
MEMORANDUM

Flexible Flow Management Program: Performance Report June 1, 2025 – May 31, 2026

The goals of the Flexible Flow Management Program ([FFMP](#))¹ are to protect water supplies, manage droughts, and maintain flow objectives during periods of low flows. In addition, conservation releases are enhanced to maintain tailwater temperatures, and to minimize spilling of reservoirs through use of the Conditional Seasonal Storage Objective (CSSO). The following is a summary of the performance of the FFMP during the release year 2025– 2026 (June 1, 2025, through May 31, 2026).

In the upper basin, above Montague, precipitation trends were generally below normal with three months of above normal precipitation. June 2025, and March and April 2026 were much above normal precipitation, while July, August, September, November 2025, January, February and May 2026 were much below normal precipitation.² Though in the East Branch Delaware Basin, there was much above normal precipitation March and April 2026. In the middle basin, above Trenton, precipitation tended to be below normal throughout the year, except for July 2025 and March 2026, which recorded above normal rainfall. From August 2025 until March 2026, significantly below normal precipitation was observed in the middle basin. In the lower basin, precipitation had a similar pattern, most of the year experienced much below normal precipitation. Only July 2025 and May 2026 had normal to above normal precipitation. The lack of rainfall in the fall months led to drought conditions throughout the Basin, and to severe drought conditions in New Jersey (**Slide 4-8**).

The combined storage in the New York City reservoirs is used to define drought levels for the basinwide drought management plan, adopted in the [Delaware River Basin Water Code \(18 CFR 410 Part 410\)](#) and incorporated in the FFMP. During the release year, the combined storage was not less than the drought watch line, and the drought management plan was not implemented. At the beginning of the release year, storage in the three New York City (NYC) reservoirs (Pepacton, Cannonsville, and Neversink) was above the median value and 100% full. Storage began to decrease in mid-July, a trend that continued until November. Storage remained below the long-term median for the next 5 months due to persistent dry conditions and very little precipitation. In November and through March 2026, a series of precipitation events (both liquid and snow) allowed for the reservoirs to refill. Winter snow melt is especially evident in March 2026, with the sharp increase in storage observed in the combined reservoir storage figure. Filling up to 100% due to snowmelt and precipitation events, the reservoirs began to spill mid-March, which lasted until mid-April. Storage remained at about 100% for the rest of the release year. As of the end of this year's reporting period, the combined storage of the NYC reservoirs is 98%.

¹ https://webapps.usgs.gov/odrm/documents/ffmp/Appendix_A_FFMP-20180716-Final.pdf

² Data Source: Applied Climate Information System - <https://www.rcc-acis.org/>

Information about hydrologic events is available in the Annual Hydrologic Conditions Reports for the Delaware River Basin, published on the Delaware River Basin Commission (DRBC) website³ (**Slide 9**).

The FFMP established four banks of water from the NYC reservoir storage used for specific purposes from the Interim Excess Release Quantity (IERQ). The IERQ with a total of 10 billion gallons [BG] (15,472 cubic feet per second-days) (cfs-days) is provided to further protect the ecology of the river by supporting releases for thermal mitigation (1.62 BG or ~2,500 cfs-days), Rapid Flow Change (RFC) Mitigation Bank (0.65 BG or ~1,000 cfs-days), the Trenton Equivalent Flow Objective Bank (TEFO) (6.09 BG or 9,423 cfs-days), and the New Jersey Diversion Amelioration Bank (NJDAB) (1.65 BG or 2,553 cfs-days). Another bank of water, called the New Jersey Diversion Offset Bank (NJDOB) is accumulated during the summer season and amounted to 1.49 BG (2,300 cfs-days) during the release year, but was not needed. In the release year 2025-2026, 1,009 cfs-days were used from the RFC. Releases of 1,080 cfs-days were used from the Thermal Mitigation Bank (described below), and 6,700 cfs-days from the TEFO Bank. The other banks were not used (**Slide 10 and Slide 21**).

The flows at Montague⁴ and Trenton⁵ were above normal in June and July. Beginning in September, flows were normal to below normal⁶ through mid-December, except for some smaller precipitation events (shown in the peaks in the hydrographs). A high-volume precipitation event occurred in mid-December increasing the flow to above normal conditions until late January. In February gages along the mainstem were impacted by ice, which impacted accurate flow measurements. In March, snowmelt from the accumulated snowpack began to melt leading to sharp increases in flow at both Trenton and Montague. In April, there was a sharp decrease in flow due to persistent lack of precipitation, low flow conditions returned, which continued through the end of the release year. Small precipitation events during this period allowed for flows to recover for a few days before returning to below normal. In 2025-2026, 55.3 BG were released more than the conservation releases required from the NYC reservoirs to meet the flow objective at Montague or from the lower basin reservoirs (Blue Marsh and Beltzville) to meet the flow objective at Trenton (**Slides 11-14**).

As defined in the [FFMP](#), the diversion from NYC is limited to 800 million gallons per day (mgd) based on a running average beginning on June 1 until May 31 of the previous year. The running average did not exceed 800 mgd during the release year 2025-2026. The average diversion from the NYC reservoirs during the release year 2025-2026 was 489 mgd. In New Jersey, the diversion is limited to 100 mgd as a monthly average. The average diversion for the release year 2025-2026 was 93 mgd (**Slide 15**).

