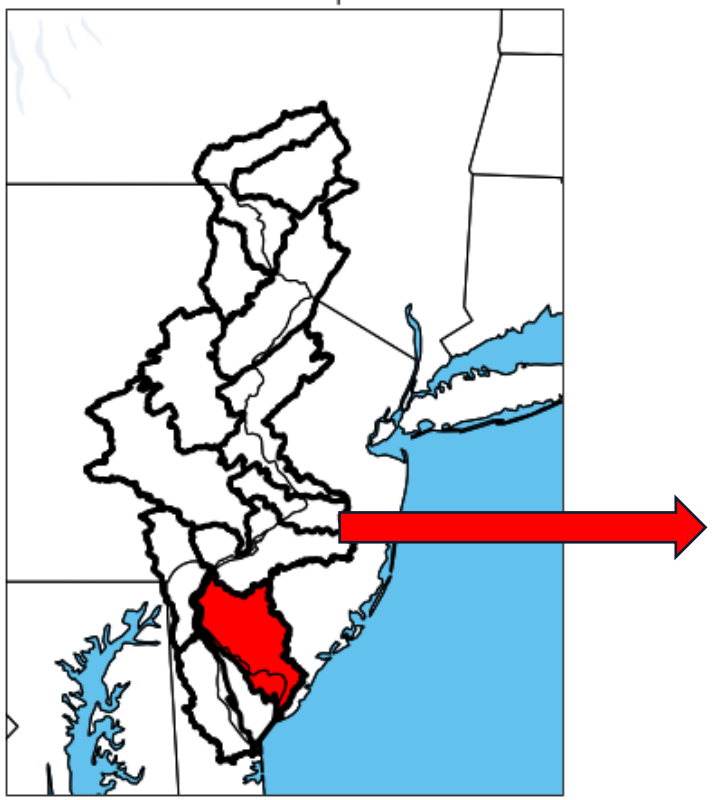
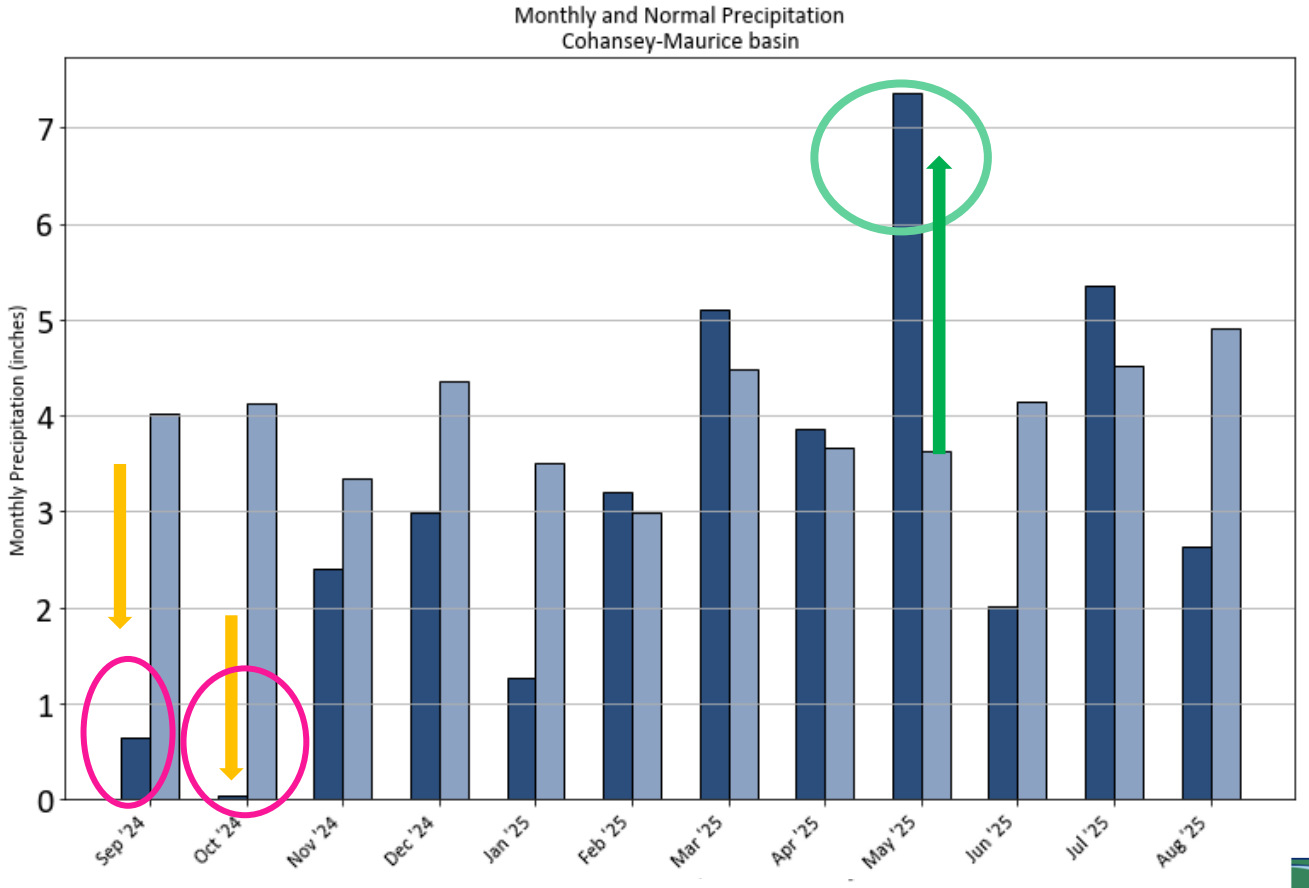
Precipitation between September 2024 to August 2025, Lower Basin
(past 365 days)

June and August had below normal observed precipitation.



Source: ACIS, USGS HUC: 02040206
Monthly Normal is based of 3 stations in the Cohansey-Maurice basin



Data Source: ACIS

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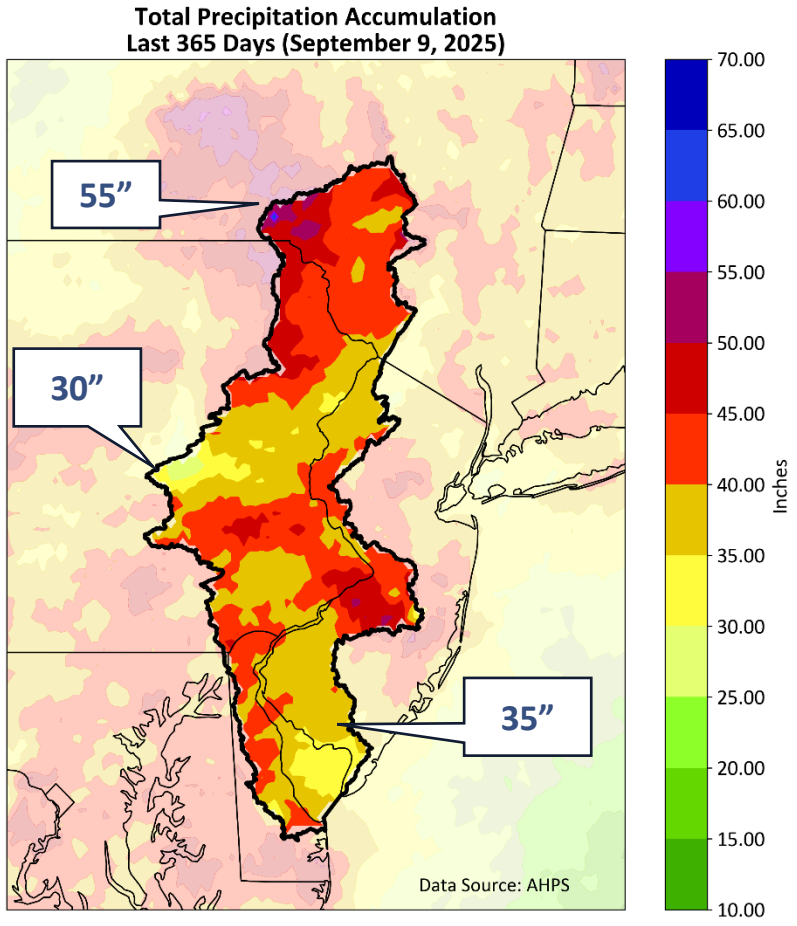
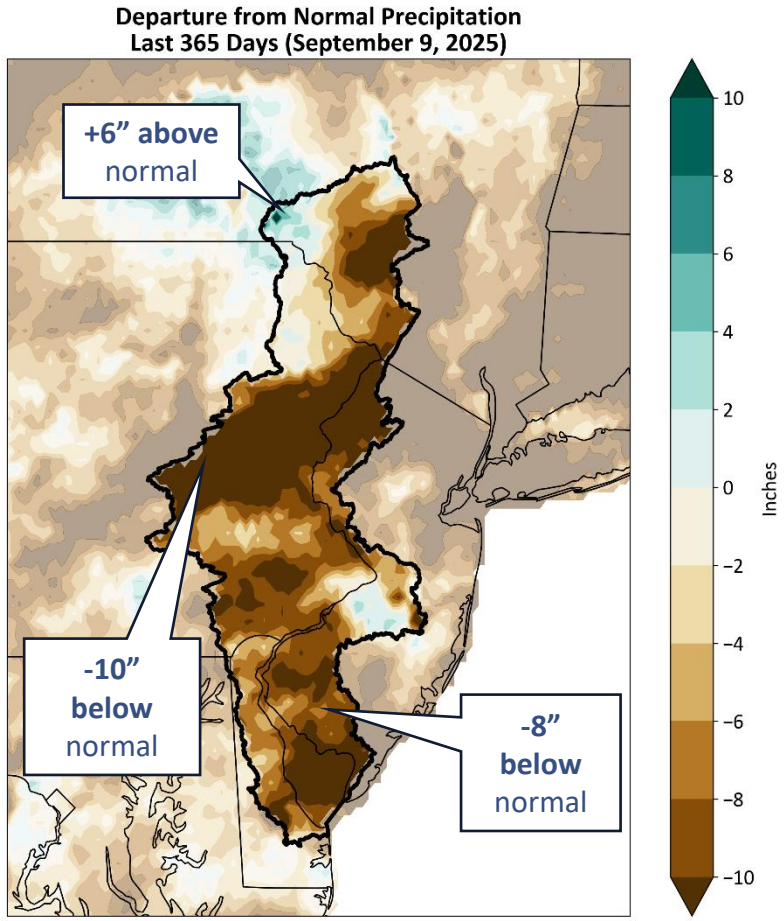
Cumulative Precipitation over the last 365 days

Cumulative totals remain below normal except for the Northwest part of the basin.





