



Hydrologic Conditions

A year in review



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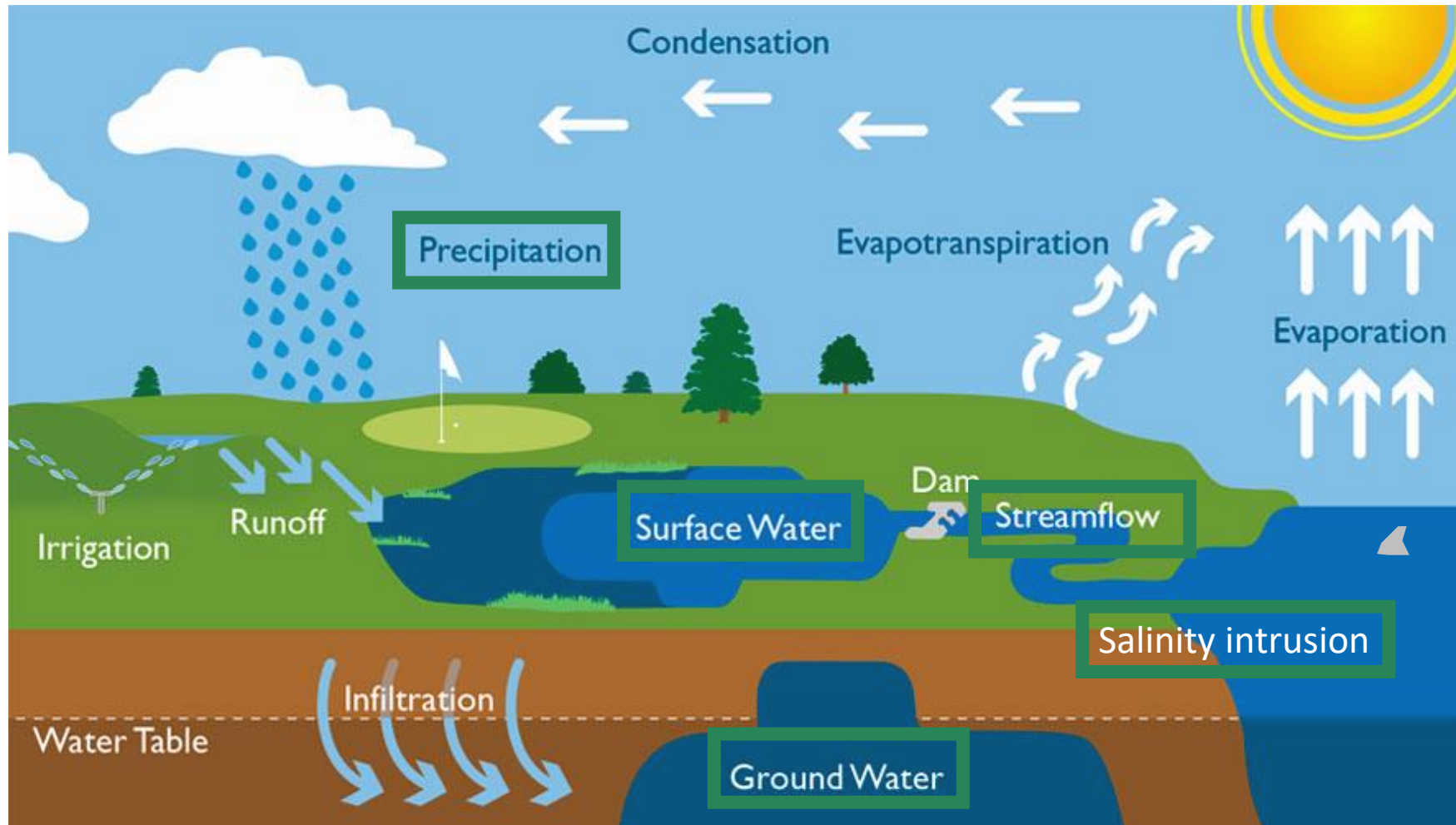
December 10th, 2025

DRBC 4Q Commission Meeting



The Hydrologic Cycle

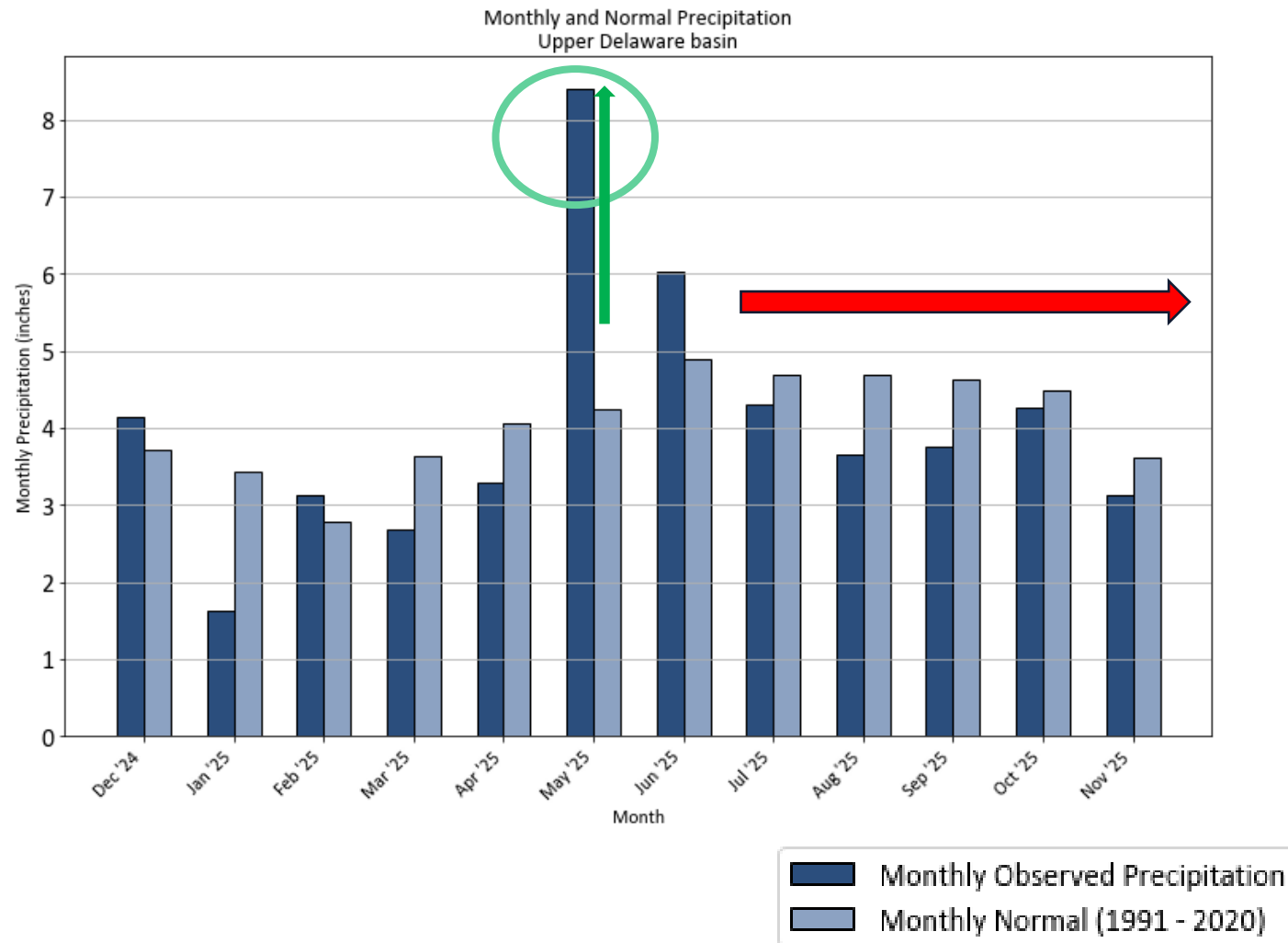
Water moves around the earth through air, soil, and over land.



Graphic courtesy of Pike County Soil Conservation District

Precipitation between December 2024 to November 2025, Upper Basin (past 365 days)

Precipitation has been running slightly below normal the last 5 months.

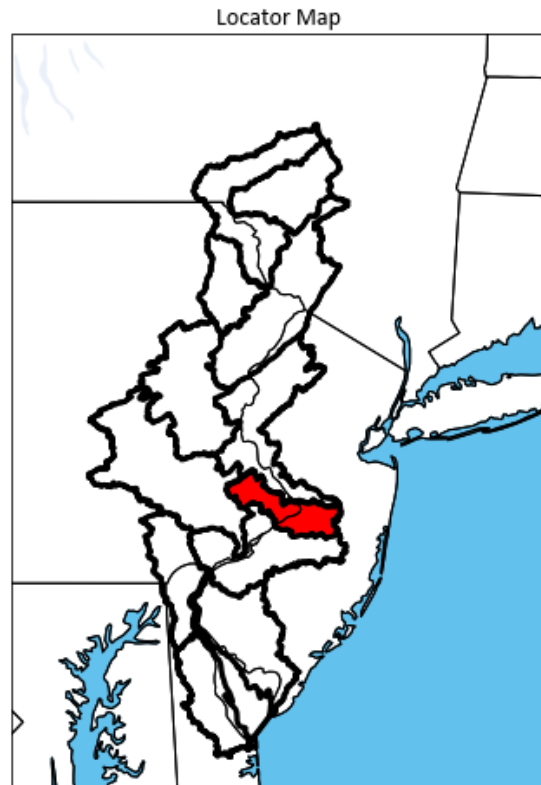


Source: ACIS, USGS HUC: 02040101
Monthly Normal is based of 4 stations in the
Upper Delaware basin

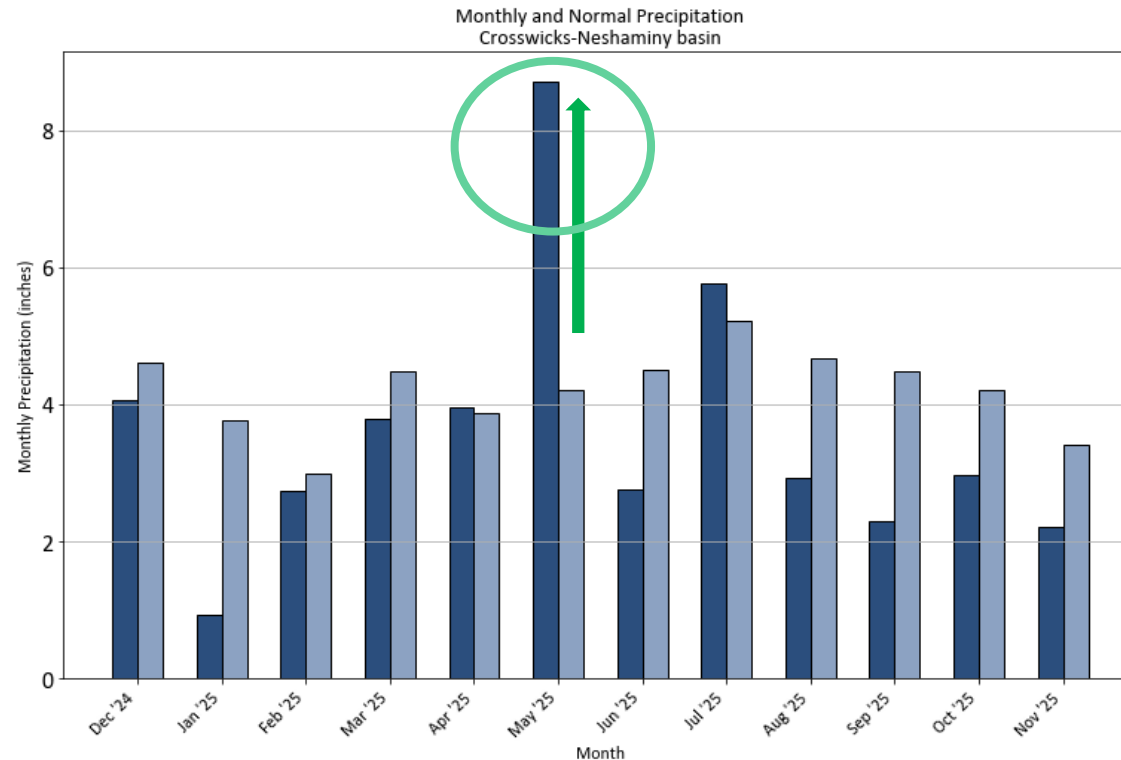
Data Source: ACIS

Precipitation between December 2024 to November 2025, Middle Basin (past 365 days)

Precipitation has been running slightly below normal the last 4 months.