Conservation releases are designed to protect the tailwater fisheries below the NYC reservoirs. In release year 2025-2026, the required conservation releases based on the FFMP tables were as follows: Cannonsville – 98,363 MG, Pepacton – 35,848 MG, and Neversink – 21,305 MG. All or a portion of the releases on a given day may have been used to meet the Montague Flow Objective. The 4G and 4F release tables were used for 83% and 16% of the release year, respectively. High inflows and high release events occurred in July 2025, April 2026, and May 2026. Directed releases occurred mostly in the

³ <https://www.nj.gov/drbc/programs/flow/annual-hydro-reports.html>

⁴ USGS 01438500 - <https://waterdata.usgs.gov/monitoring-location/USGS-01438500>

⁵ USGS 01463500 - <https://waterdata.usgs.gov/usa/nwis/uv?01463500>

⁶ Normal is defined as the 25th to 75th percentile of flow on a given day

fall months of 2025 with some intermittent releases occurring in December 2025 and February 2026 **(Slide 16 -20)**.

The thermal releases are designed to protect stream reaches below the NYC reservoirs from exceeding 24 degrees Celsius (C) for the daily maximum, with a goal of the temperature not exceeding 20 degrees C ([FFMP](#)). In release year 2025-2026, the stream reach at Lordville, exceeded 24 degrees C for 1 day⁷. At Lordville, the stream reach exceeded 20 degrees C for 57 days, 43 days at Bridgeville, and Harvard for 2 days and Hancock for 2 days during the 2025-2026 release year. Releases from the thermal bank were made on 5 days for three events in July 2025, and 6 days for three events in August 2025. Thermal releases were made for a total of 16 days during 2025-2026 release year. A total of 1,009 cfs-days (0.652 BG) used in total for thermal mitigation. The summer of 2025 (June – August) was the 20th warmest summer on record for the upper basin and 16th warmest in the lower basin based on average temperature.⁸ **(Slides 21-28)**.

To enhance flood mitigation, water is released from the NYC reservoirs based on a Conditional Seasonal Storage Objective (CSSO). Discharge mitigation releases are made from a reservoir when the combined storage is in the L1 zone, and the individual reservoir elevation/storage is above the CSSO. Releases to achieve the CSSO create a high probability of maintaining fifteen percent void spaces in individual reservoirs between November 1 and February 1, and at least ten percent void space in individual reservoirs between approximately September 15 and March 1. Discharge mitigation releases for this release year were 51,541 MG from Cannonsville, 20,007 MG from Pepacton, and 9,366 MG from Neversink and the reservoir elevations were above the CSSO for 77, 66, and 83 days, respectively. Cannonsville reservoir spilled 23,912 MG over 77 days, Pepacton reservoir spilled 8,044 MG over 47 days. Neversink reservoir spilled 2,518 MG over 44 days **(Slide 29)**.

As established in the Delaware River Basin Water Code⁹, DRBC is responsible for managing salinity intrusion in the Delaware River by maintaining the flow objective at Trenton, N.J. The purpose of the flow objective at Trenton is to prevent the salt front, an indicator of salinity intrusion, from moving too far upstream. The salt front is a calculated indicator based on the 7-day average location of the 250 mg/L isochlor in the river¹⁰. The normal range of the salt front is between river mile 67 and 76 (river miles are defined as the along-channel distance from the mouth of the estuary). The DRBC directs releases from reservoirs to meet the flow objective, which impedes the upstream movement of the salt front to protect drinking water intakes near Philadelphia, PA approximately 110 river miles from the mouth of the bay. In accordance with both the Water Code and the FFMP 2017 agreement, in a drought emergency, the flow objectives depend on the location of the salt front. The increased Montague flow objective from 1,100 cfs to 1,600 cfs as SF moves from RM 82.9 farther upstream to above RM 92.5 in a drought emergency provides more water from the upper basin to reduce the amount of water needed from the lower basin reservoirs to meet the Trenton flow objective. During the 2025-2026 release year, a drought emergency did not occur in the basin, and releases were not made for management of the salt front. The salt front was in or near the normal range from June through September. Beginning in the fall, the salt front began to move upstream due to the dry conditions. The salt front reached its most

⁷ Data Source: USGS Gages (01417500, 01427000, 01436690, 01427207)

⁸ NCEI NCDC - <https://www.ncdc.noaa.gov/cag/national/rankings>

⁹ <https://www.nj.gov/drbc/library/documents/watercode.pdf>

¹⁰ <https://www.nj.gov/drbc/programs/flow/salt-front.html>

upstream location on October 30, reaching river mile (RM) 90.7 near Philadelphia International Airport. Due to the upward movement of the salt front and the lack of rainfall, releases were made to repel the salt front downstream. At the end of 2025, the salt front was back in normal range due to releases made throughout the fall months. Between January and April 2026, the salt front fluctuated between RM 60 and RM 80 and no releases were made. The salt front briefly reached RM 88 in February due to ice conditions on the river and a high influx of road salt due to snow events. Snow melt in March led to the retreat of the salt front to RM 60 by mid-April. At the end of the release year, the salt front was around RM 69, normal for the month of May (**Slide 30**).

Summary: In the 2025-2026 release year, precipitation was mixed throughout the basin but tended to be below normal. Dry conditions have persisted on and off throughout the last release year. The NYC Storage was near or slightly below normal for most of the year, except in fall 2025 where below normal levels of precipitation led to below normal storage in the reservoirs. In 2025, flows fluctuated, but were generally below normal for much of the release year and experienced temporary recoveries during large precipitation events. At the end of the release year flows were below normal. The NYC Diversion and NJ Diversion did not exceed their respective limits as set forth in the Water Code and [FFMP](#). The conservation releases were mixed and included releases from tables 4F and 4G. Warm summer air temperature led to increased water temperatures at the beginning of the release year, and thermal mitigation was used for 5 days in July and 6 days during August 2025. Discharge mitigation releases were needed for much of the year. The salt front was in or slightly above the normal range for most of the year. Its most upstream location was RM 90.7 on October 30, 2025, near the Philadelphia International Airport.