Data Source: NOAA

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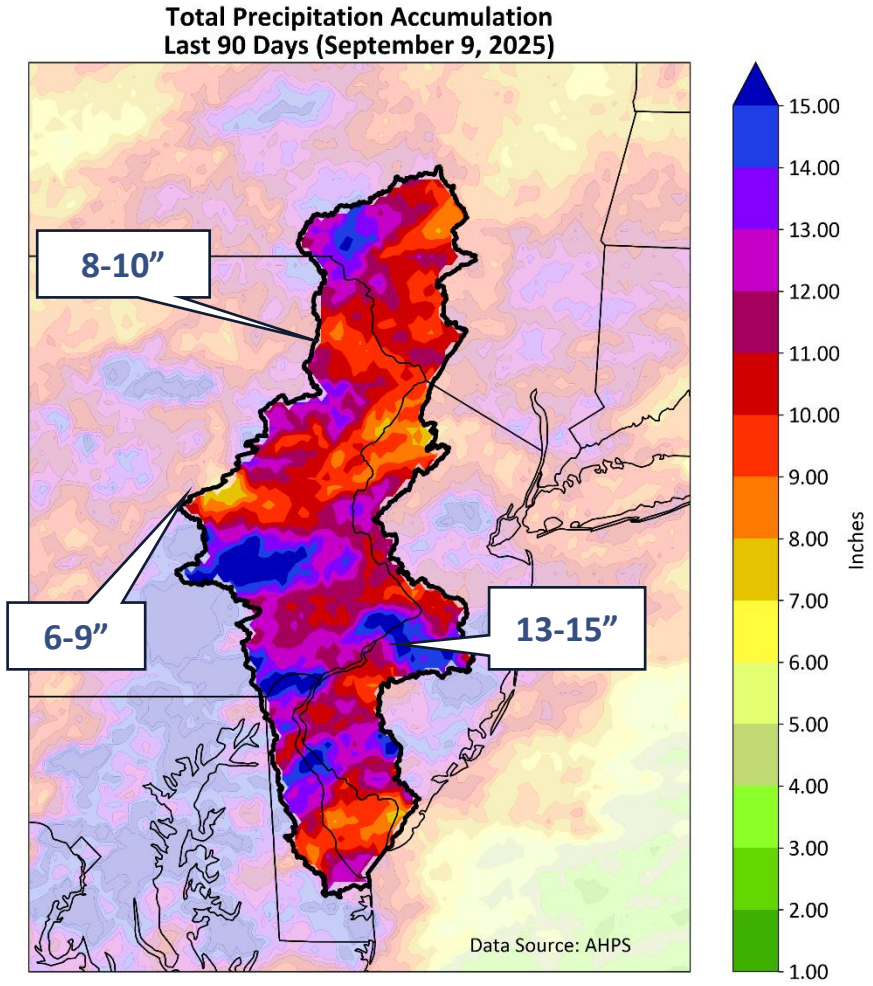
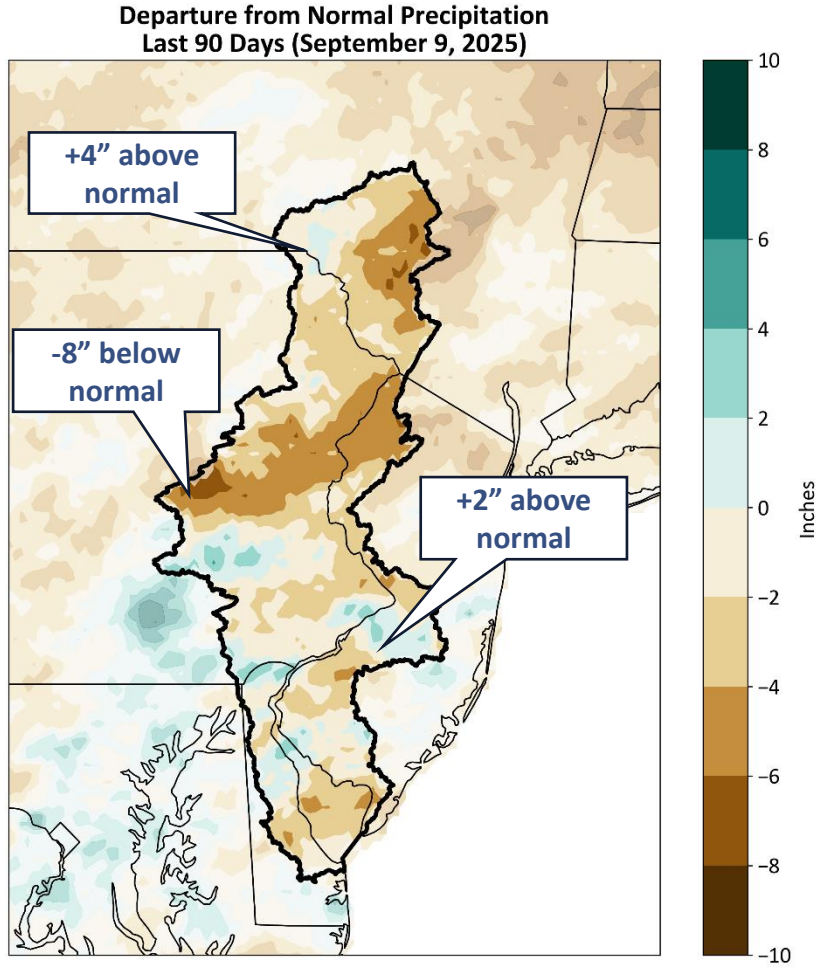
Cumulative Precipitation – Last 90 days

The last three months shows a trend of little rainfall.





Data Source: NOAA

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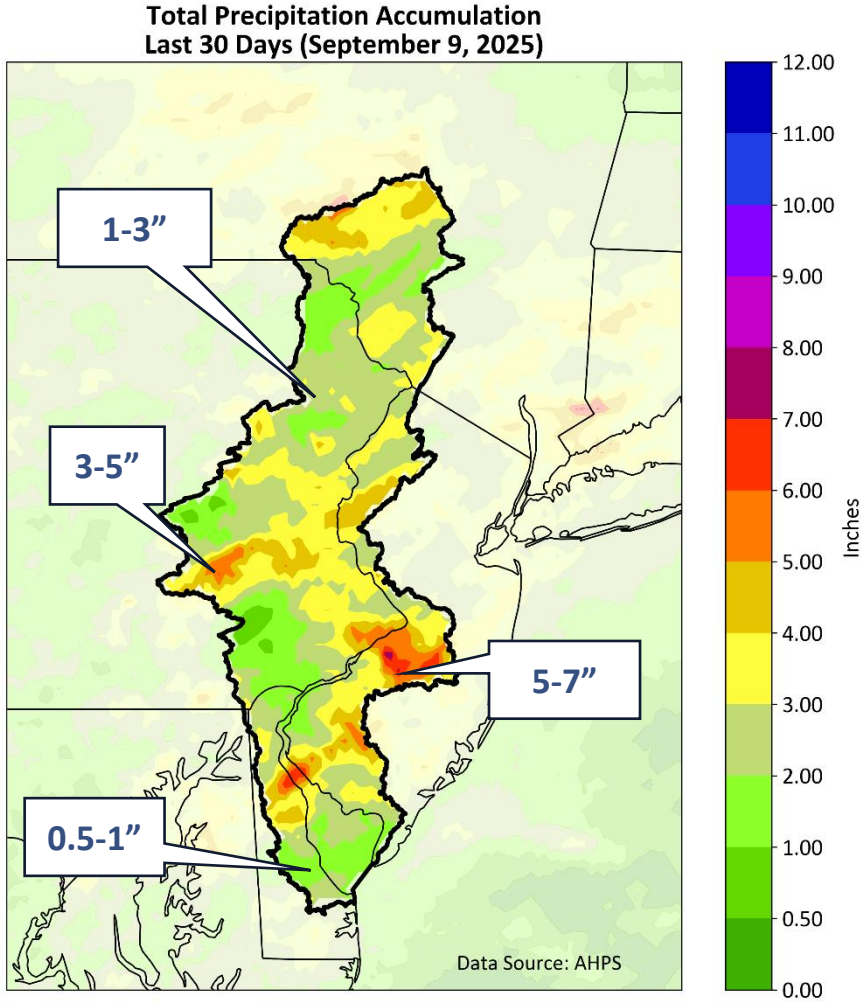
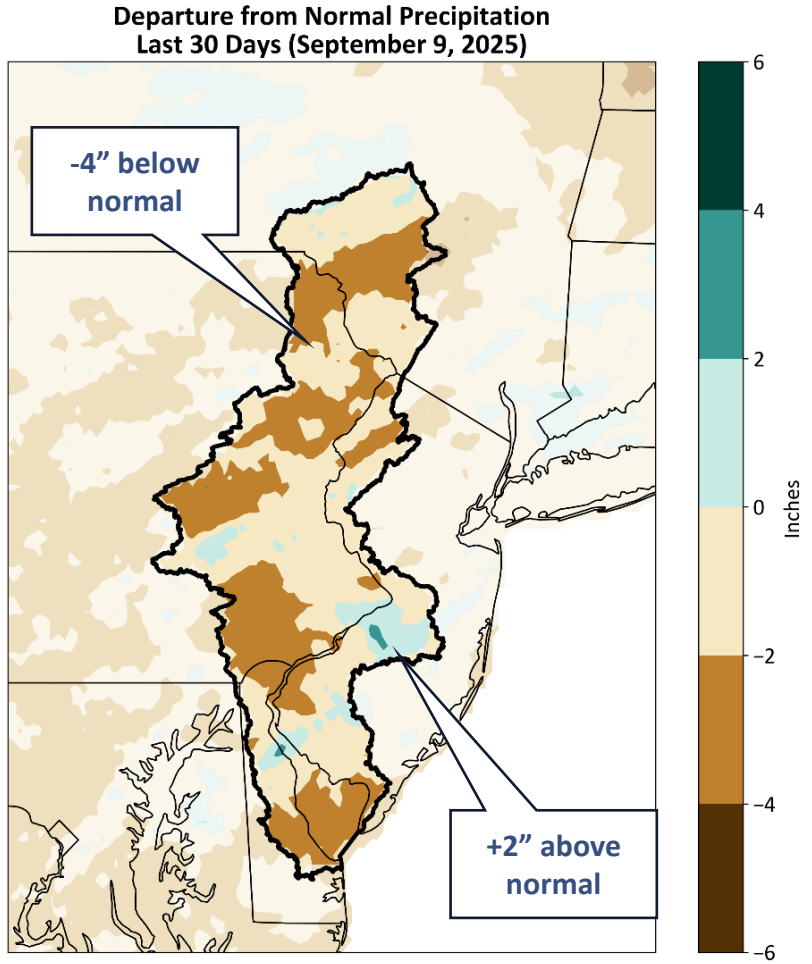
Cumulative Precipitation – Last 30 days

Slightly below normal throughout the basin the last 30 days.