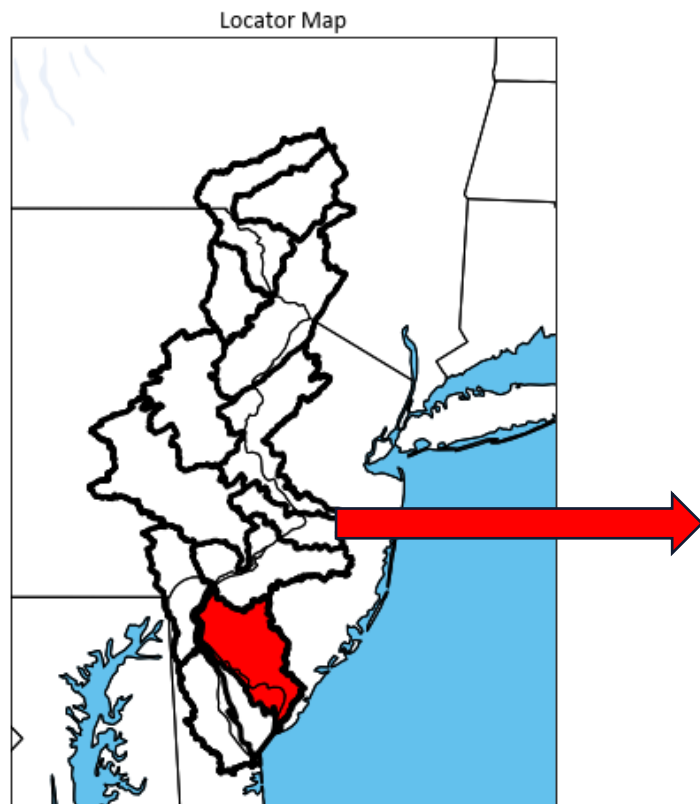
Source: ACIS, USGS HUC: 02040201
Monthly Normal is based on 5 stations in the Crosswicks-Neshaminy basin



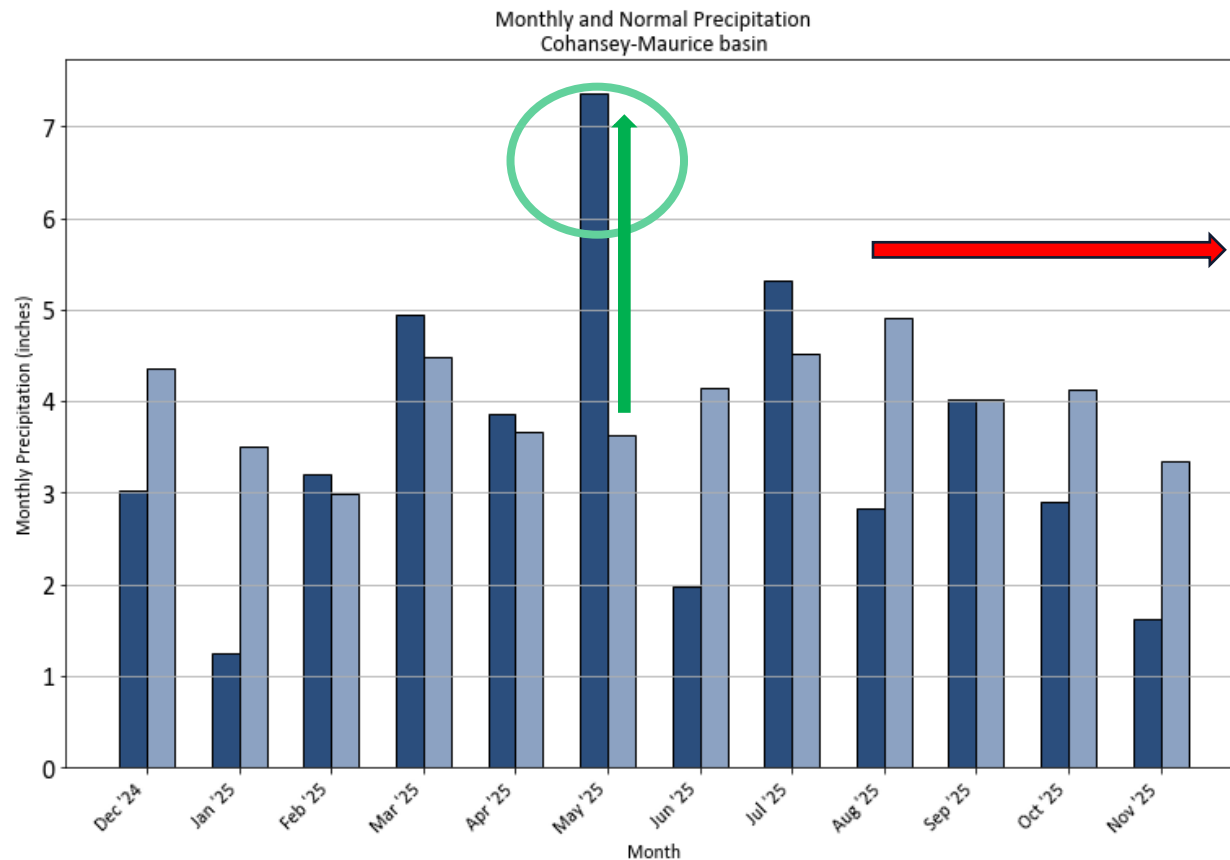
Data Source: ACIS

Precipitation between June 2024 to May 2025, Lower Basin (past 365 days)

Precipitation has been below normal since June (except July)



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



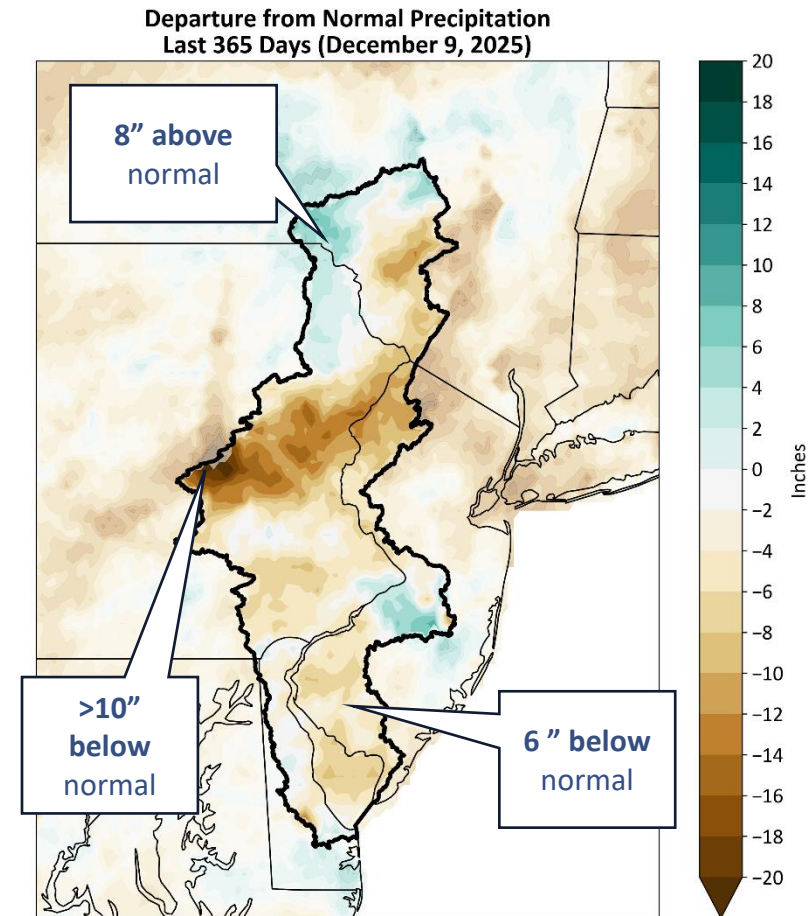
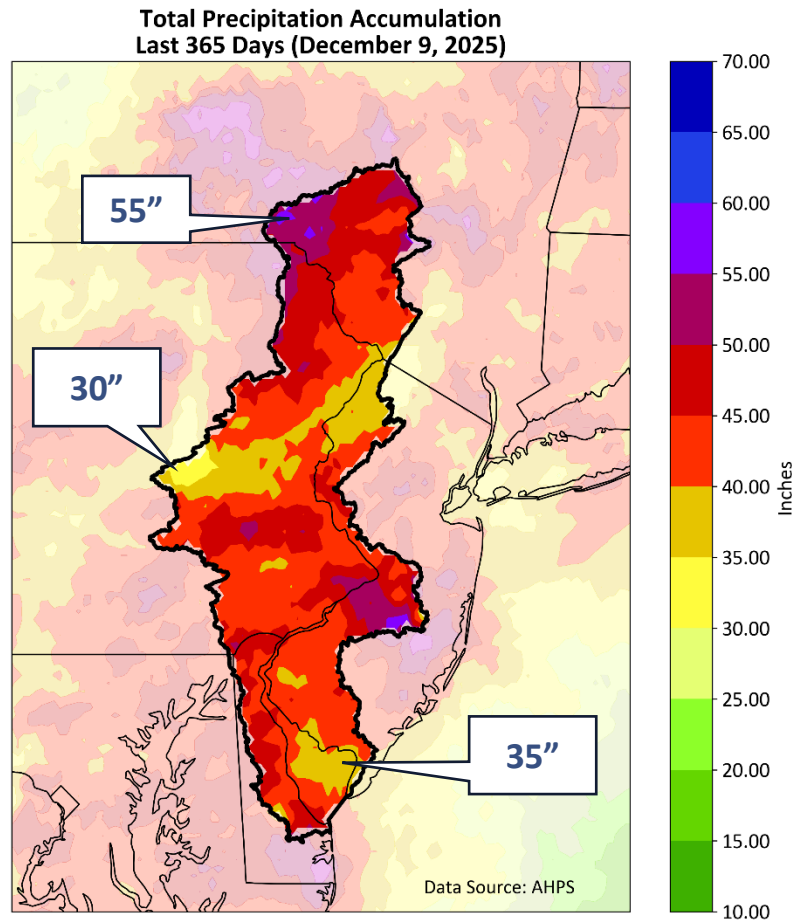
■ Monthly Observed Precipitation
■ Monthly Normal (1991 - 2020)