For non-provisional, approved data, contact the Delaware River Basin Commission (salt front), the NYC Department of Environmental Protection (NYCDEP), the Office of the Delaware River Master (ODRM), or the United States Geological Survey (USGS)¹¹. This report is available online at:
https://www.nj.gov/drbc/programs/flow/FFMP_PerformanceRpts.html

ACKNOWLEDGEMENTS

This report was prepared by the Delaware River Basin Commission staff. Sara Sayed, Water Resource Scientist, and Amy Shallcross, P.E., Manager of Water Resource Operations, authored this report.

SUGGESTED CITATION

DRBC. (2026). FFMP Performance Report 2025-2026. Delaware River Basin Commission.
https://www.nj.gov/drbc/programs/flow/FFMP_PerformanceRpts.html

¹¹ USGS - <https://www.usgs.gov/>



FFMP Implementation Performance



Release Year 2025-2026
June 1, 2025- May 31, 2026



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June 2026



Data Sources

All data used in the analysis are provisional.

Final/approved data are available from:

NYC Department of Environmental Protection (NYCDEP)

Office of the Delaware River Master (ODRM)

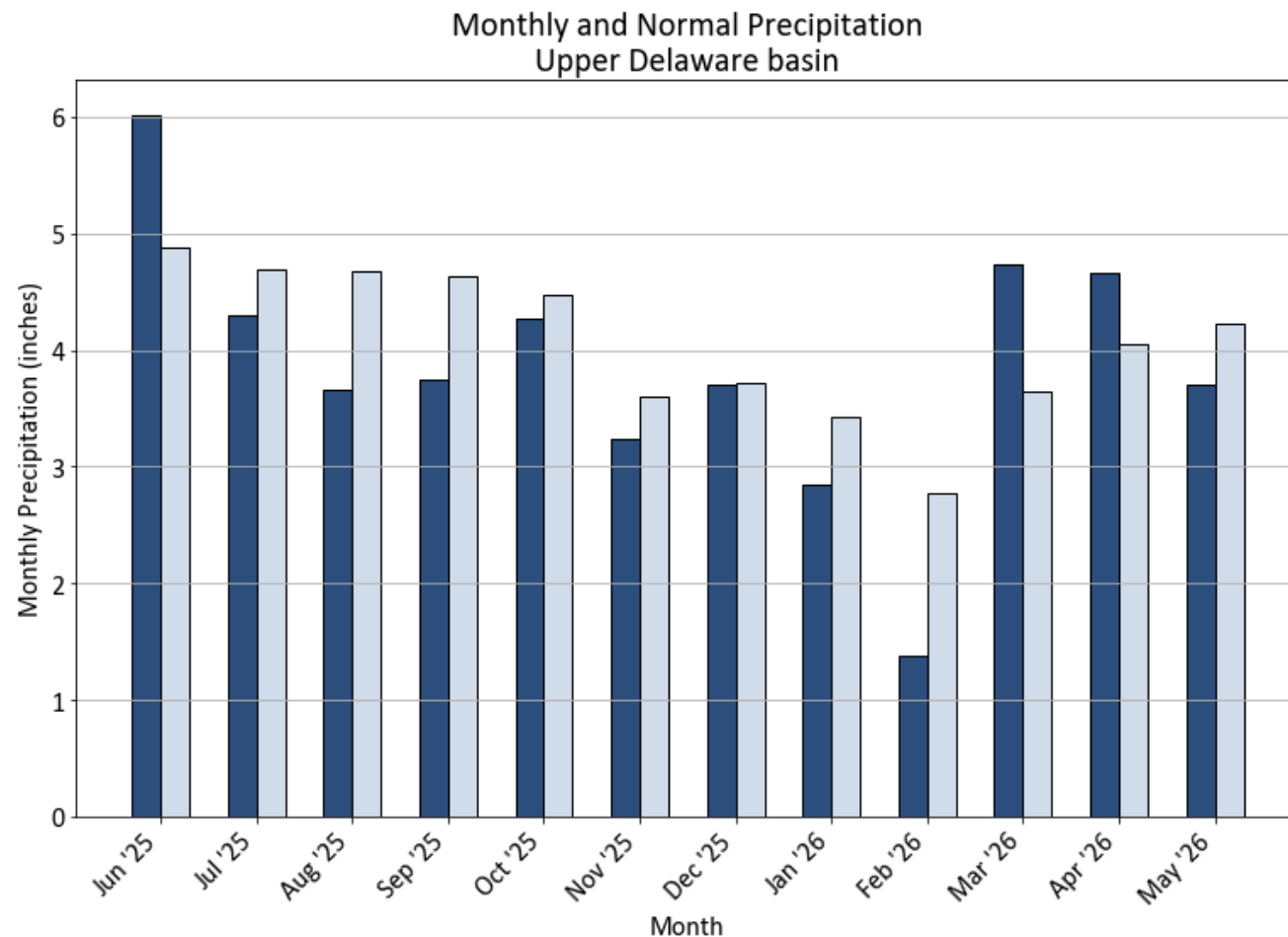
United States Geological Survey (USGS)

Methodology for calculations is included for reference on the last slide.