Data Source: NOAA

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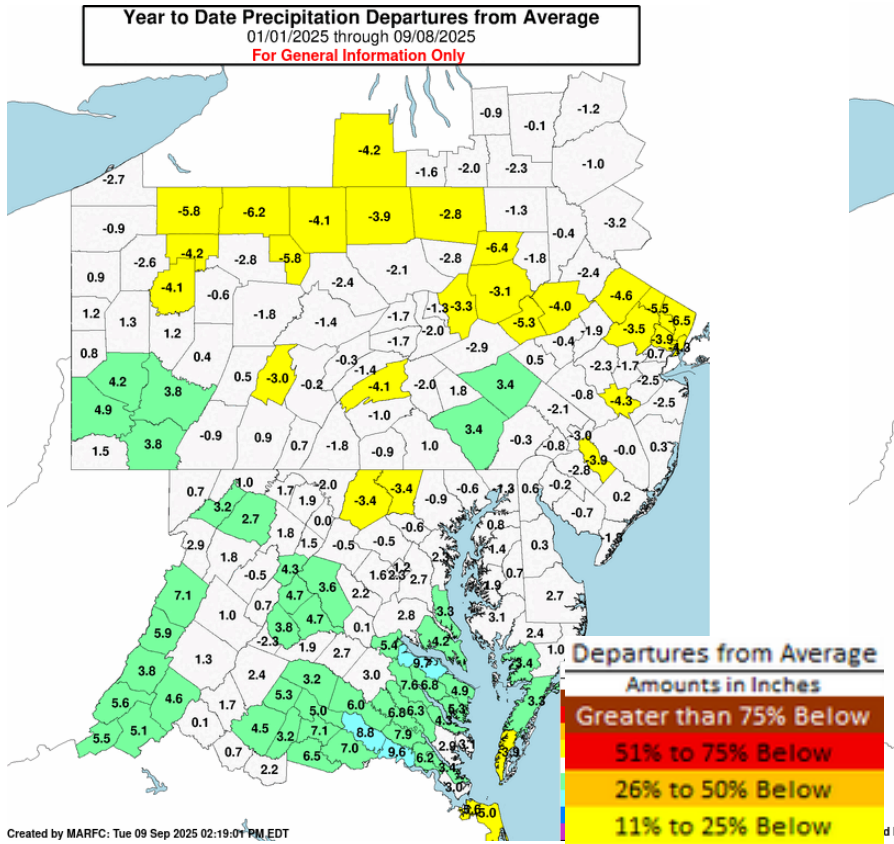
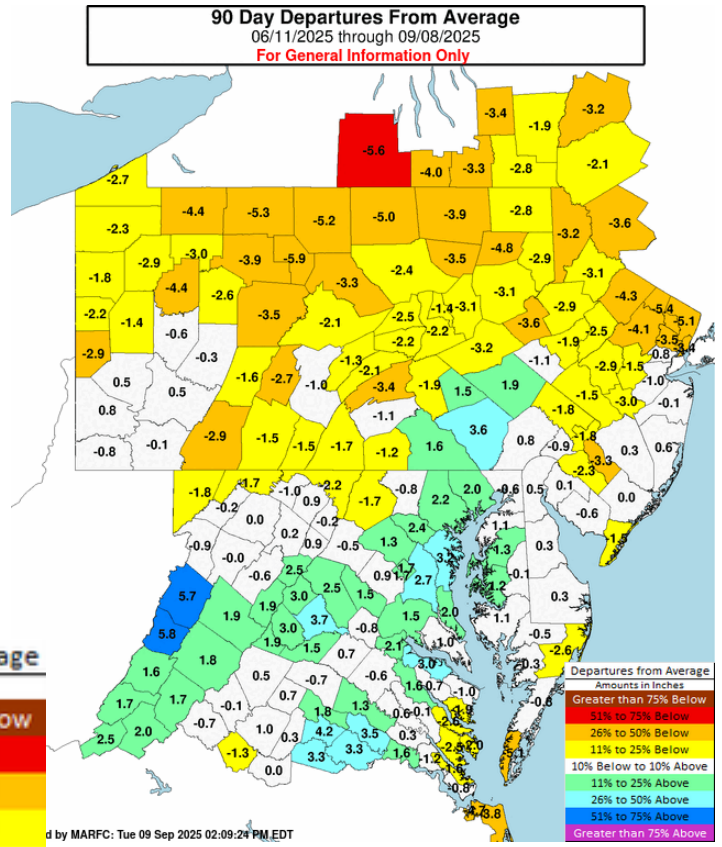
Precipitation Departures Summarized by County

Conditions have become much drier in the past 30 days.

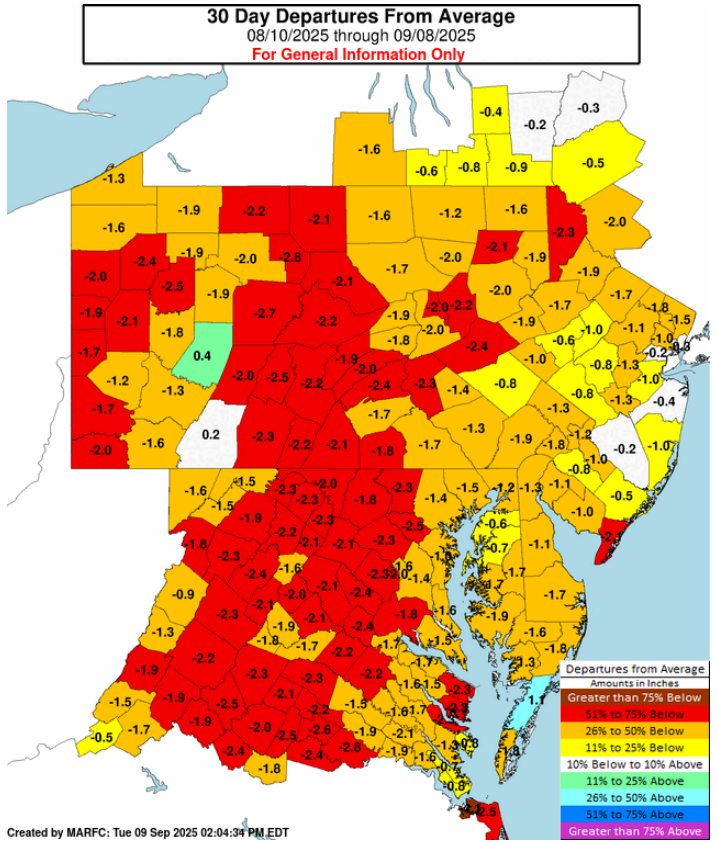
Year-to-date



90-day



30-day



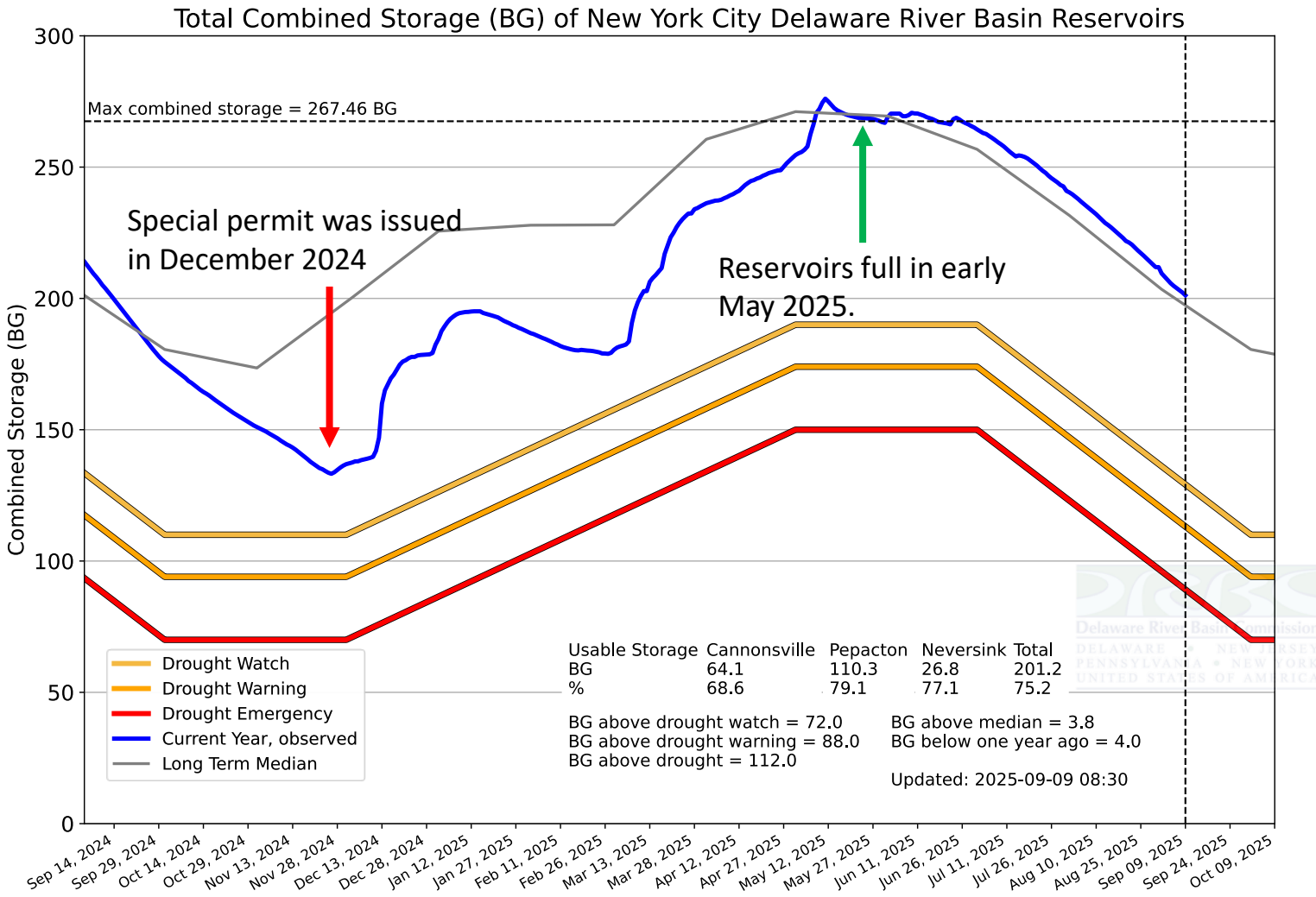
Departures from Average
Amounts in Inches
Greater than 75% Below
51% to 75% Below
26% to 50% Below
11% to 25% Below
10% Below to 10% Above
11% to 25% Above
26% to 50% Above
51% to 75% Above
Greater than 75% Above

Data Source: NOAA

Reference date: September 9, 2025

New York City Reservoir Storage

NYC combined storage steadily decreasing since May.