Data Source: ACIS

Cumulative Precipitation over the last 365 days

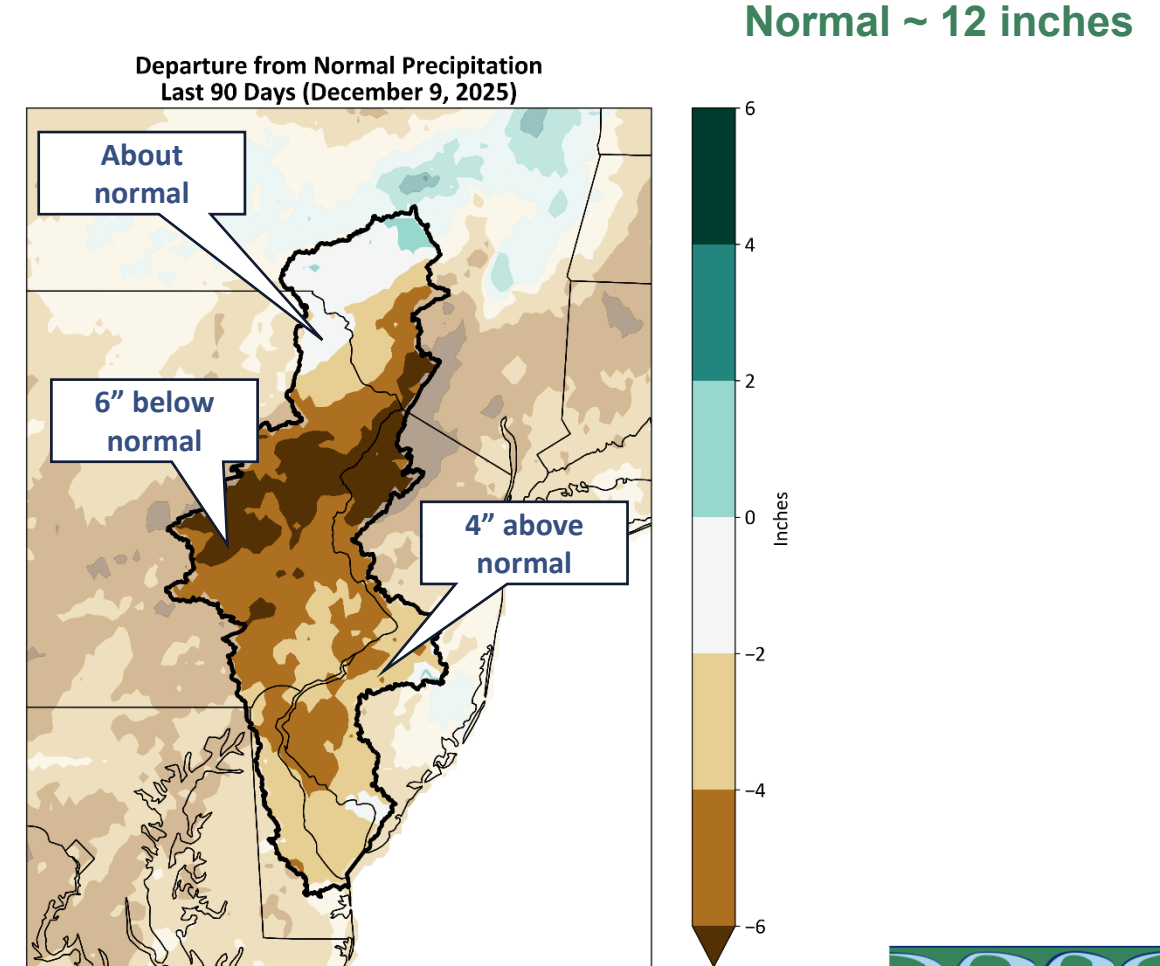
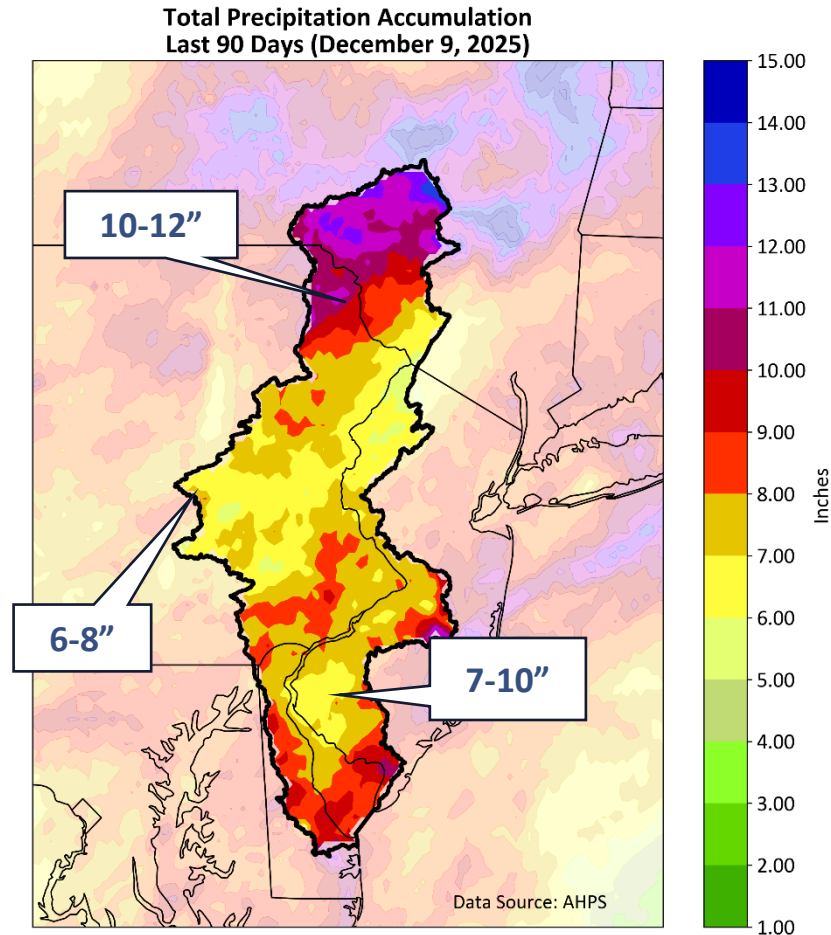
Cumulative totals remain below normal except for the Northwest part of the basin.

Normal ~ 45 inches



Cumulative Precipitation – Last 90 days

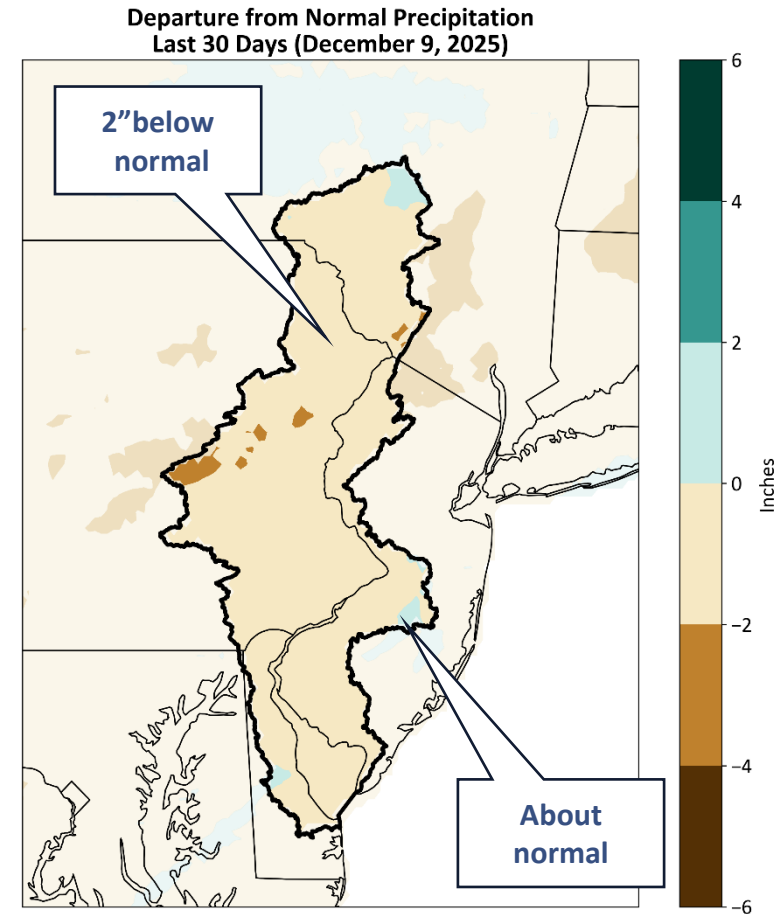
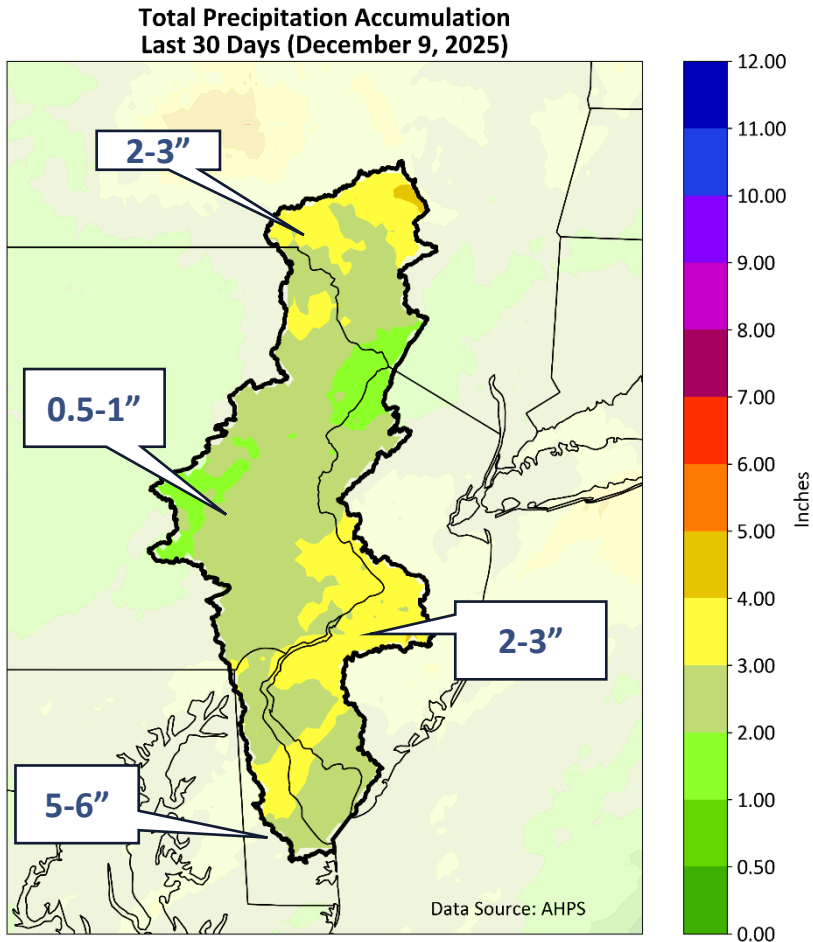
The last three months indicate a drying trend rainfall totals.



Cumulative Precipitation – Last 30 days

Below normal throughout the basin the last 30 days.