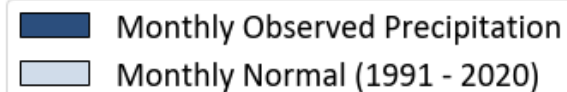
FFMP Performance Goals

- Manage Droughts
- Maintain Flow Objectives
- Provide enhanced conservation releases
- Maintain desirable tailwater temperatures
- Minimize spills with Conditional Seasonal Storage Objective (CSSO)

Precipitation – Upper Basin

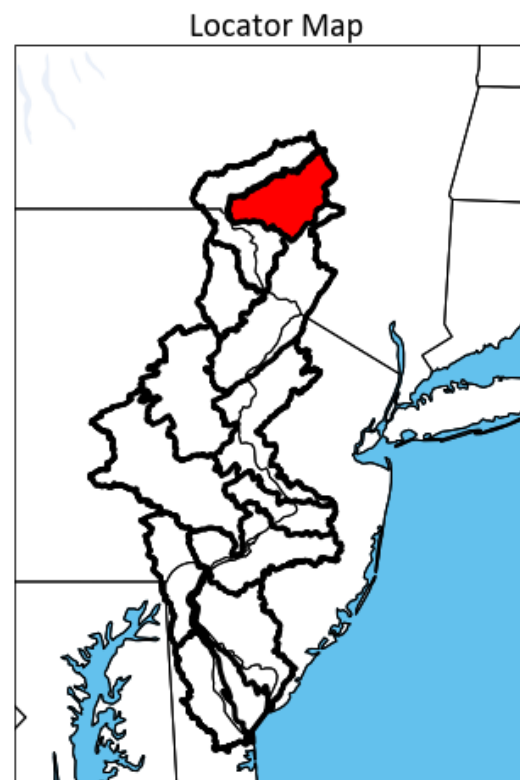
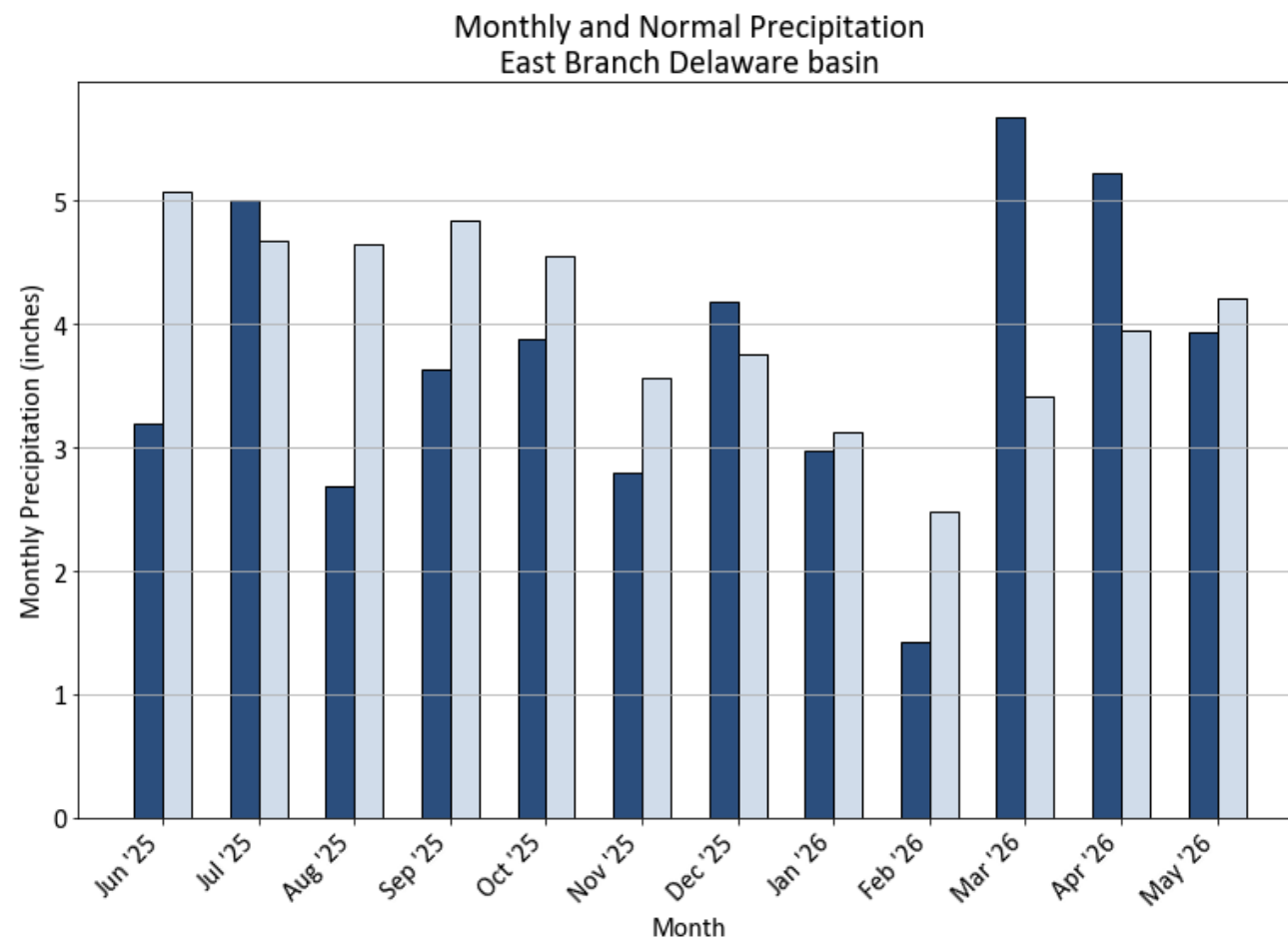


Source: ACIS, USGS HUC: 02040101
Monthly Normal is based on 4 stations in the
Upper Delaware basin