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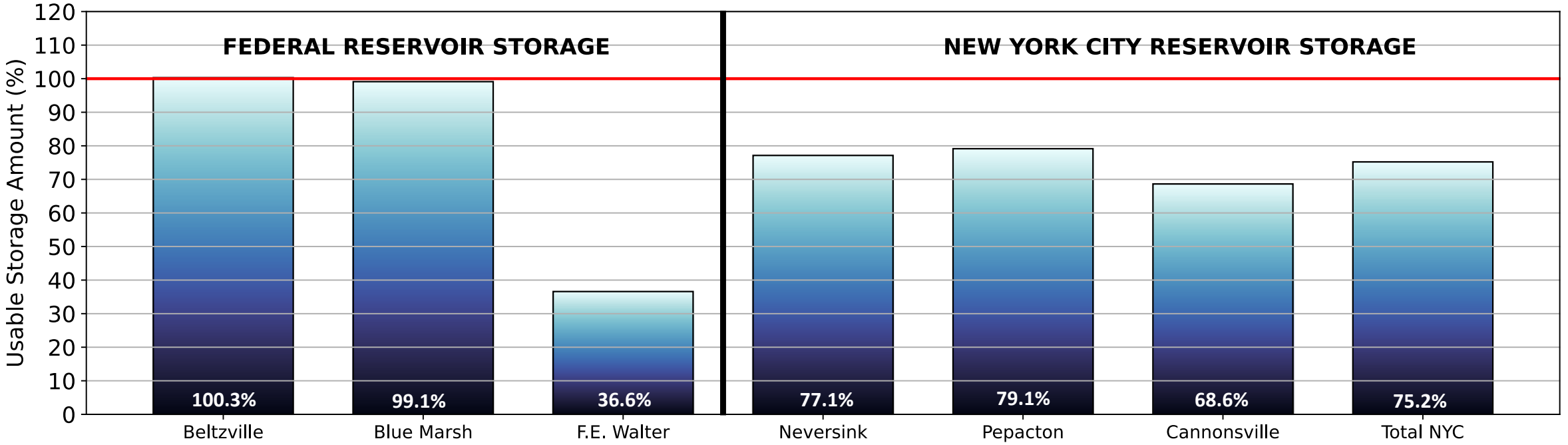
Reservoir Storage for Flow Management

The lack of rain recently is shown in the reservoir storage.



Reference date: September 9, 2025

Releases from Lower and Upper Basin Reservoirs are used to meet flow objectives.

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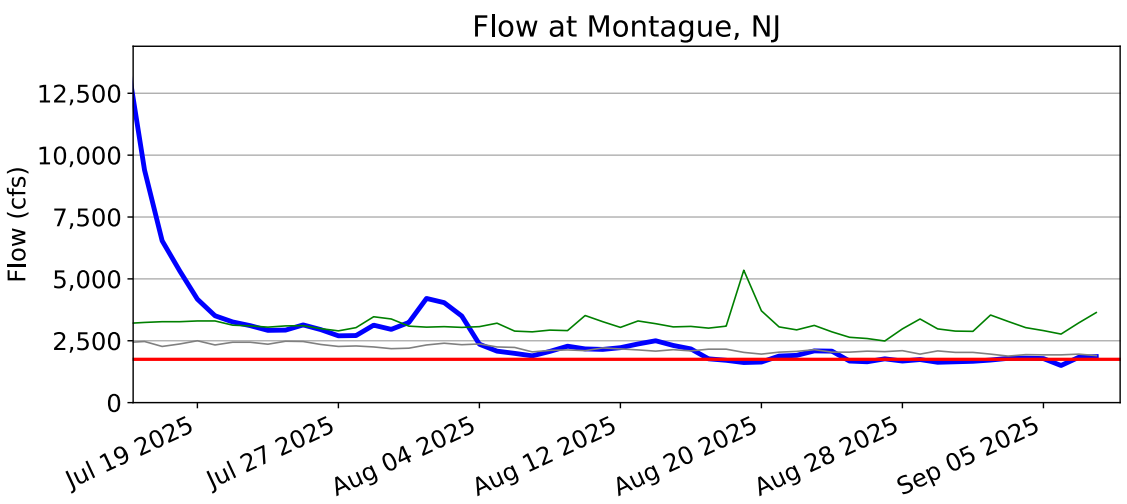
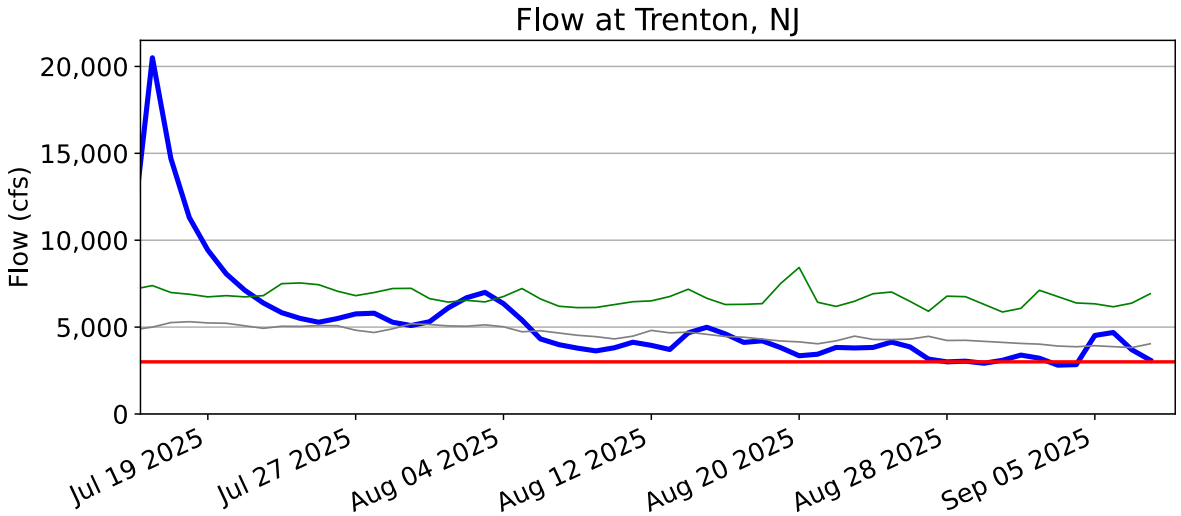
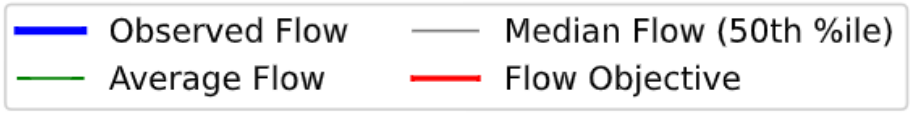
Mainstream Streamflow Conditions along Delaware River

Flows along the mainstem are hovering around the flow objective due to below normal precipitation.







Map last updated: 8:30 am, September 9, 2025

Data Source: USGS

Streamflow for yesterday

Some small tributaries are beginning to show below normal flow due to drying conditions.

<u>Flow Conditions on average</u>:

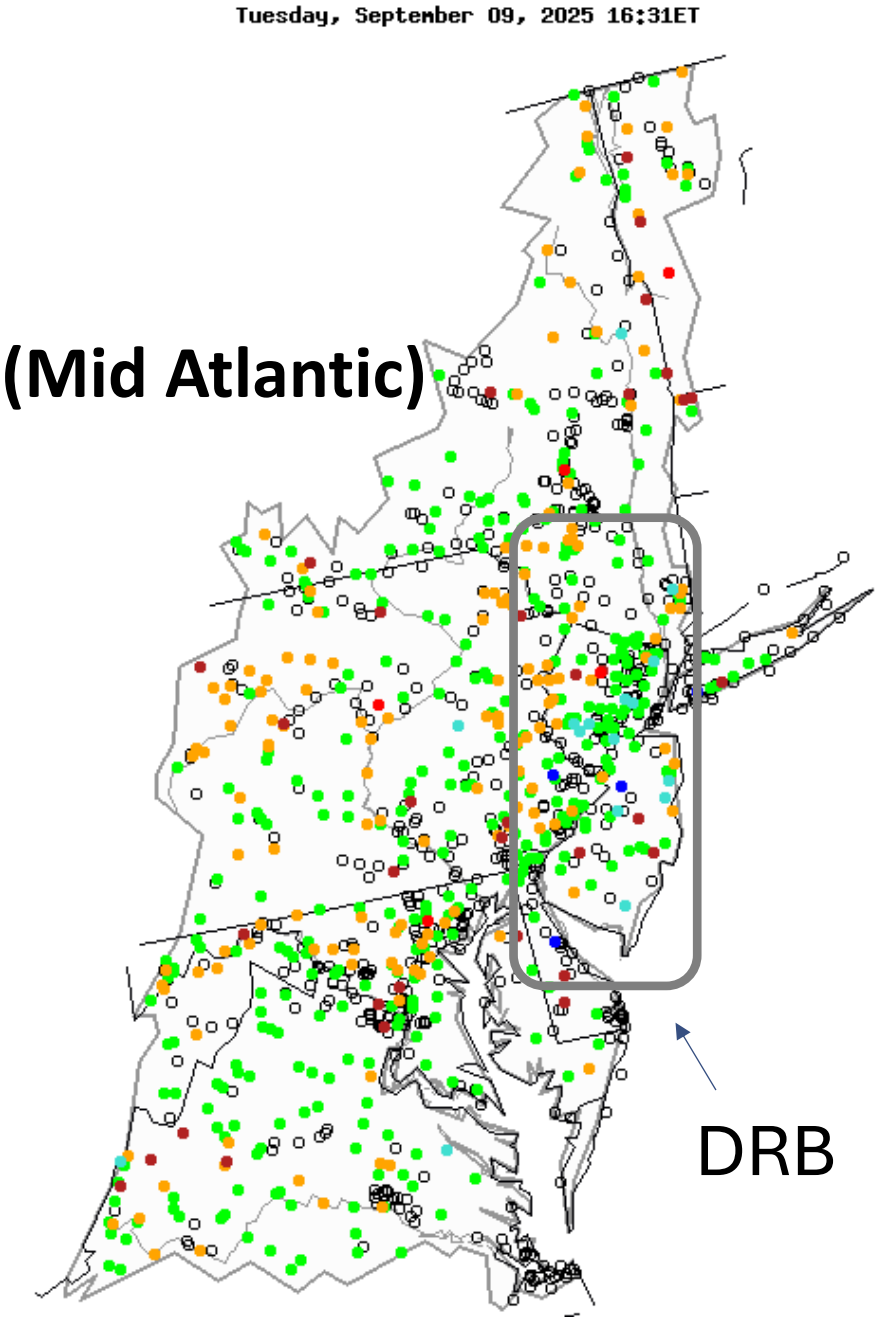
Upper Basin: Normal to below Normal

Central Basin: Normal to below Normal

Lower Basin: Normal to below Normal

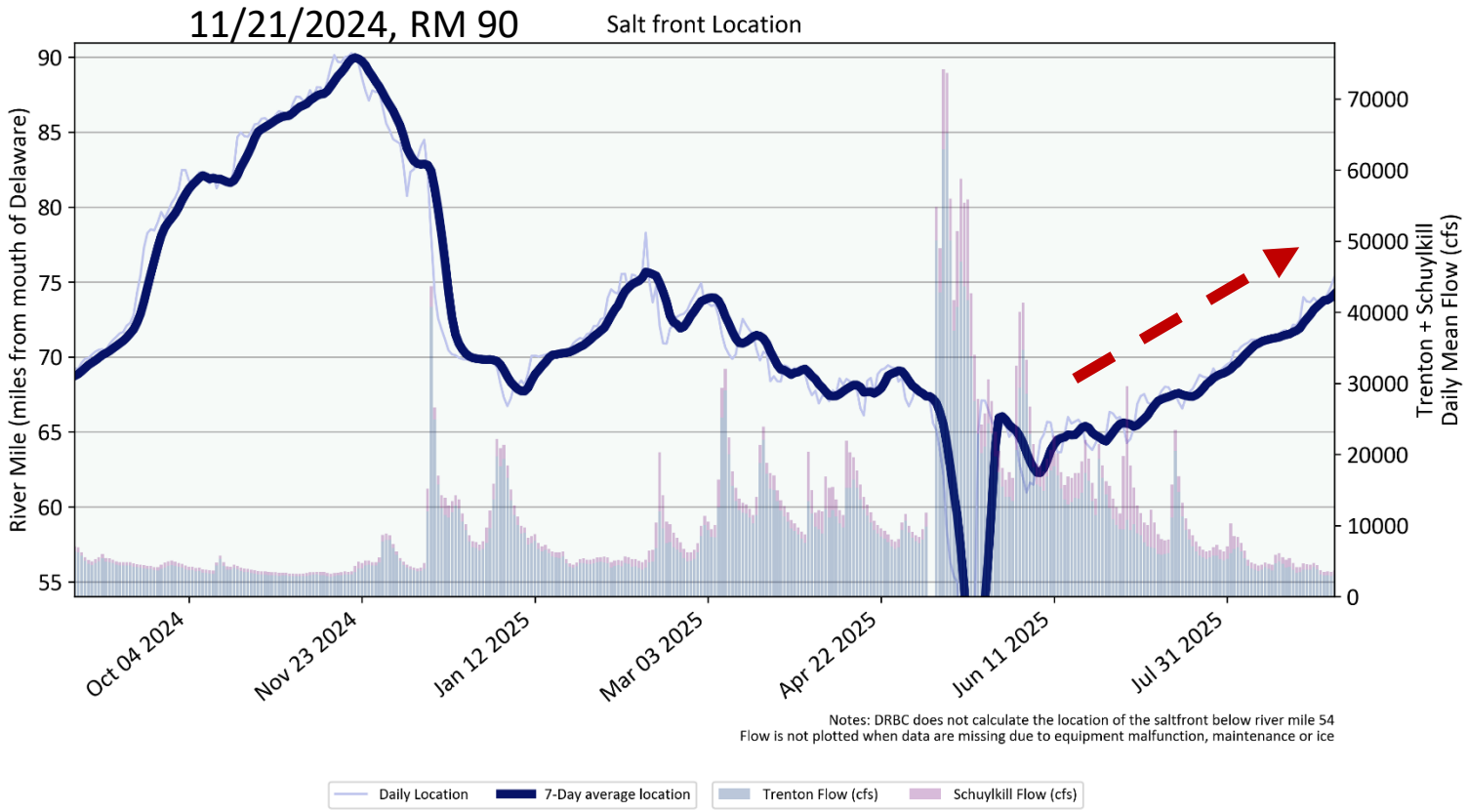
Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

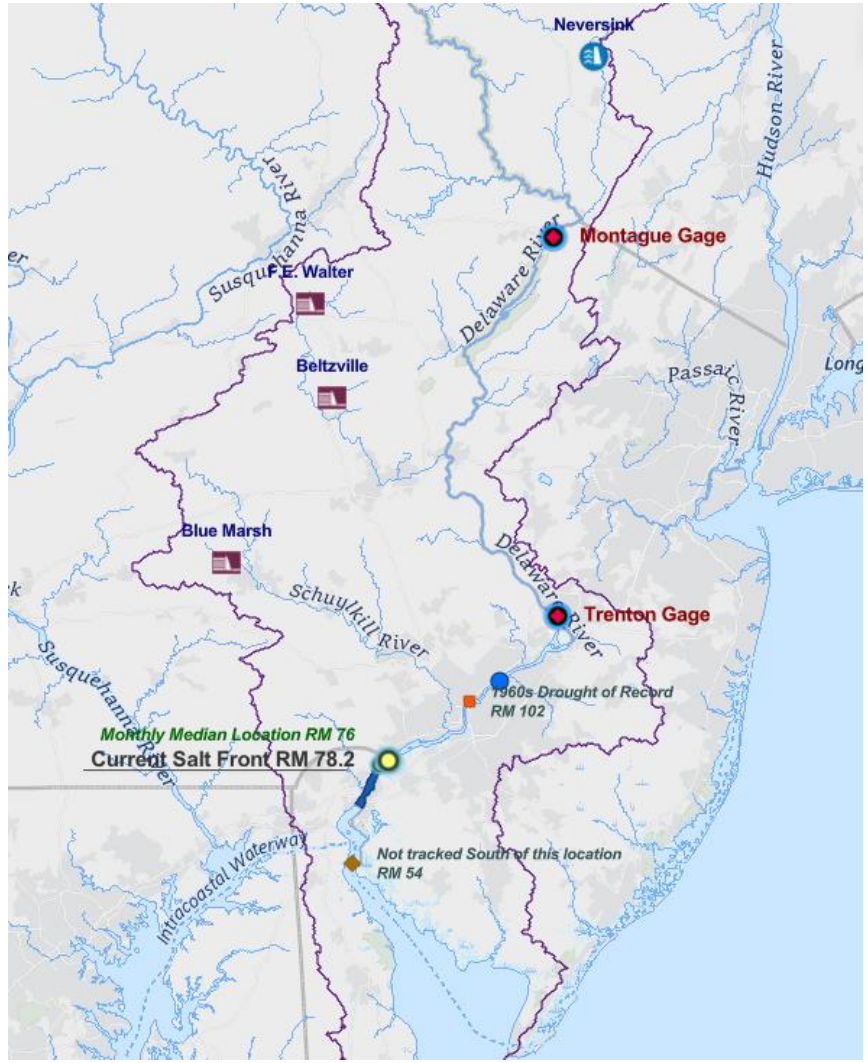
Data Source: USGS, Water Watch, https://waterwatch.usgs.gov/index.php?r=02&id=mv01d



Salt Front Location

Salt front continues to be in the normal range for the year but moving upward.





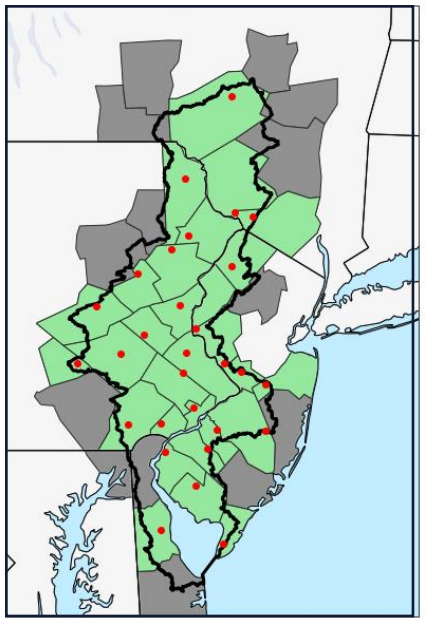
SALT FRONT (river mile)	This Week: 78.2	Last Week: 75.6	September Median: 76

September 9, 2025 DRBC hydrosnap.drbc.net

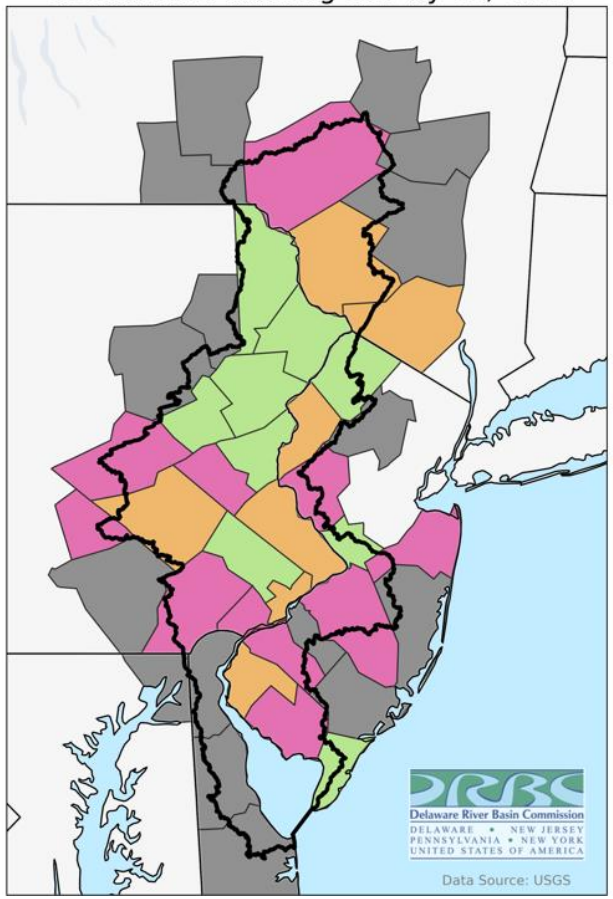
Groundwater Levels

Several wells have begun to show below normal levels due to drying conditions.