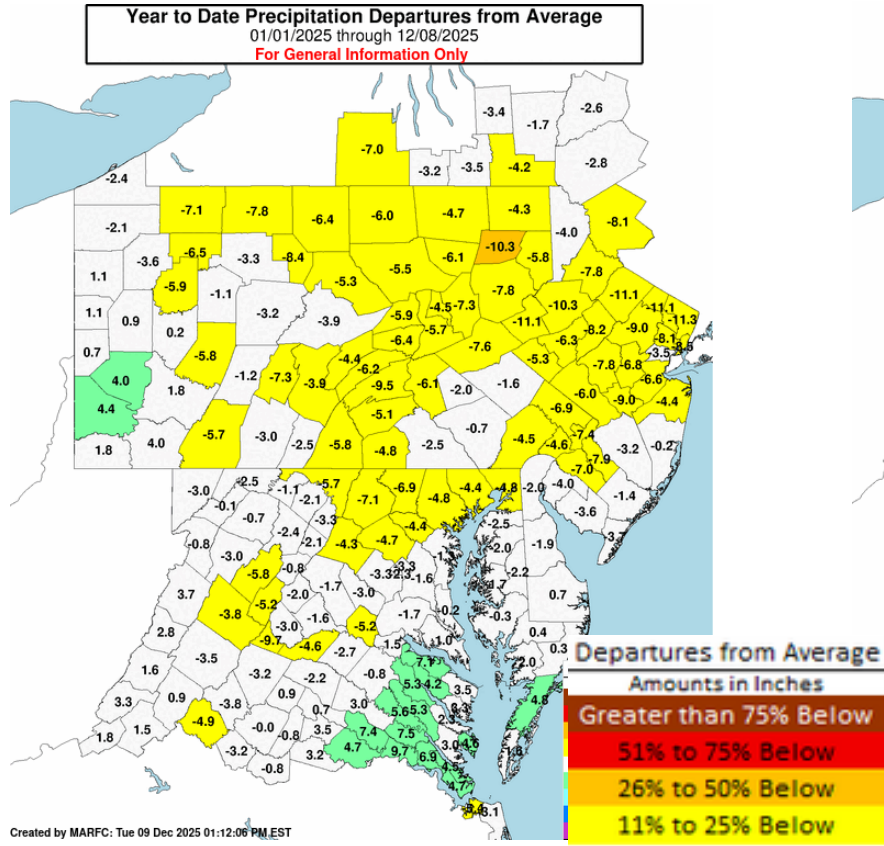
Normal ~ 4 inches



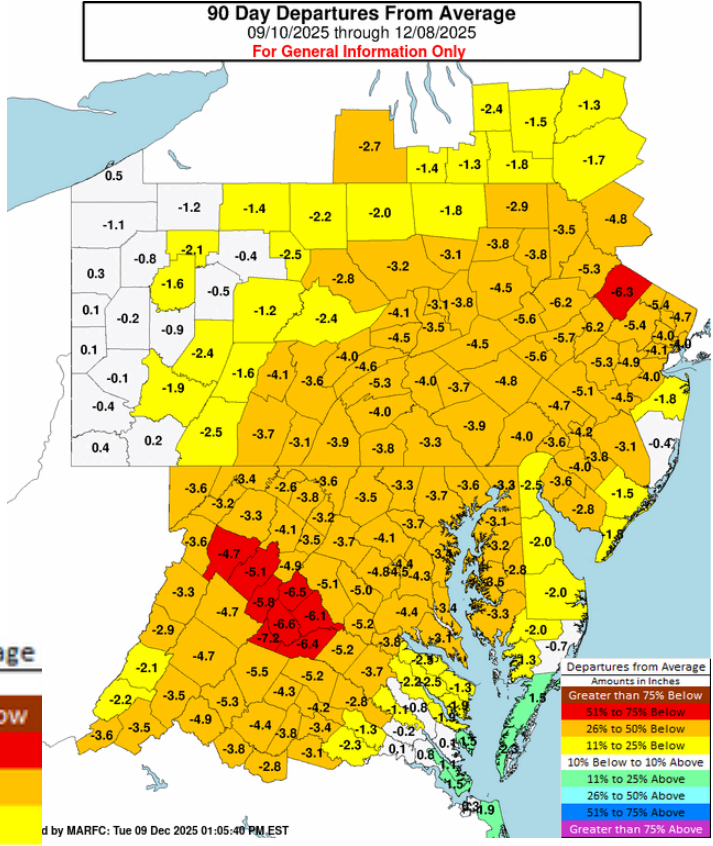
Precipitation Departures Summarized by County

Conditions have significantly dried over the past 90 days.

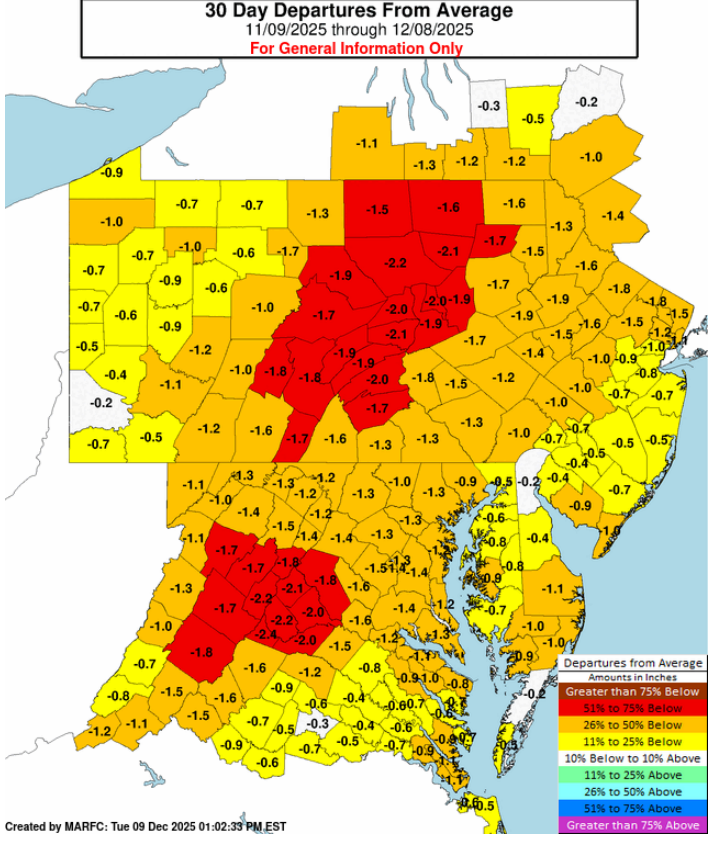
Year-to-date



90-day

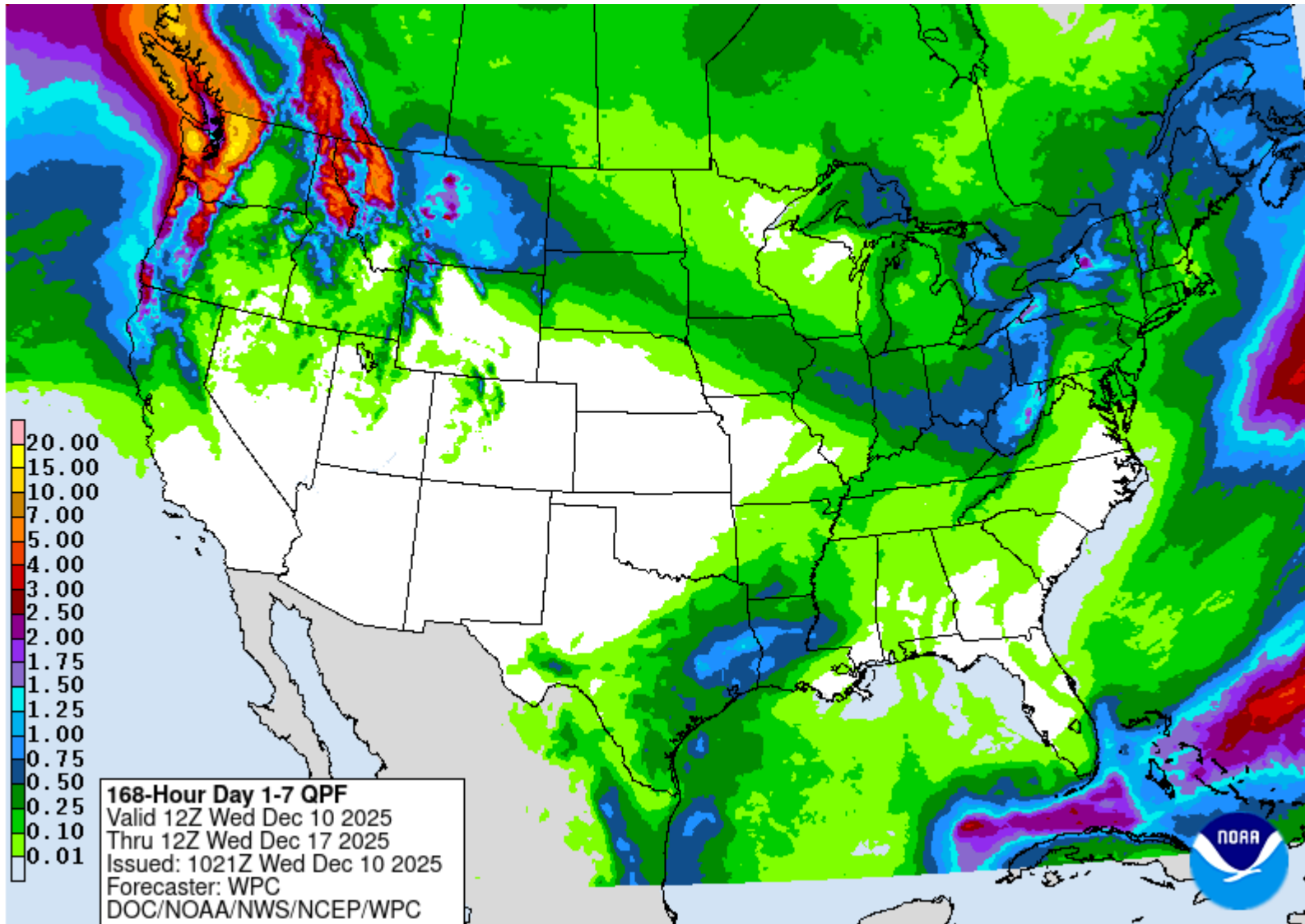


30-day



Seven-day Outlook

Precipitation is likely to fall as snow in the upper basin and held in snowpack



In early fall, predictions of 0.1 – 0.5 inches did not result in significant increases in flow

Data Source: CPC

Reference date: December 9, 2025

Streamflow









Most tributaries are below normal to much below normal reflecting low precipitation and drier than normal conditions.

Flow Conditions on average:

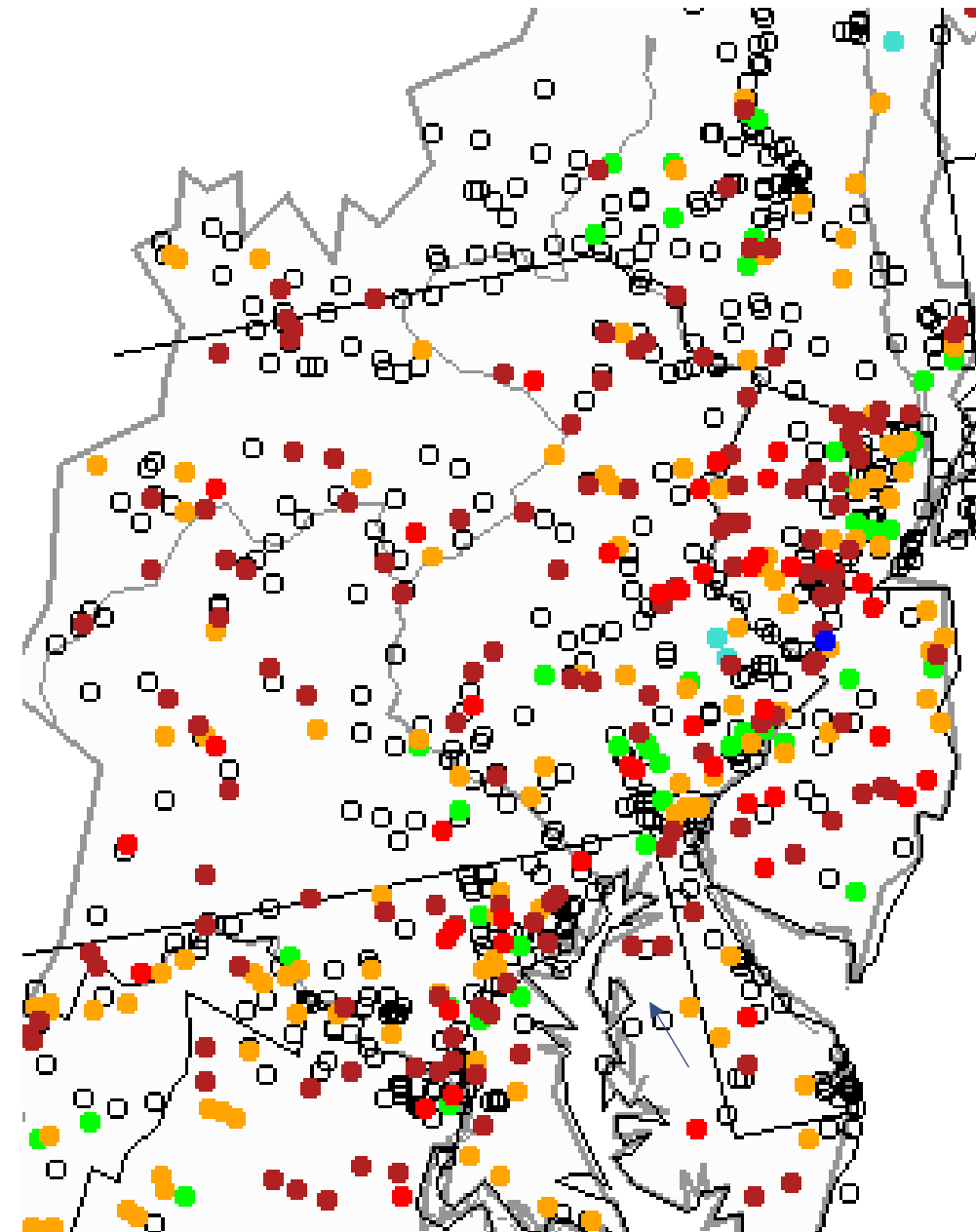
Upper Basin: Normal or below Normal

Central Basin: Below normal

Lower Basin: Below normal

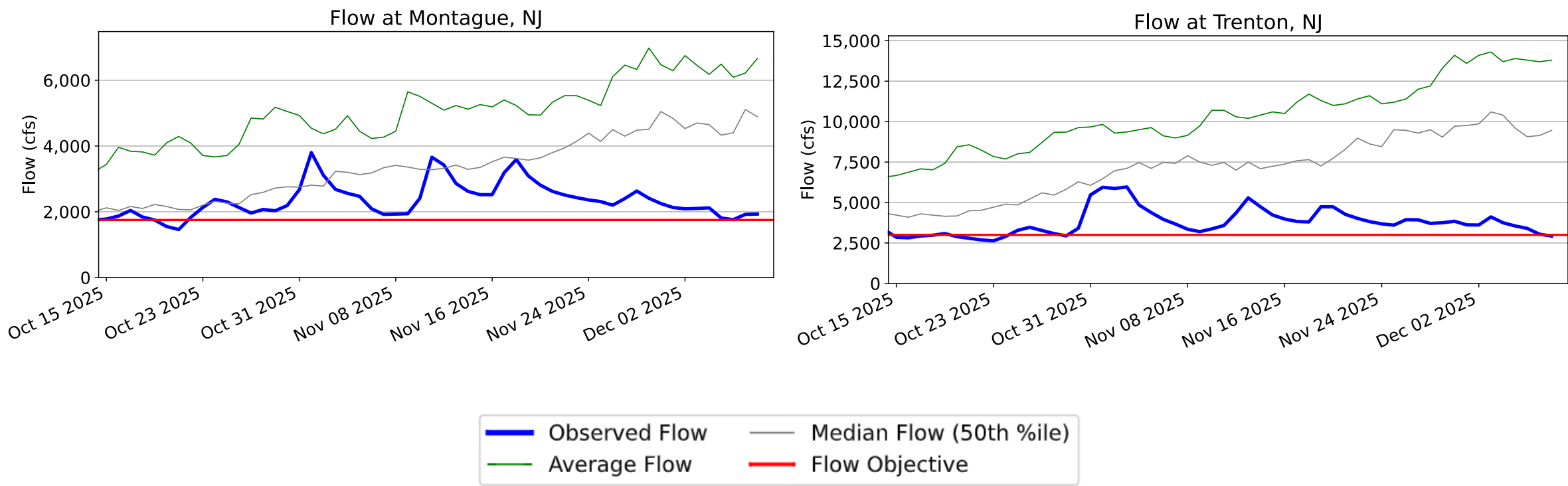
Explanation - Percentile classes							
							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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



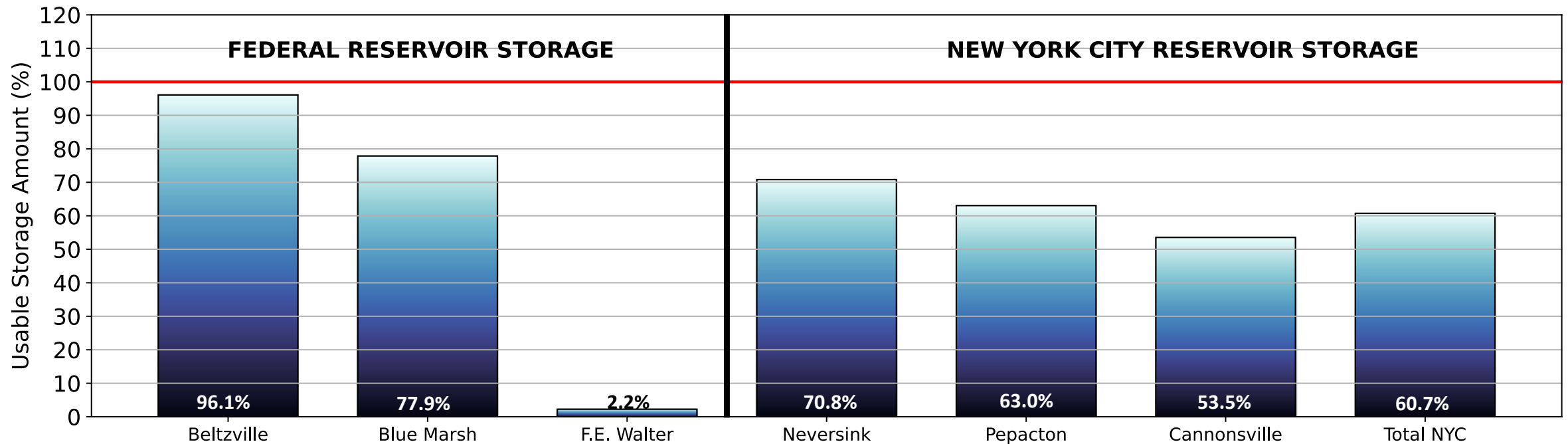
Releases for Flow Objectives

Mainstem flows are below normal and close to the flow objectives



Reservoir Storage for Flow Management

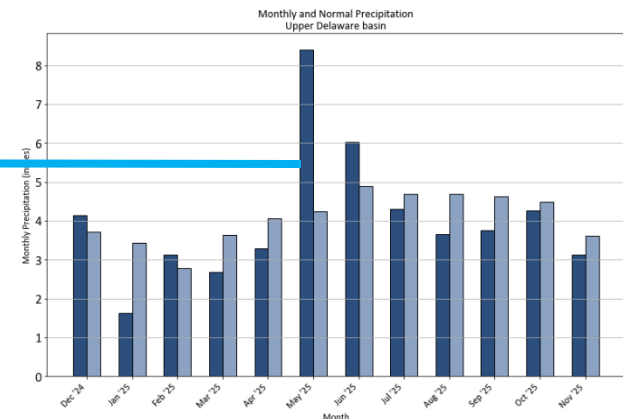
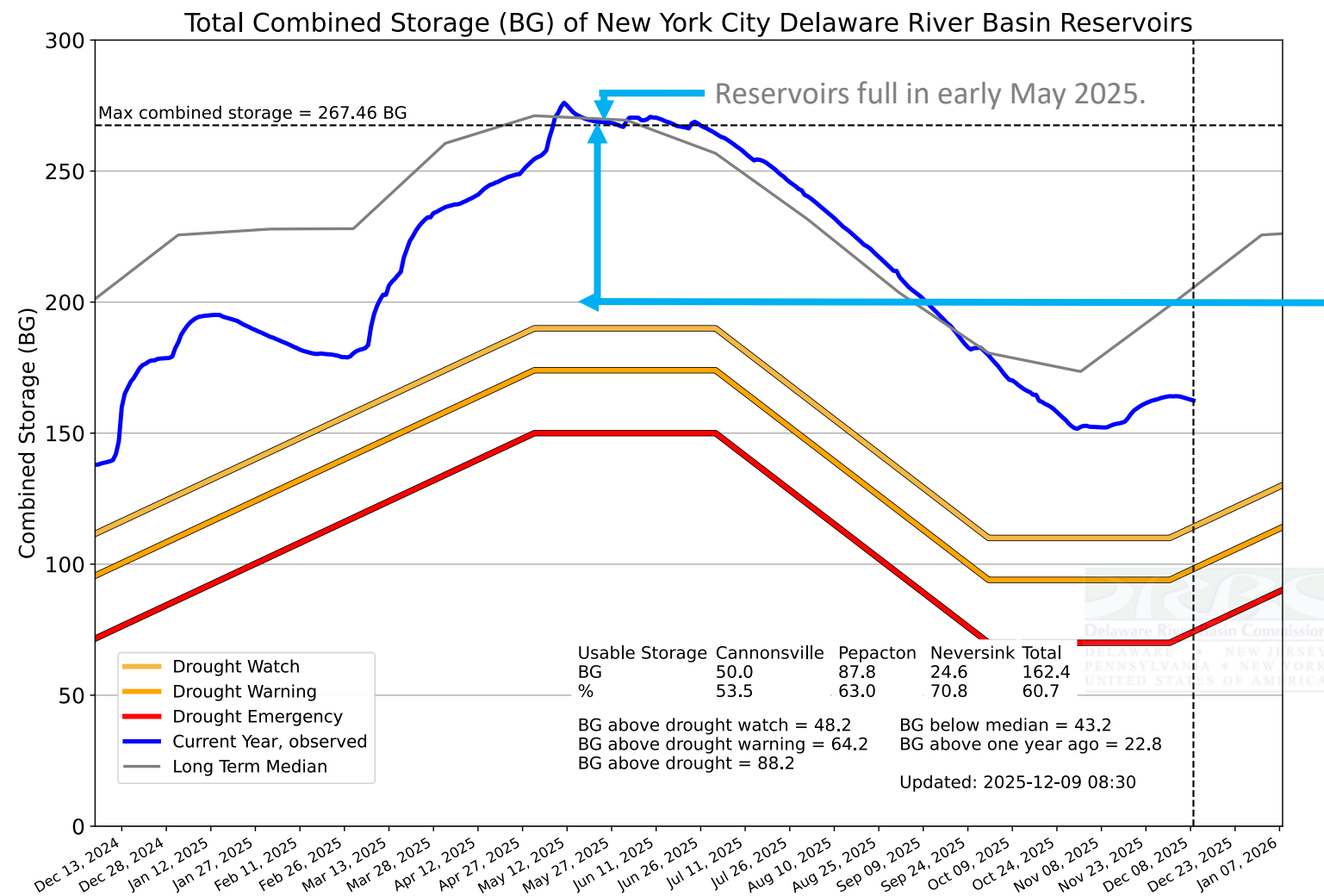
The reservoirs are showing signs of the drier than normal precipitation pattern.



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

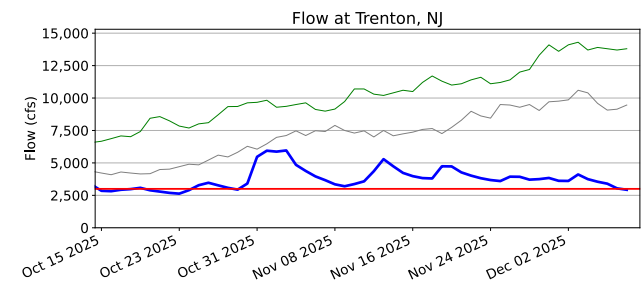
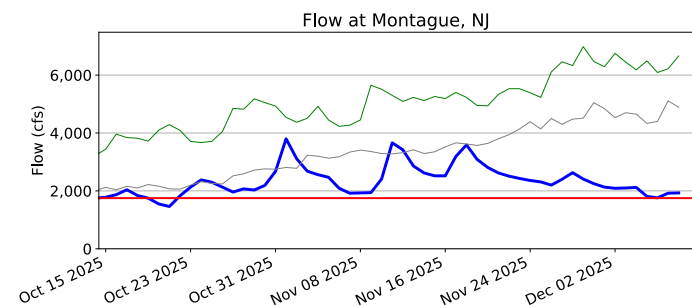
New York City Reservoir Storage

NYC combined storage reached full capacity in early May.