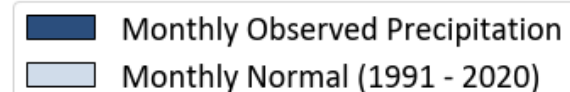


Data Source: ACIS

Precipitation – Upper Basin

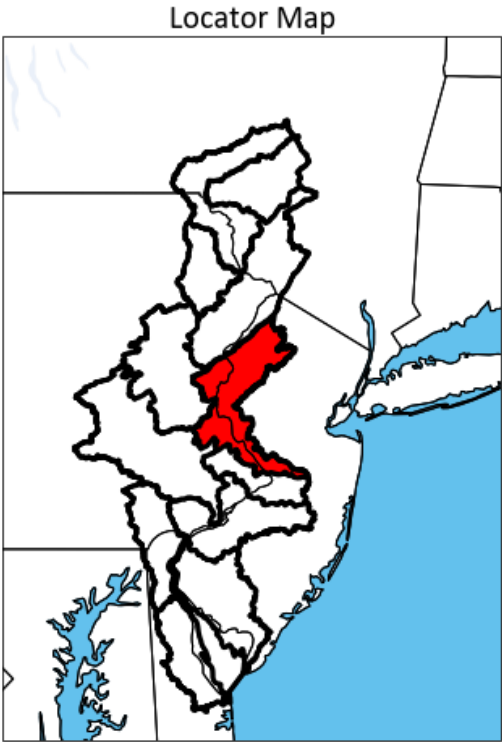
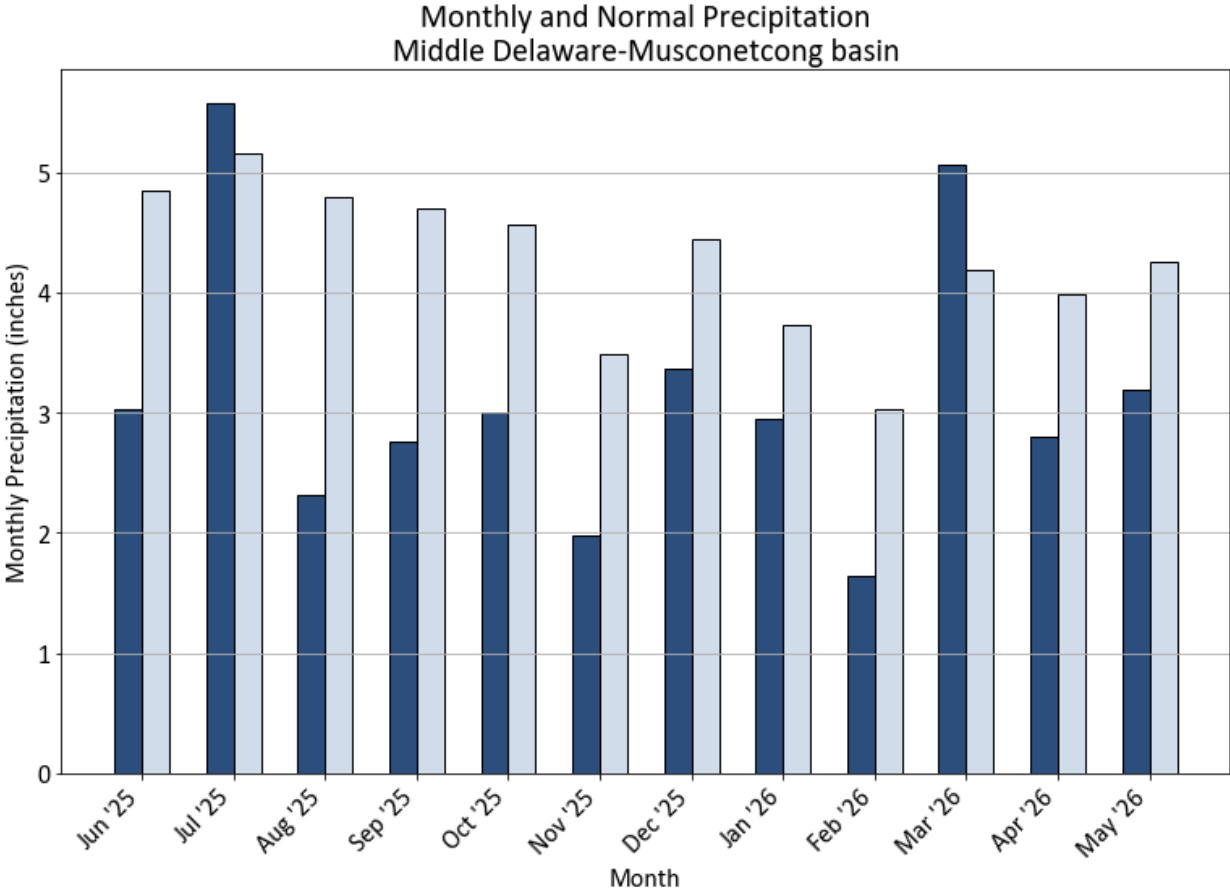


Source: ACIS, USGS HUC: 02040102
Monthly Normal is based of 1 stations in the
East Branch Delaware basin