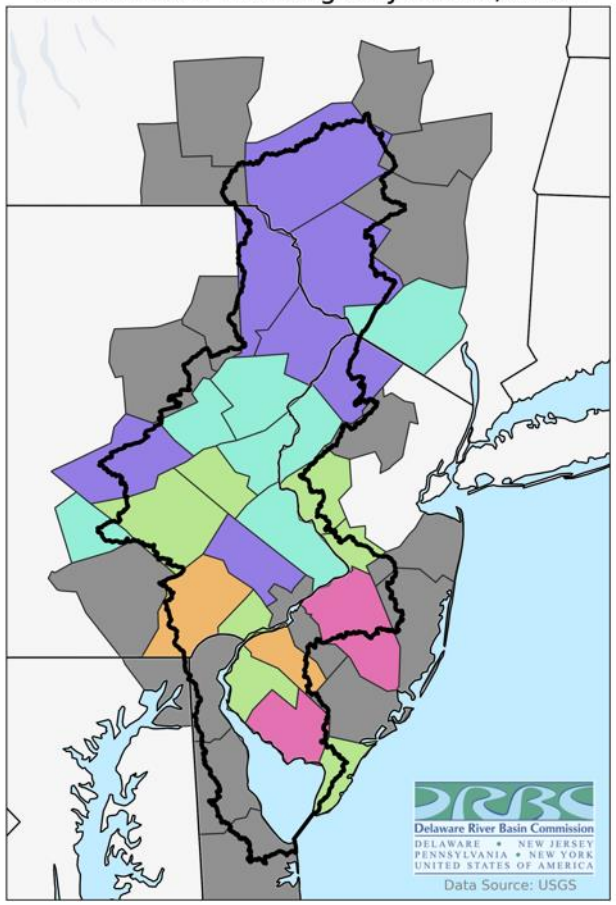
Reference Wells



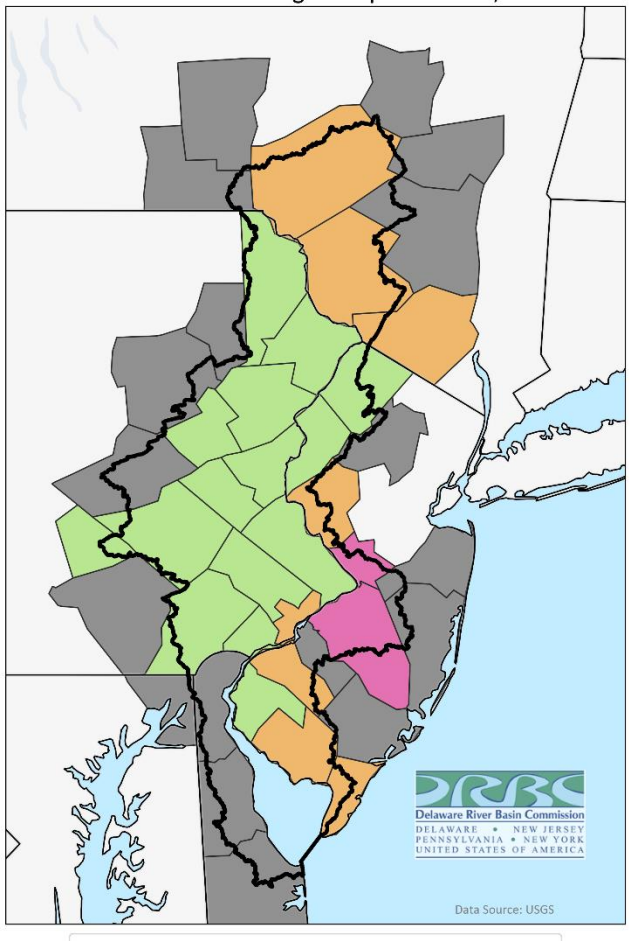
Groundwater Ranking on May 01, 2025



Groundwater Ranking on June 08, 2025



Groundwater Ranking on September 08, 2025



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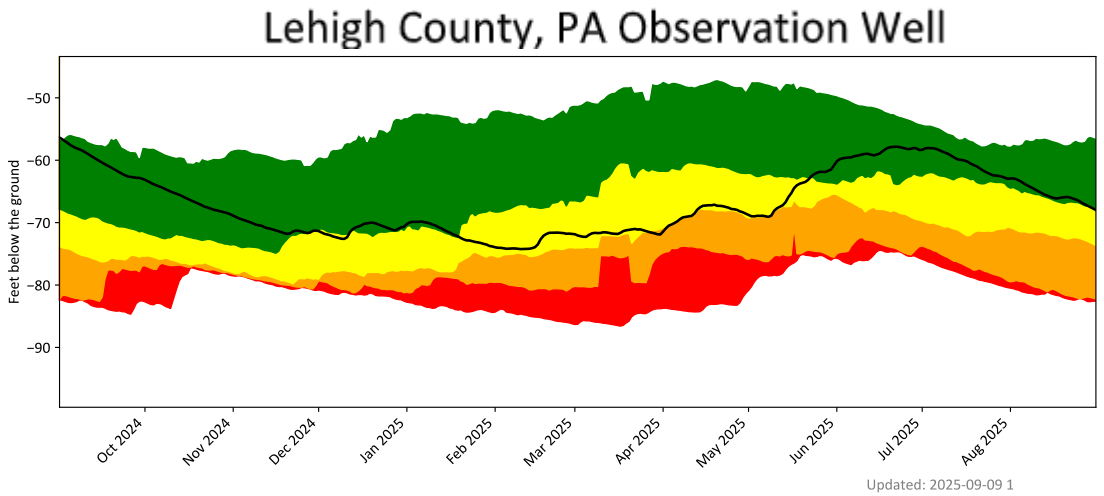
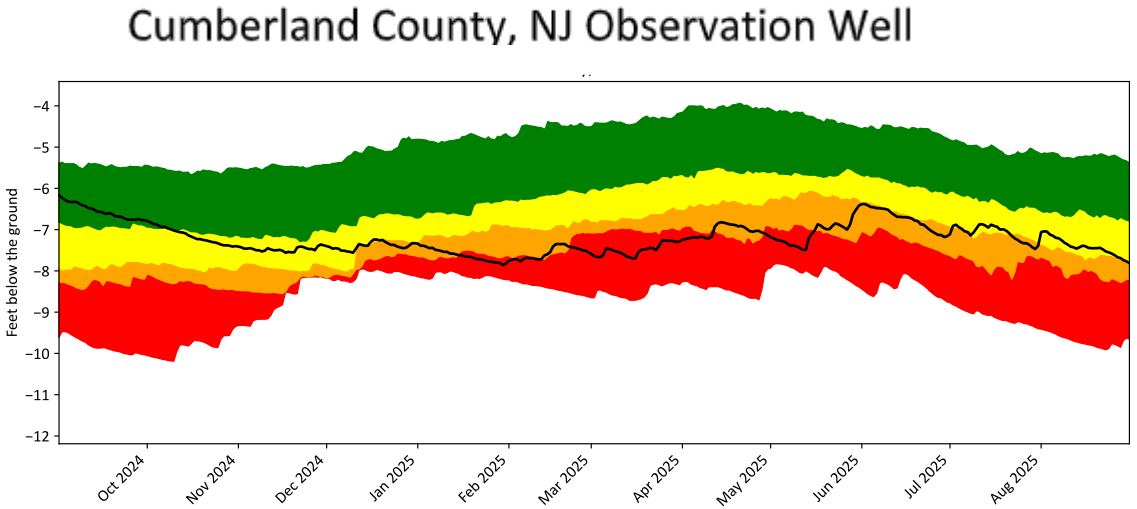
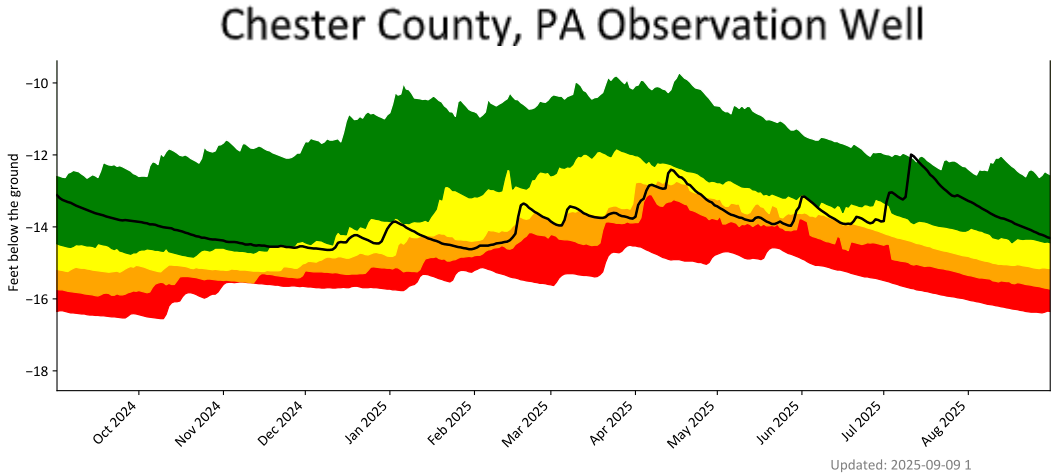
Basin Boundary
Much Above Normal
Above Normal
Normal
Below Normal
Much Below Normal
Data unavailable

Groundwater Levels

Groundwater levels hovering between normal in PA wells and drought watch in NJ well.







Last updated on September 9, 2025

Observed
Drought Emergency
Drought Warning
Drought Watch
Normal Conditions

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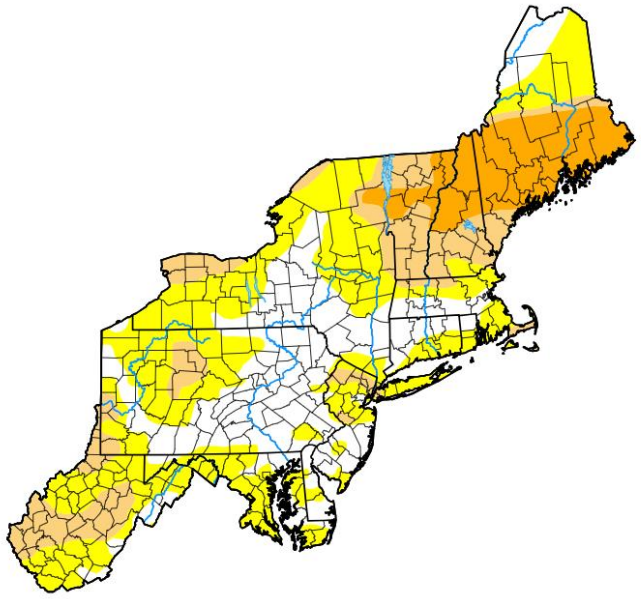
Drought Monitor

Dry conditions have returned to both the Basin and the Northeast with the lack of rainfall.