Mainstream Streamflow Conditions along Delaware River

Reservoir releases were required to meet the flow objectives



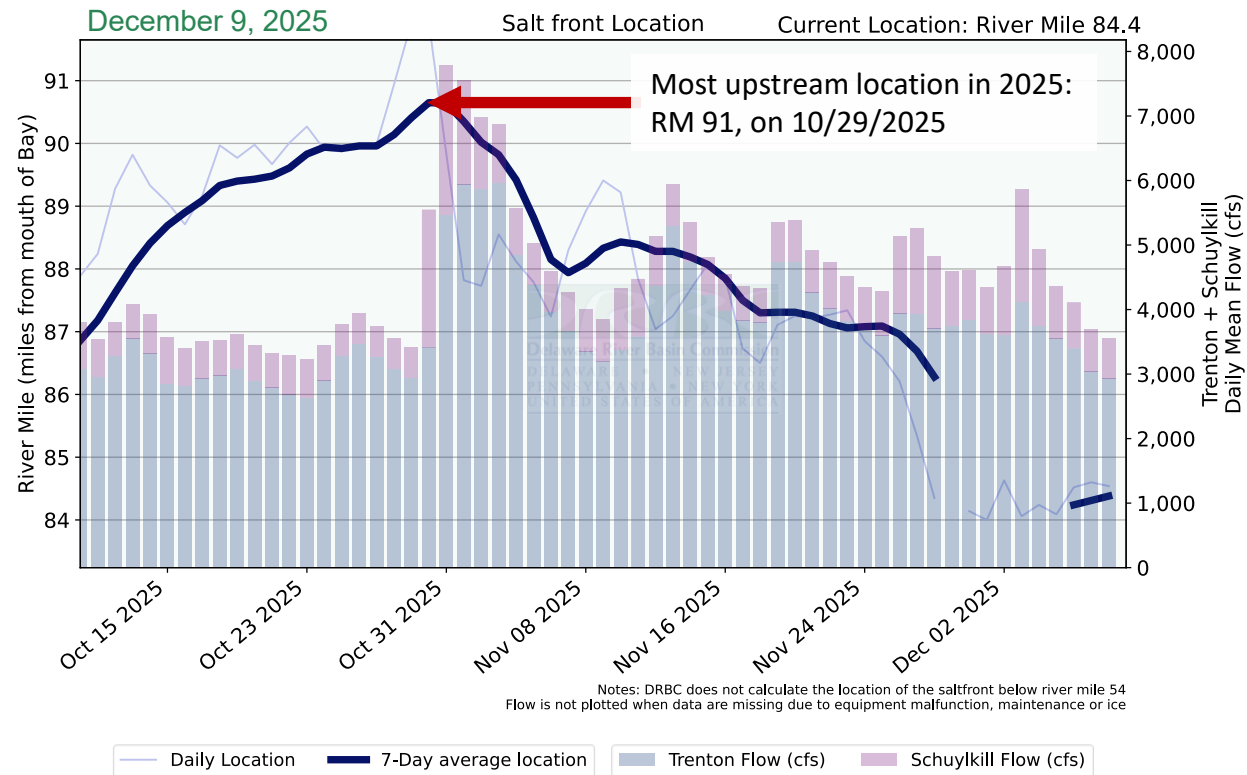
CUMULATIVE RELEASE FOR MONTAGUE AND TRENTON		
Source	Montague	TEFO Bank**
Cumulative volume requested (includes today)		
Total water requested to-date (BG)	48.52	4.33
Total water requested to-date (cfs-days)	75056	6700
Days used	105	28
A cfs-day is equivalent to the volume of water released over a day. Also known as day-second-feet (dsf)		
Percent of Water Supply Storage remaining	na	29%
The TEFO Bank is water reserved for Trenton from water set aside for lower basin use.		

CUMULATIVE REQUESTED LOWER BASIN RELEASES AND REMAINING STORAGE			
Source	Beltville*	Blue Marsh*	TEFO Bank**
Cumulative volume requested (includes today)			
Total water requested to-date (BG)	0.97	1.84	4.33
Total water requested to-date (cfs-days)	1500	2850	6700
Days used	9	16	28
A cfs-day is equivalent to the volume of water released over a day. Also known as day-second-feet (dsf)			
Available Water (reconciled weekly)			
Available Water (BG)	9.27	3.17	1.76
Available Water (cfs-days)	14345	4898	2723
Available Water (acre-ft)	28446	9713	5401
Percent of Water Supply Storage remaining	98%	100%	29%
*Storage accounts for Beltville and Blue Marsh are debited by the release; account volume, weighted overage/underage and evaporation; and credited with contract storage weighted inflow. ** TEFO bank is fully debited and does not refill (resets annually on June 1 if not in drought). Storage cannot be greater than 100%			



Salt Front Location

Salt front location is at RM 84.4, near Eddystone, PA, and was as far upstream as airport.



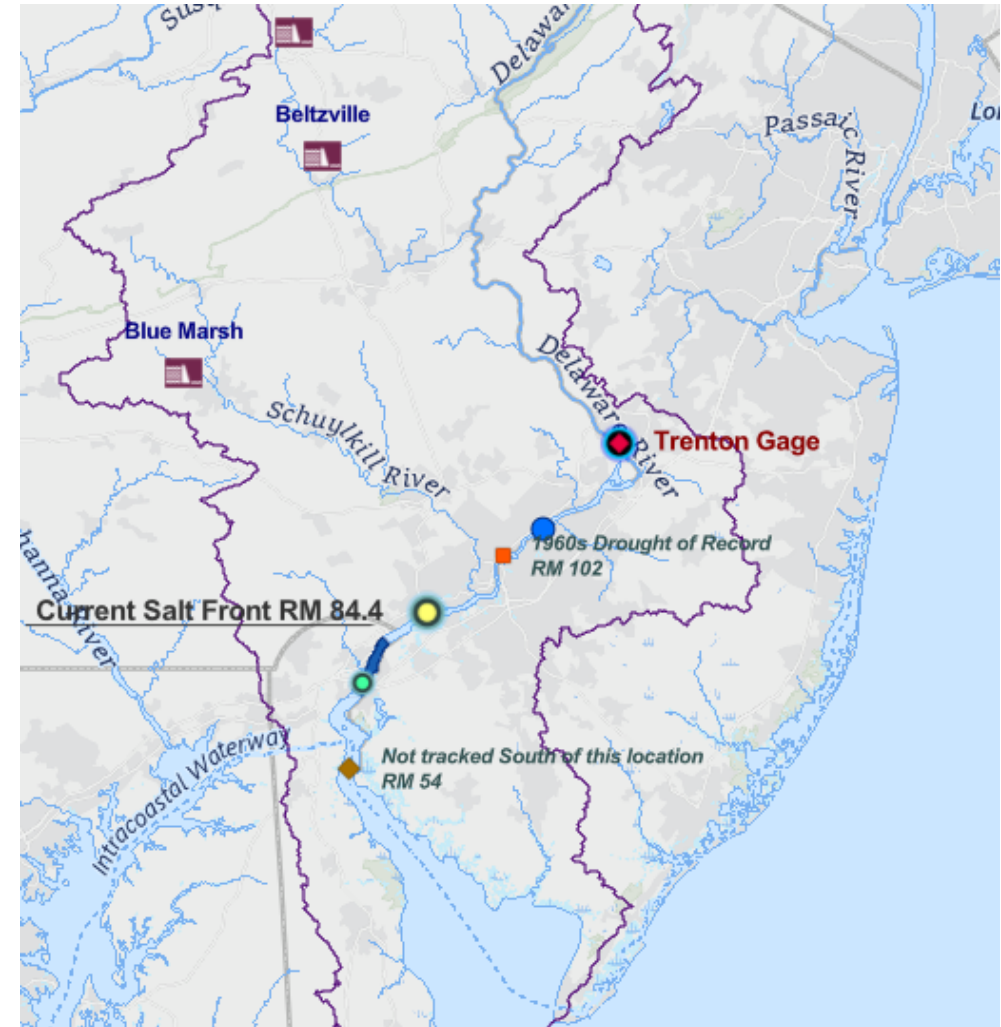
Updated: 2025-12-09 08:33

SALT FRONT (river mile)	This Week: NA	Last Week: NA	December Median: 69
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More about the salt front: <https://www.nj.gov/drbc/programs/flow/salt-front.html>

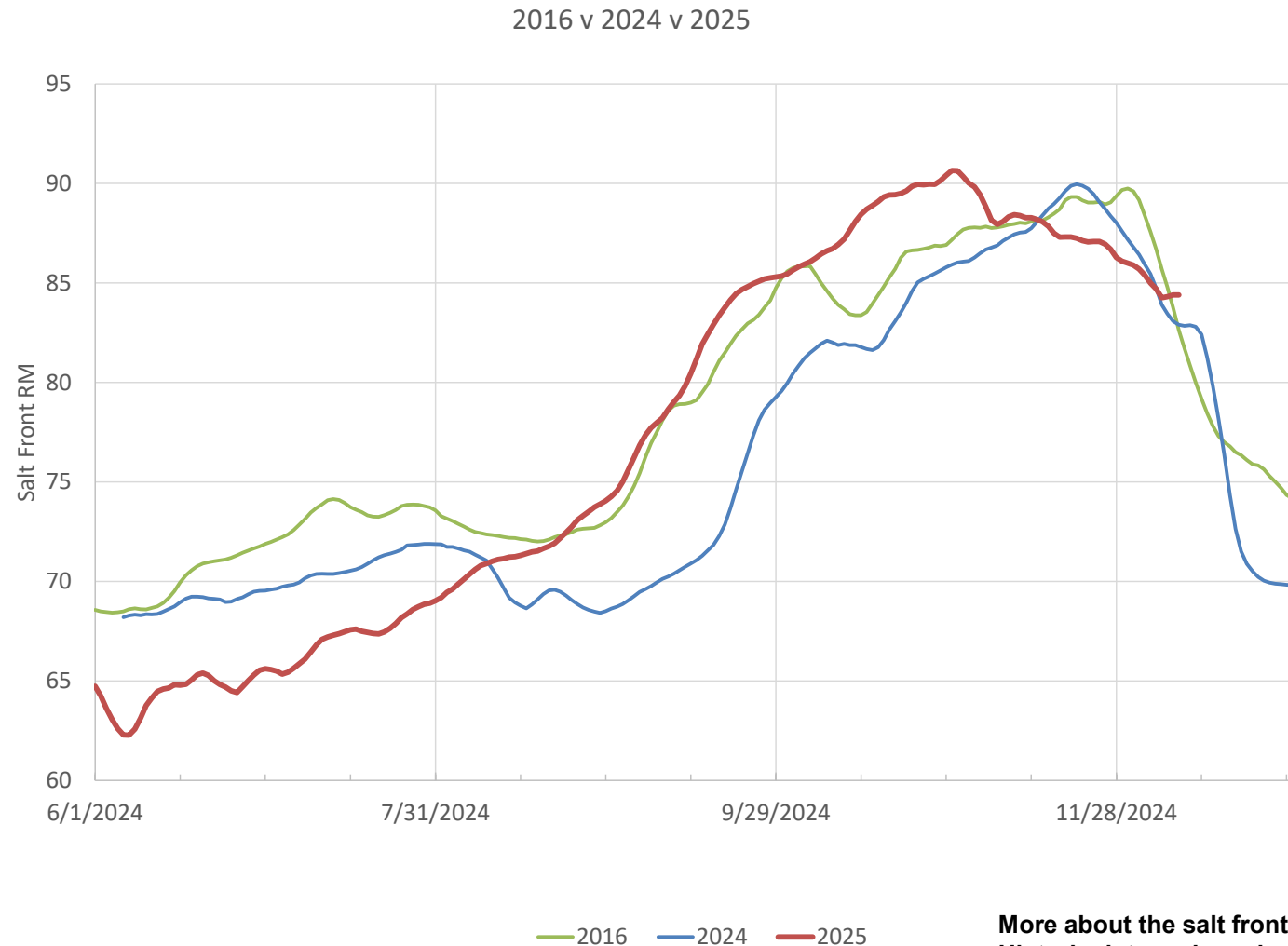
Historic data and movies: <https://drbc.net/Sky/hydro/saltfront.html#header1>