Data Source: ACIS

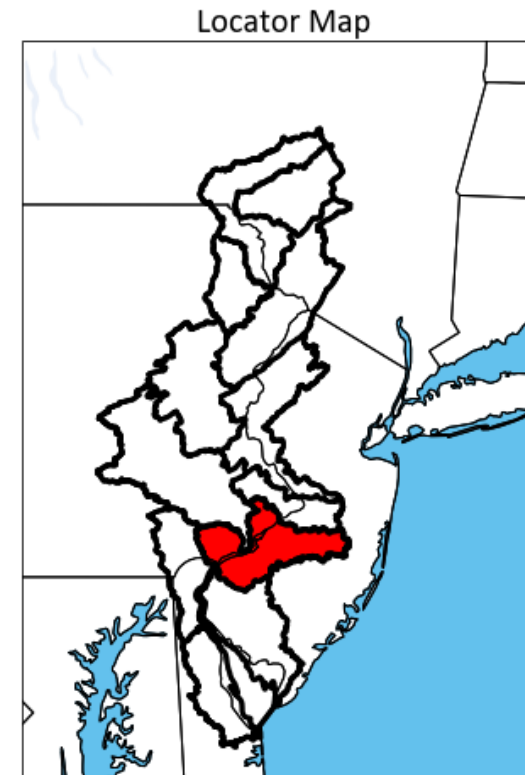
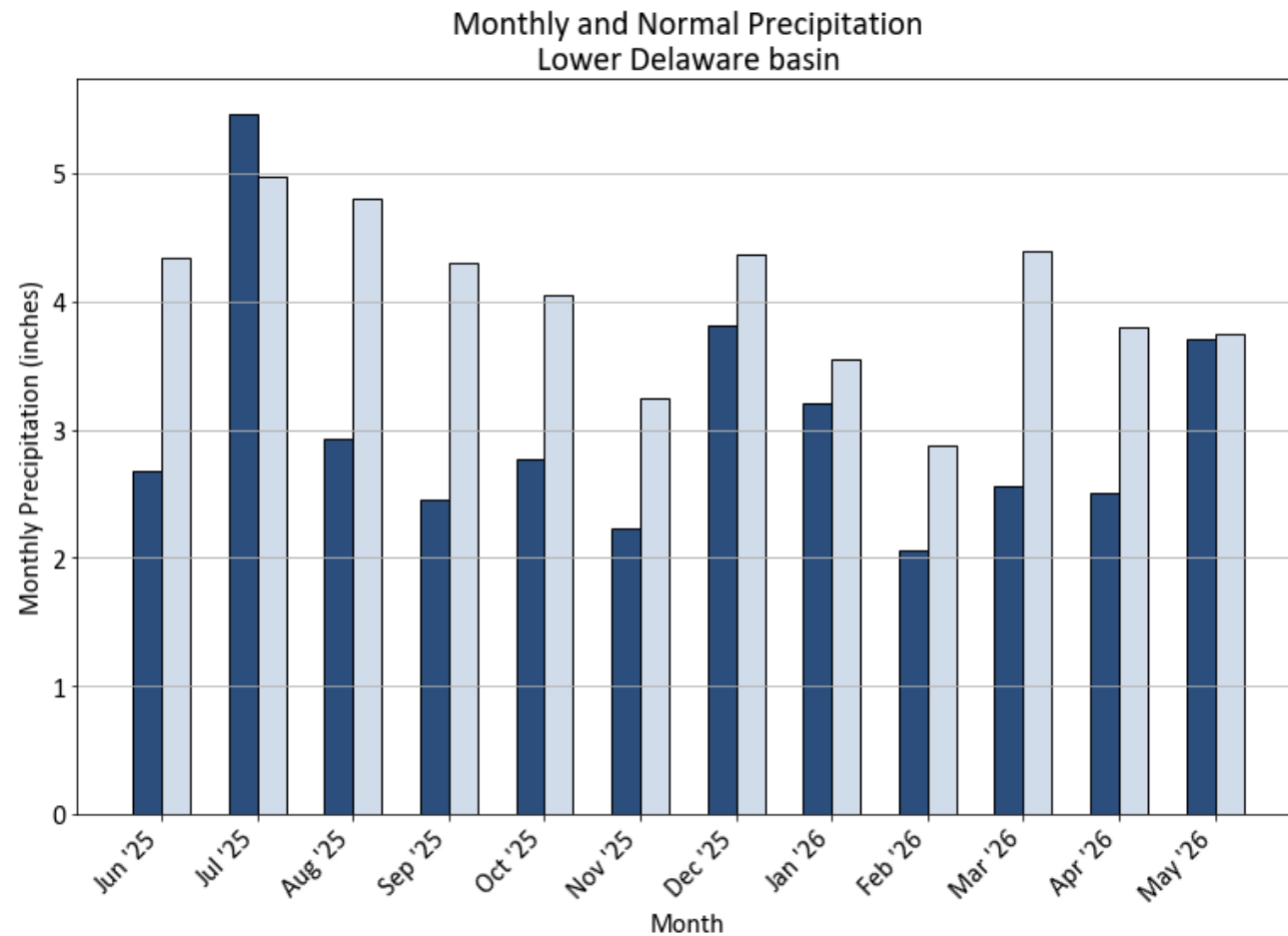
Precipitation – Middle Basin



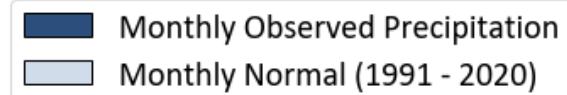
Source: ACIS, USGS HUC: 02040105
Monthly Normal is based of 8 stations in the
Middle Delaware-Musconetcong basin

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

Precipitation – Lower Basin



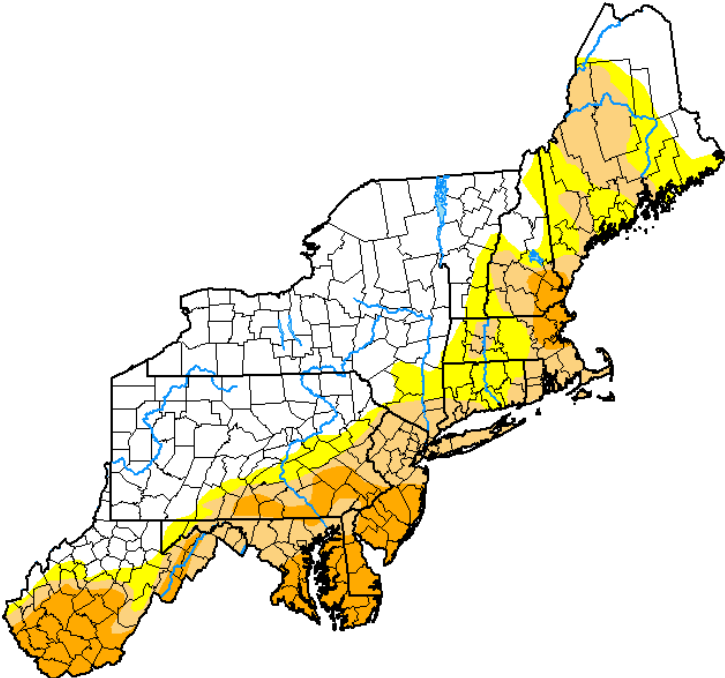
Source: ACIS, USGS HUC: 02040202
Monthly Normal is based of 8 stations in the
Lower Delaware basin