Map released: Thurs. September 4, 2025

Data valid: September 2, 2025 at 8 a.m. EDT

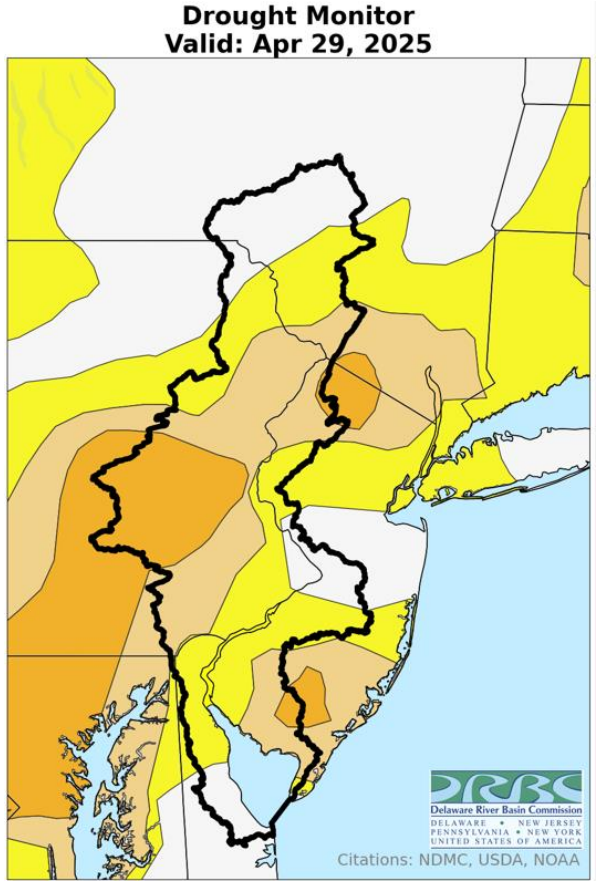
Intensity

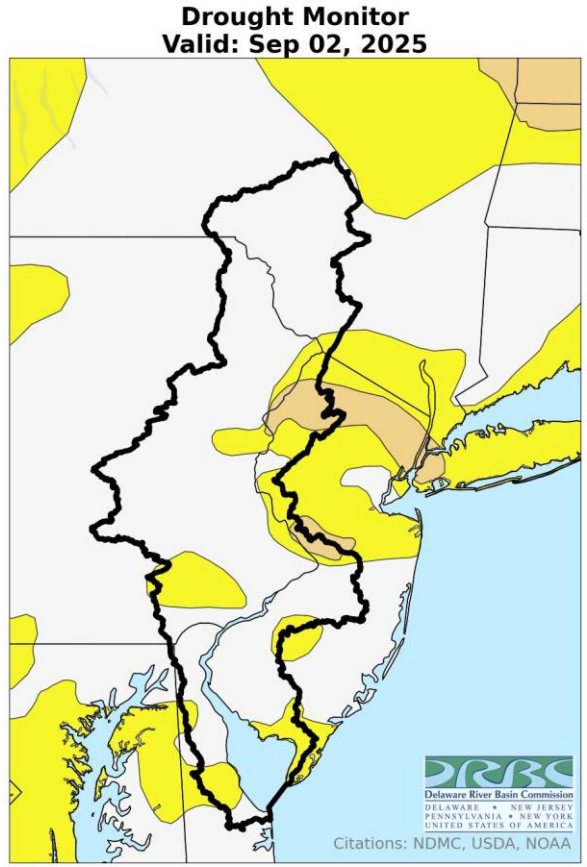
- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Authors

United States and Puerto Rico Author(s):
David Simeral, Western Regional Climate Center

Pacific Islands and Virgin Islands Author(s):
Anthony Artusa, NOAA/NWS/NCEP/CPC





- Basin Boundary
- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought

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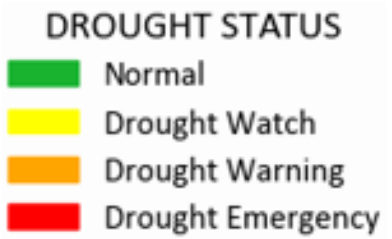
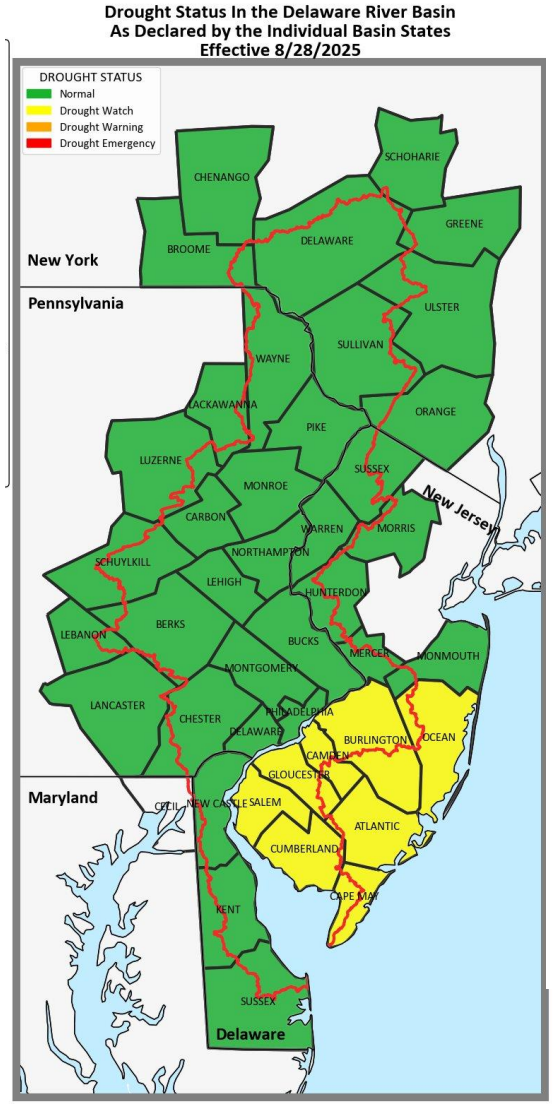
Data Source: USDM

Drought Status

All basin states have returned to normal status except for Coastal South region of NJ.





- DRB drought status is normal
- NJ: Normal as of June 2025, except Coastal South region
- DE: Normal as of Aug 2025
- NY: Normal as of Jan 2025
- PA: Normal as of July 2025

Map last updated on 8/28/2025.

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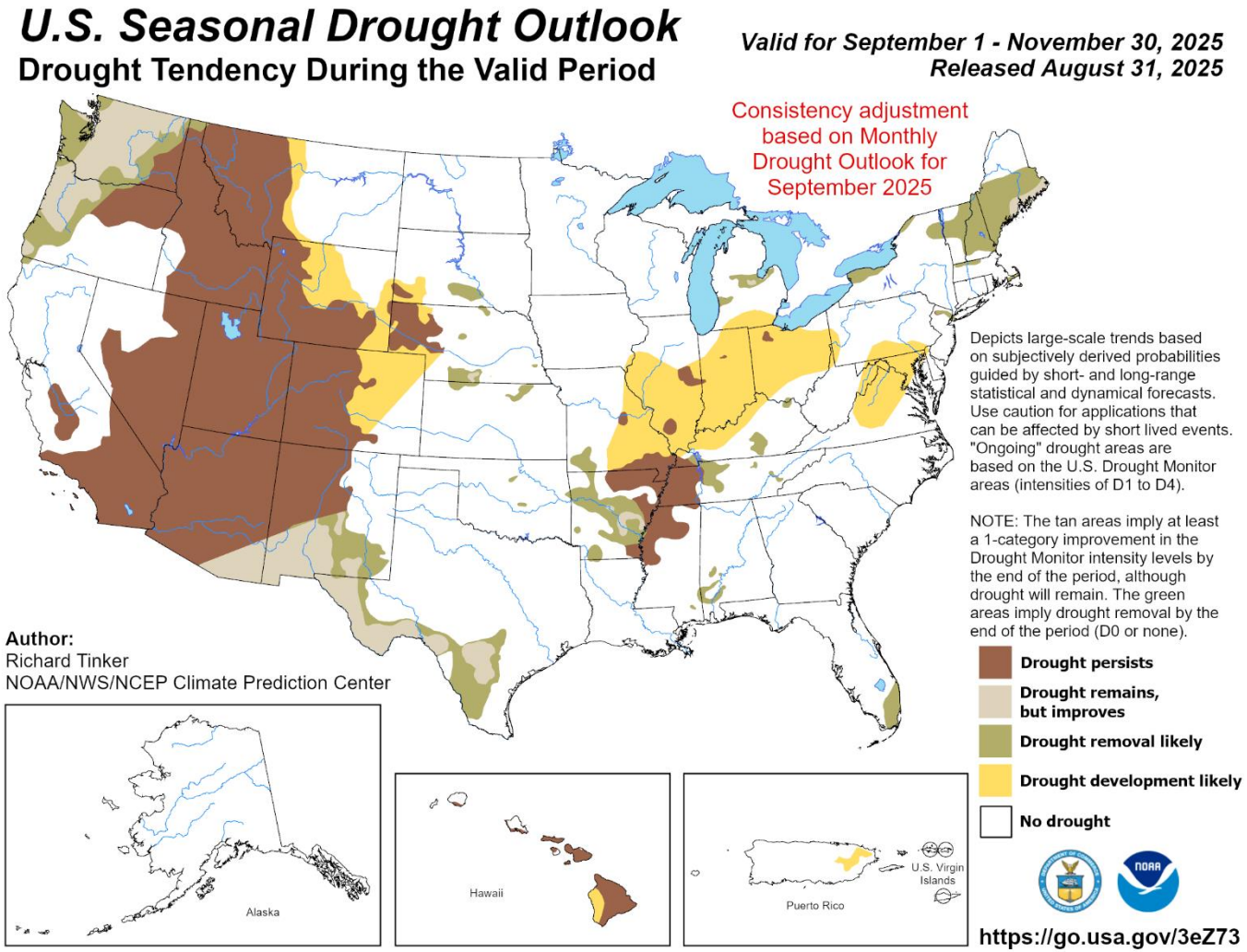
NOAA Seasonal Drought Outlook: September 1 – November 30, 2025