Current information: DRBC hydrosnap.drbc.net



Salt Front compared with other recent dry years

Salt front was farther upstream earlier in 2025

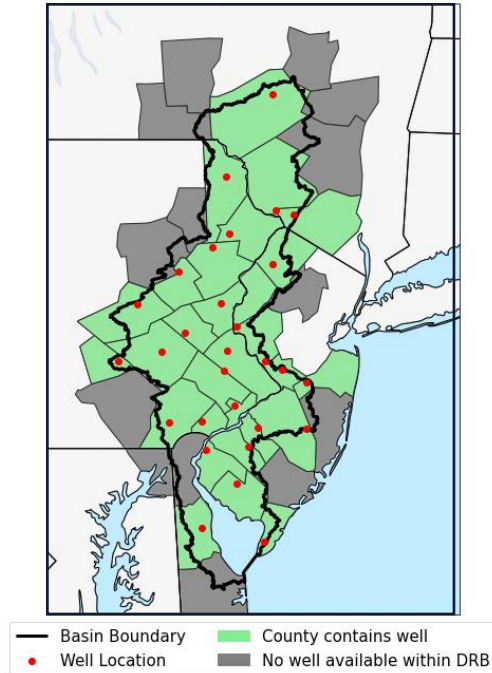


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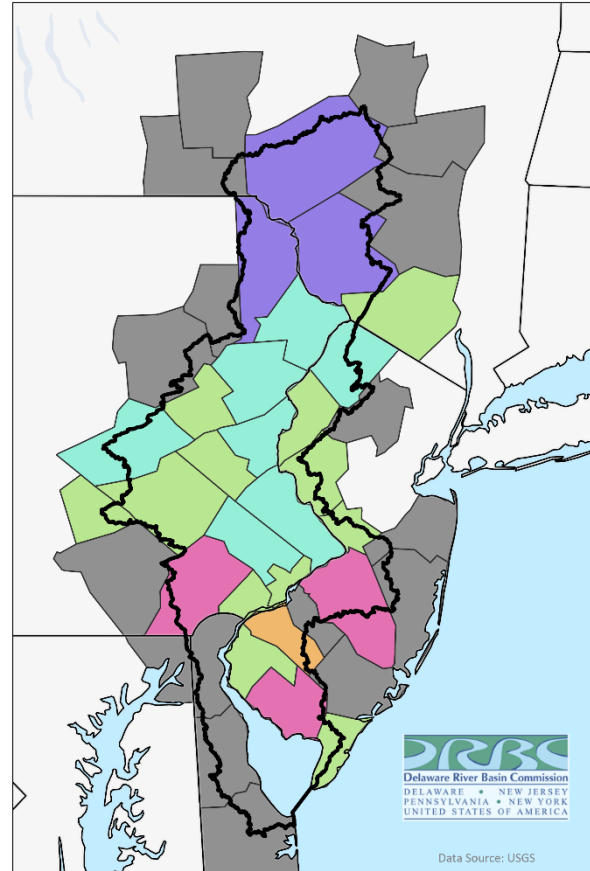
Groundwater Levels

Groundwater levels have dropped below normal due to lack of recharge.

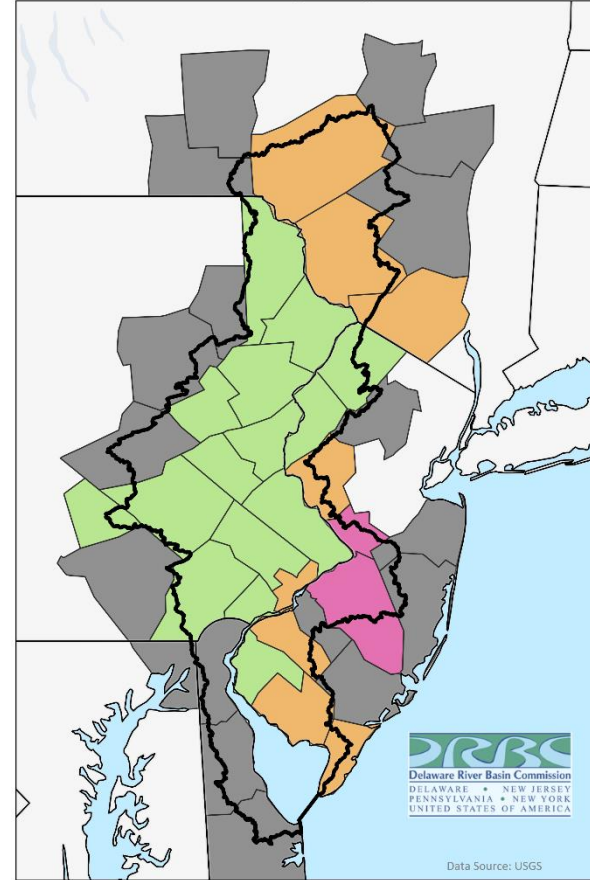
Reference Wells



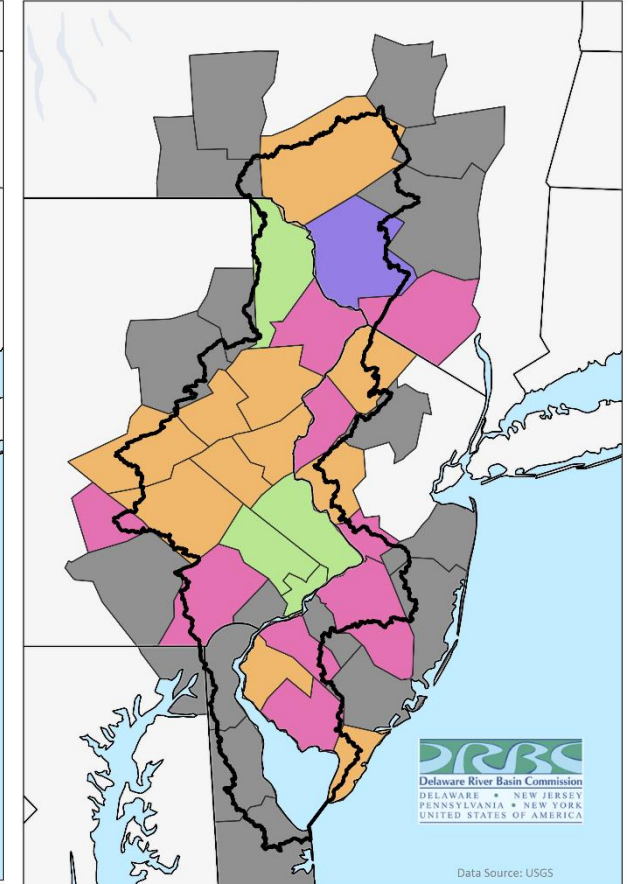
Groundwater Ranking on June 16, 2025



Groundwater Ranking on September 08, 2025



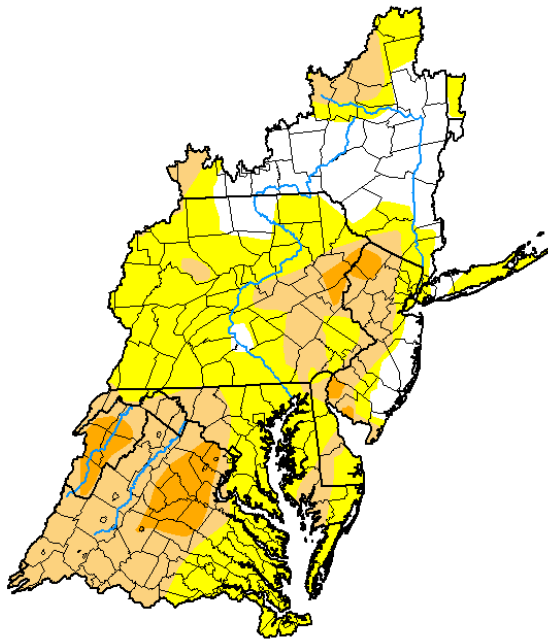
Groundwater Ranking on December 08, 2025



Drought Monitor

Most of the Basin is in D0 (abnormally dry) or D1 (moderately dry)

U.S. Drought Monitor Mid Atlantic Watershed



Data Source: USDM

December 2, 2025
(Released Thursday, Dec. 4, 2025)
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	18.32	81.68	36.80	6.27	0.00	0.00
Last Week 11-25-2025	19.43	80.57	36.88	6.26	0.00	0.00
3 Months Ago 09-02-2025	44.33	55.67	4.51	0.00	0.00	0.00
Start of Calendar Year 01-07-2025	21.86	78.14	47.78	20.53	2.84	0.00
Start of Water Year 09-30-2025	20.58	79.42	32.56	4.67	0.58	0.00
One Year Ago 12-03-2024	0.94	99.06	79.26	38.90	6.28	0.00

Intensity:

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.aspx>

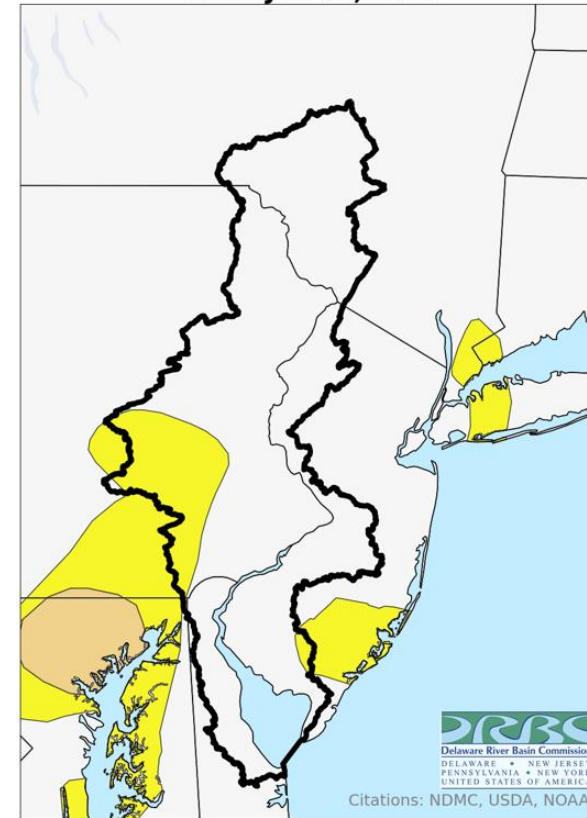
Author:

David Simerali
Western Regional Climate Center

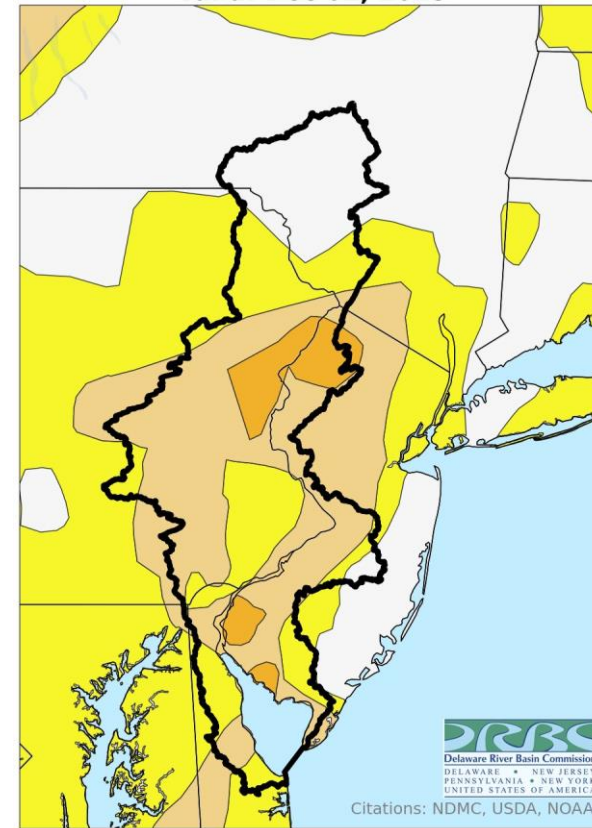


droughtmonitor.unl.edu

Drought Monitor
Valid: Jun 03, 2025



Drought Monitor
Valid: Dec 02, 2025



- Basin Boundary
- Yellow D0 - Abnormally Dry
- Orange D1 - Moderate Drought
- Dark Orange D2 - Severe Drought

Some of the data used to classify conditions include: precipitation, streamflow, soil moisture, agriculture, wildfire danger, reservoir storage, groundwater levels, among others.

Drought Status

Each state has independent indicators and management measures for drought conditions

The basin states ended 2024 in drought conditions, returned to normal, and returned to drought conditions in fall 2025

Drought Status :

DRB: Normal

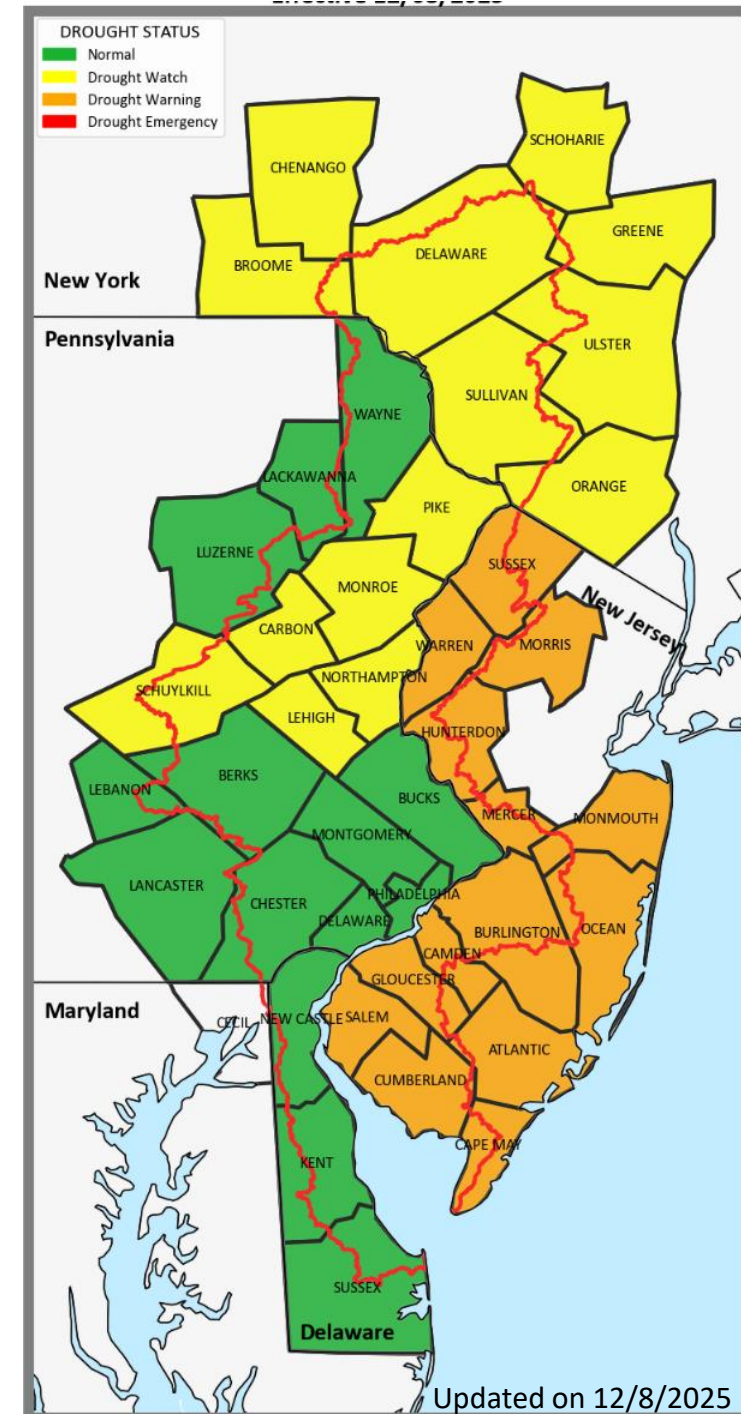
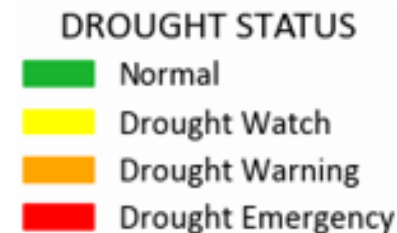
NJ: Warning 12/5

NY: Watch 9/10

PA: Watch 12/8

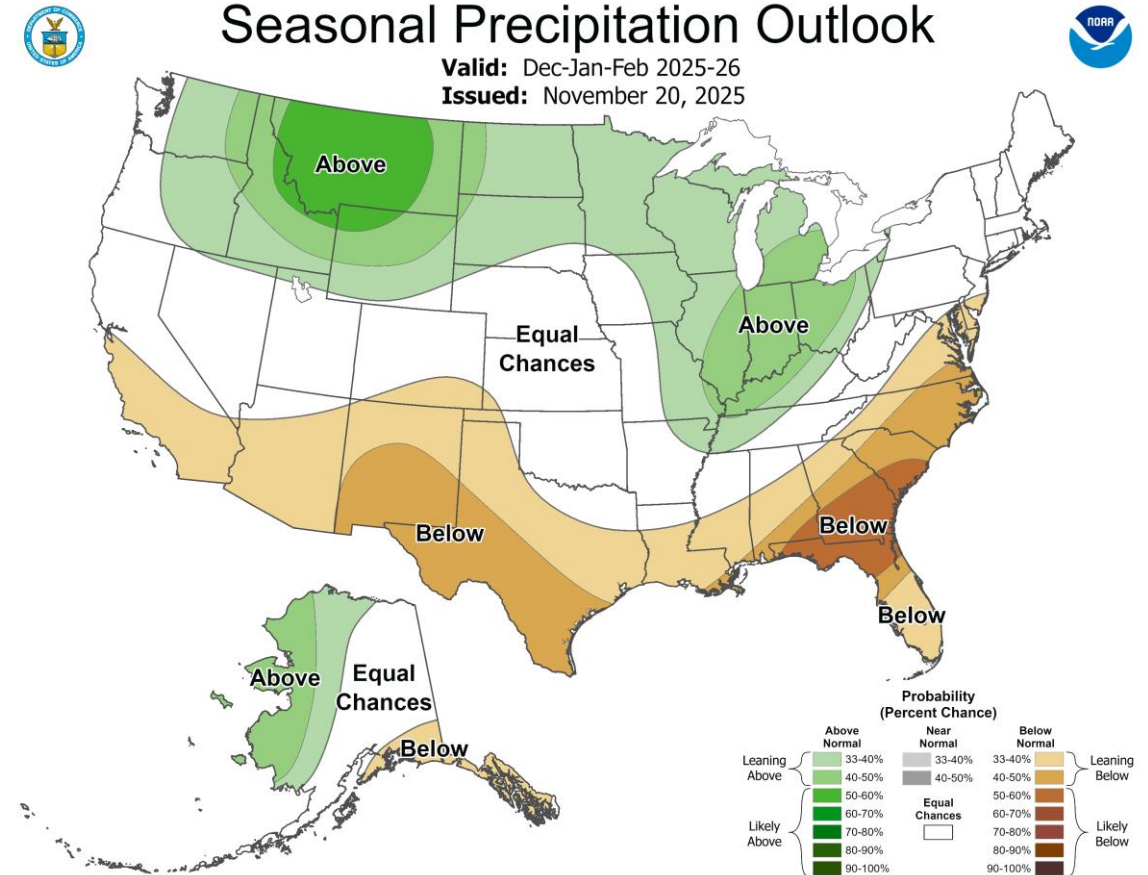
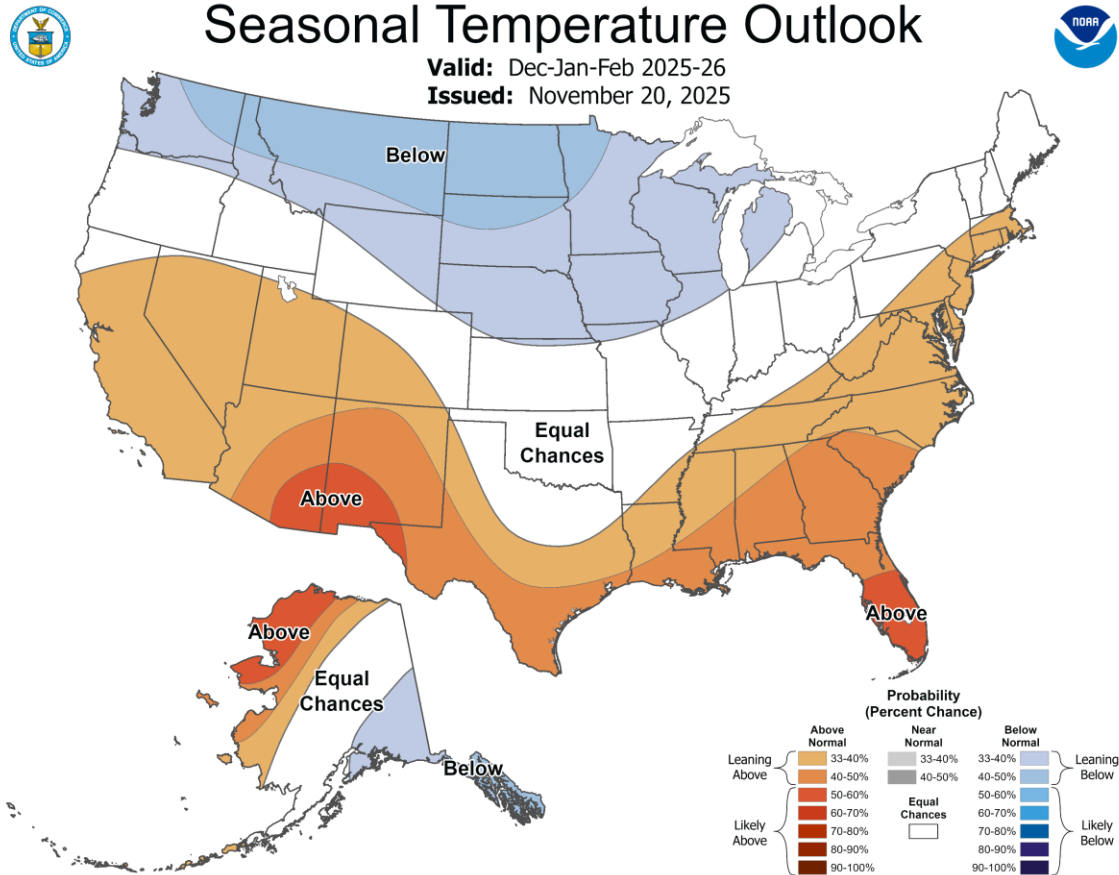


History of current and 2024-2025 drought conditions:
<https://www.nj.gov/drbc/programs/flow/state-drought-links.html>



NOAA Seasonal Outlook – Dec-Jan-Feb 2025-26

Winter is expected to be warm with average precipitation.



Ice Jams

Ice jams typically form after heavy storms or refreezing after break-up





Trenton Ice Jam January 14, 2018





Hydrologic conditions summary

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- 
- Drought => Normal => Drought
 - Salt front farthest upstream since the 1960s
 - NOAA Three-month outlook – warm and dry winter
 - All forecasts are subject to change



**Wishing you health and
happiness for the New Year!**