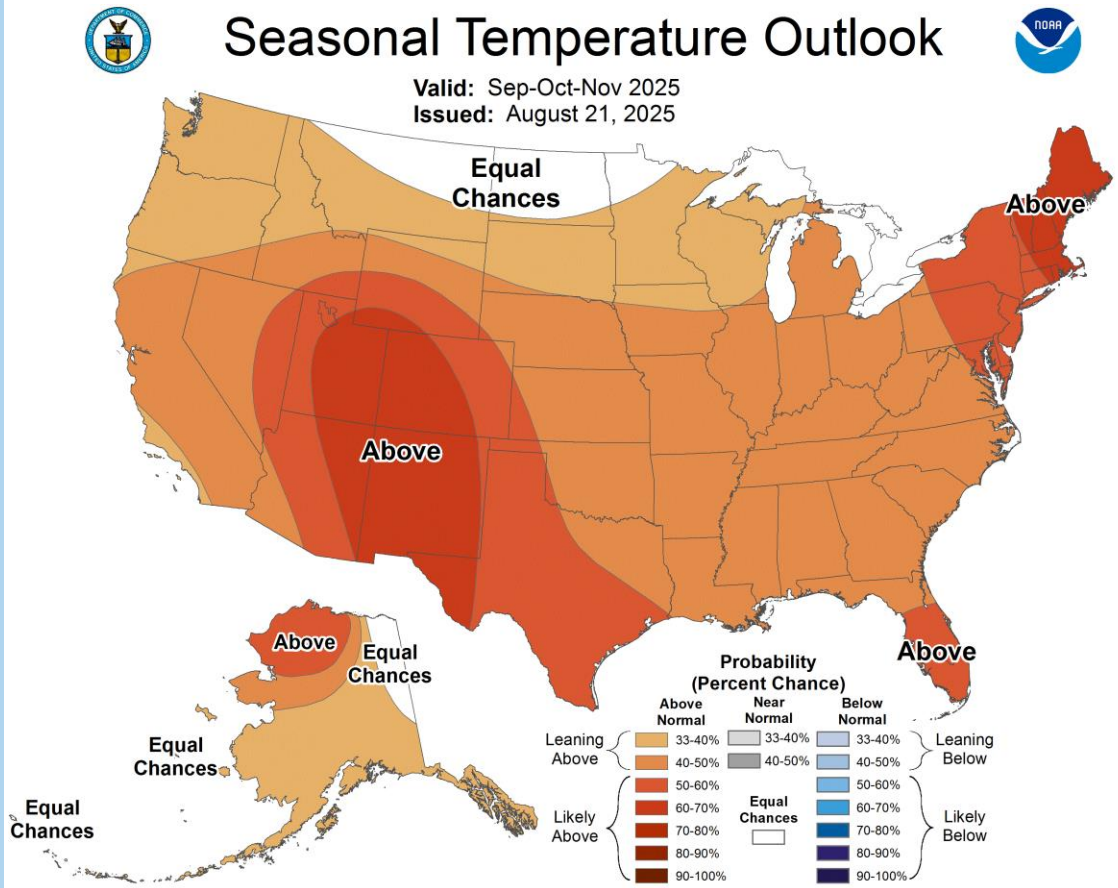
Delaware River Basin is expected to largely remain free of drought conditions through the end of November.

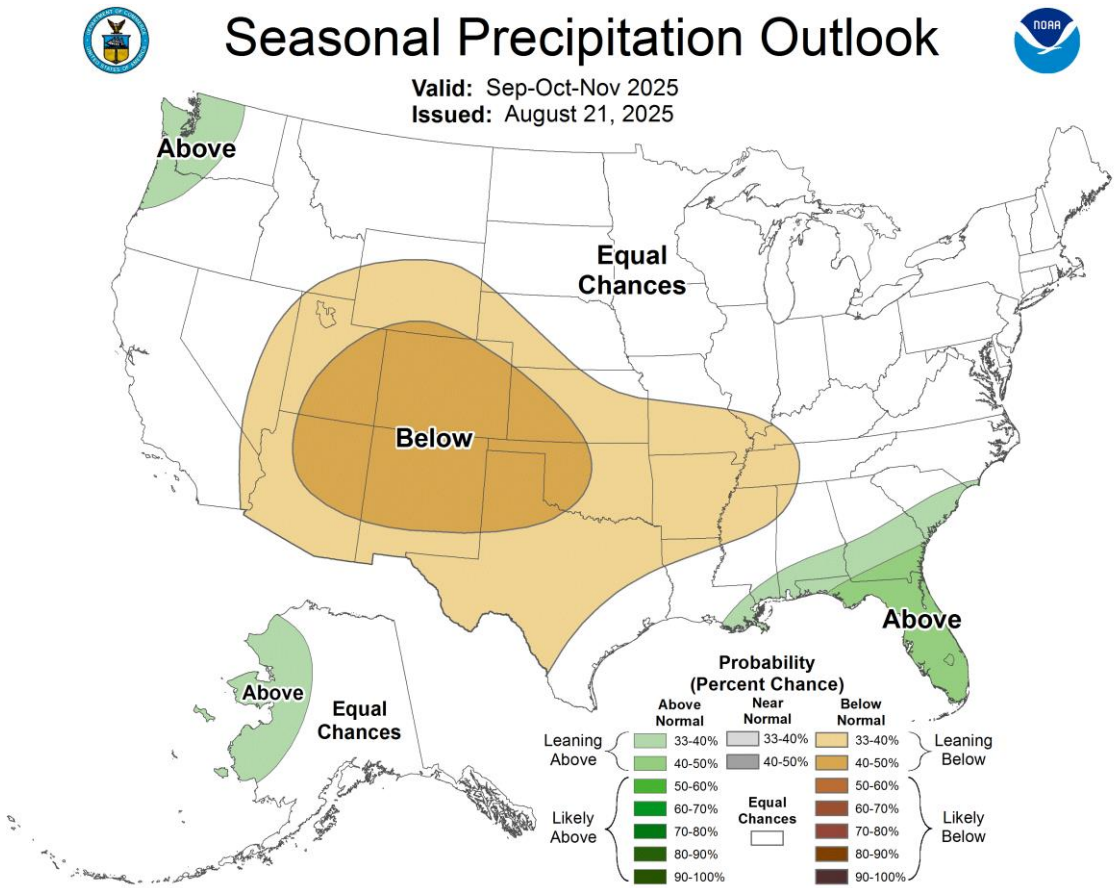


https://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php

NOAA Seasonal Outlook – Sept-Oct-Nov 2025

A warm fall with normal precipitation is expected.

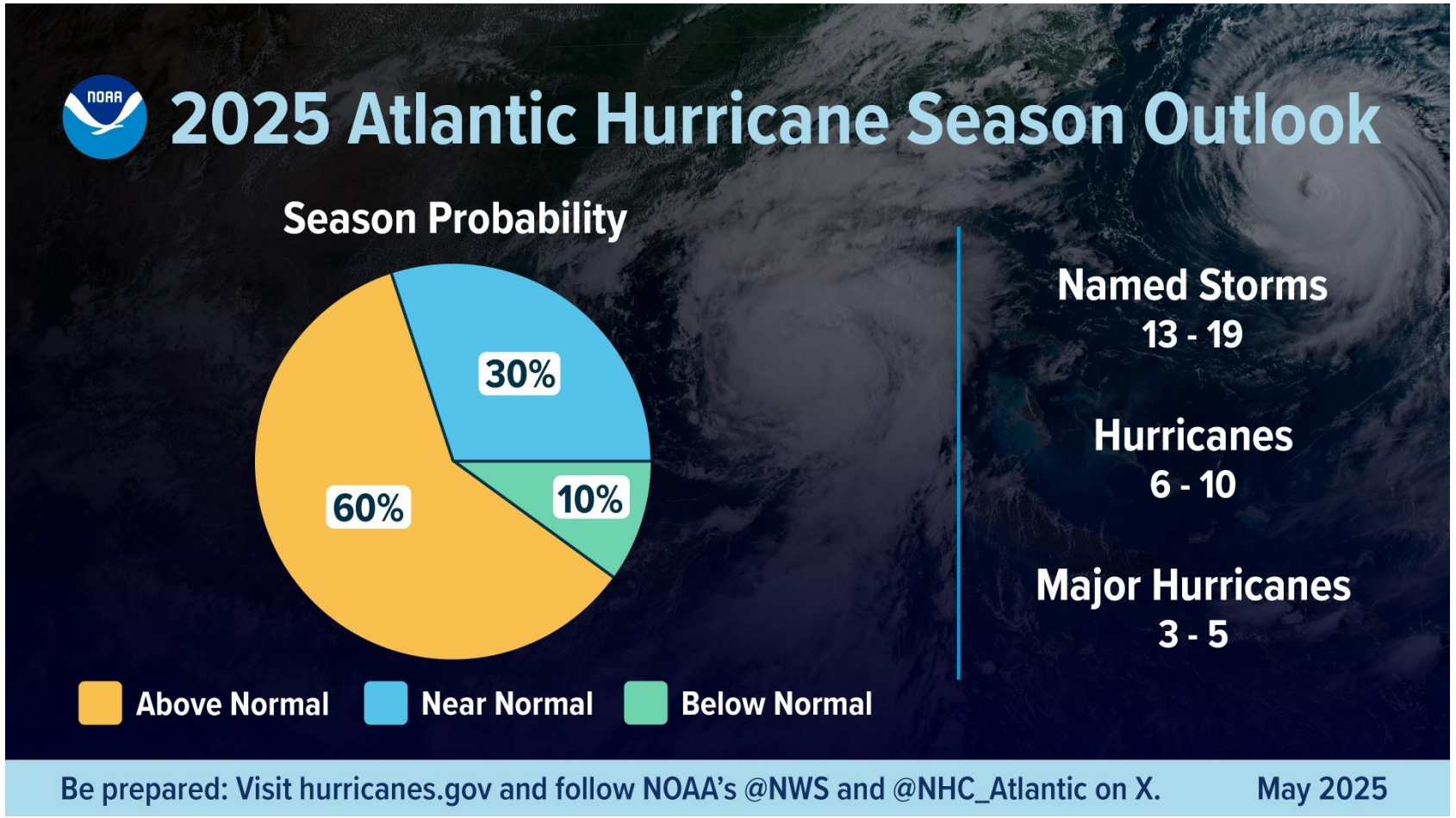




Climate Prediction Center: https://www.cpc.ncep.noaa.gov/.

NOAA Hurricane Outlook – Summer 2025

An above normal hurricane season is predicted.



NOAA National Hurricane Center: https://www.nhc.noaa.gov/.

Hydrologic conditions summary

- Conditions have started to show the impacts of the lack of rainfall, particularly last month. Some groundwater wells have recovered but others have dropped below normal.
- Three-month outlook – warm and wet fall expected. Above average hurricane season expected.
- Drought conditions are not expected to occur in the next three months.

Enjoy the fall!

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