Data Source: ACIS

Drought Conditions

U.S. Drought Monitor Northeast



June 2, 2026
(Released Thursday, Jun. 4, 2026)
Valid 8 a.m. EDT

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme 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>

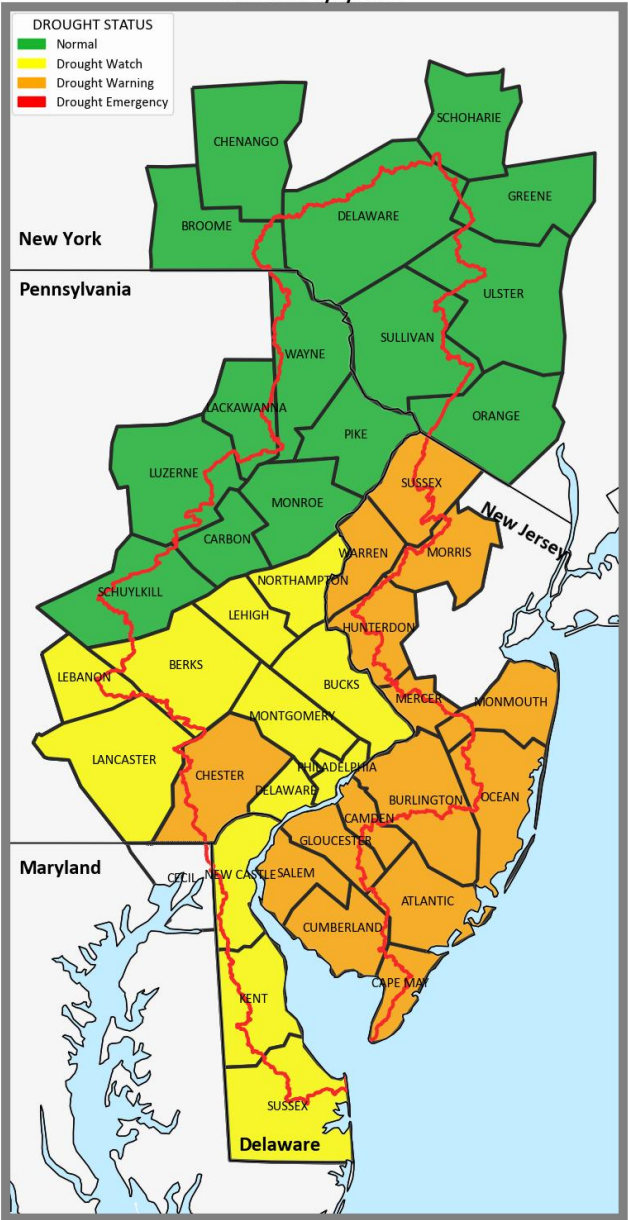
Author:

Adam Allgood
NOAA/NWS/NCEP/CPC

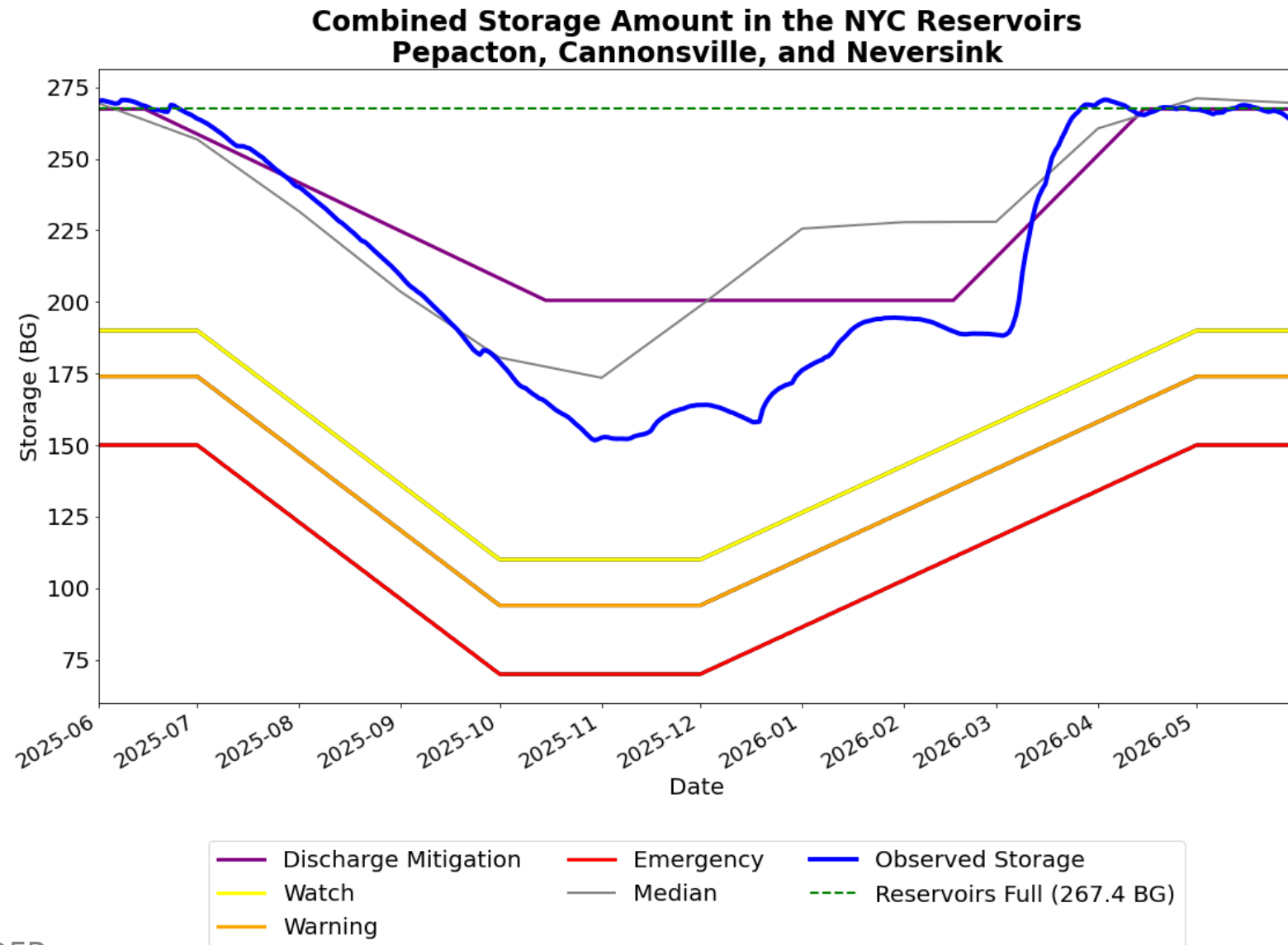


droughtmonitor.unl.edu

Drought Status In the Delaware River Basin
As Declared by the Individual Basin States
Effective 6/5/2026



New York City Reservoir Storage



Data Source: NYCDEP

Flow Objectives

Water Released from NYC to Meet Flow Objectives (MG)	
Montague*	50,985
Trenton **	1,272
Total	52,257

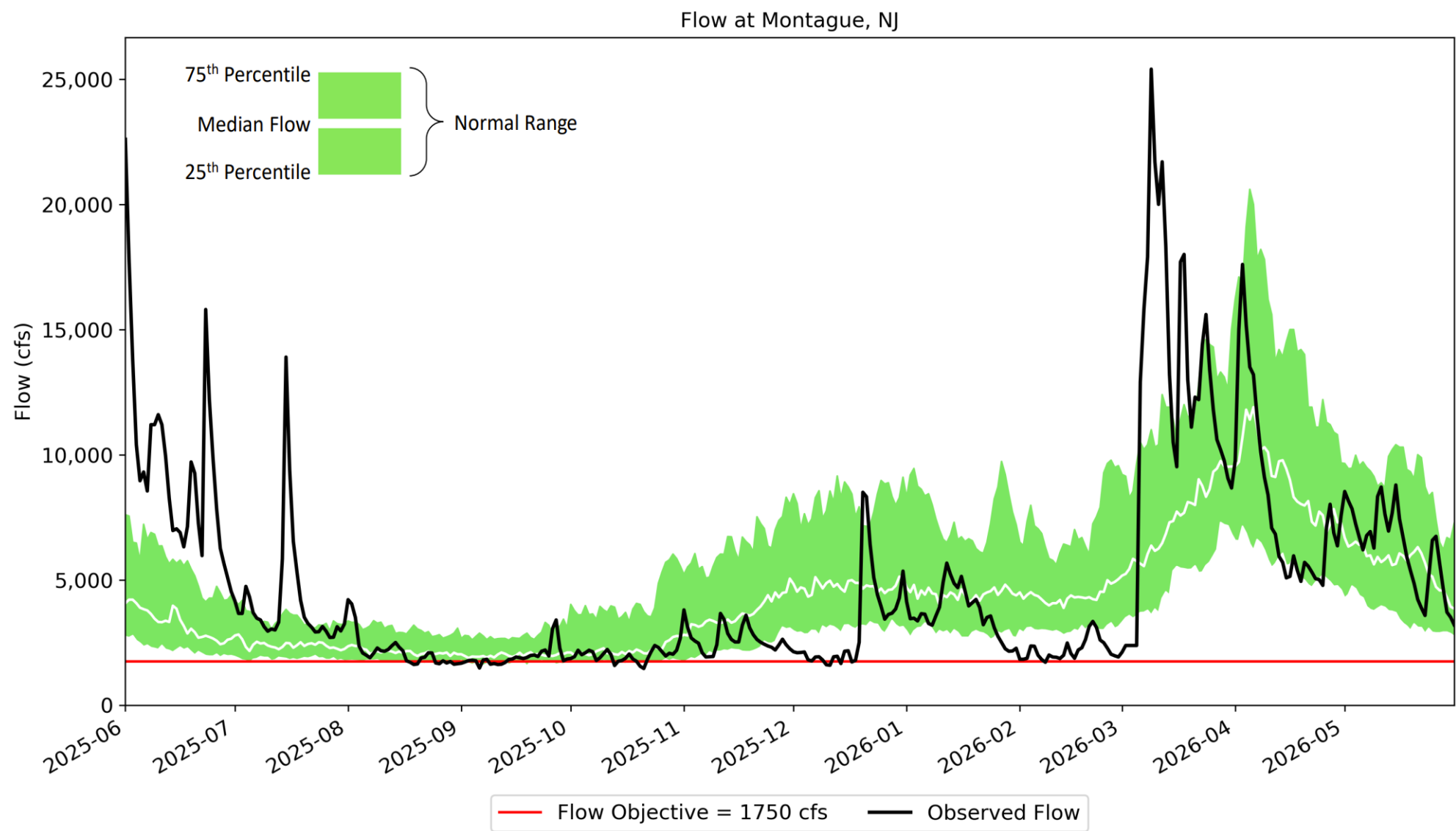
Water Released from Lower Basin to Meet Trenton Flow Objectives (MG) ***	
Beltzville	2,600
Blue Marsh	2,850
Total	3,028

*Releases made to meet the Montague Flow Objective, called directed releases, include the conservation release for the days when water is needed. Dates: 7/28, 8/1, 8/3-10/16, 10/18-11/11, 12/3 – 12/15, 2/7 – 2/14 and 2/27.

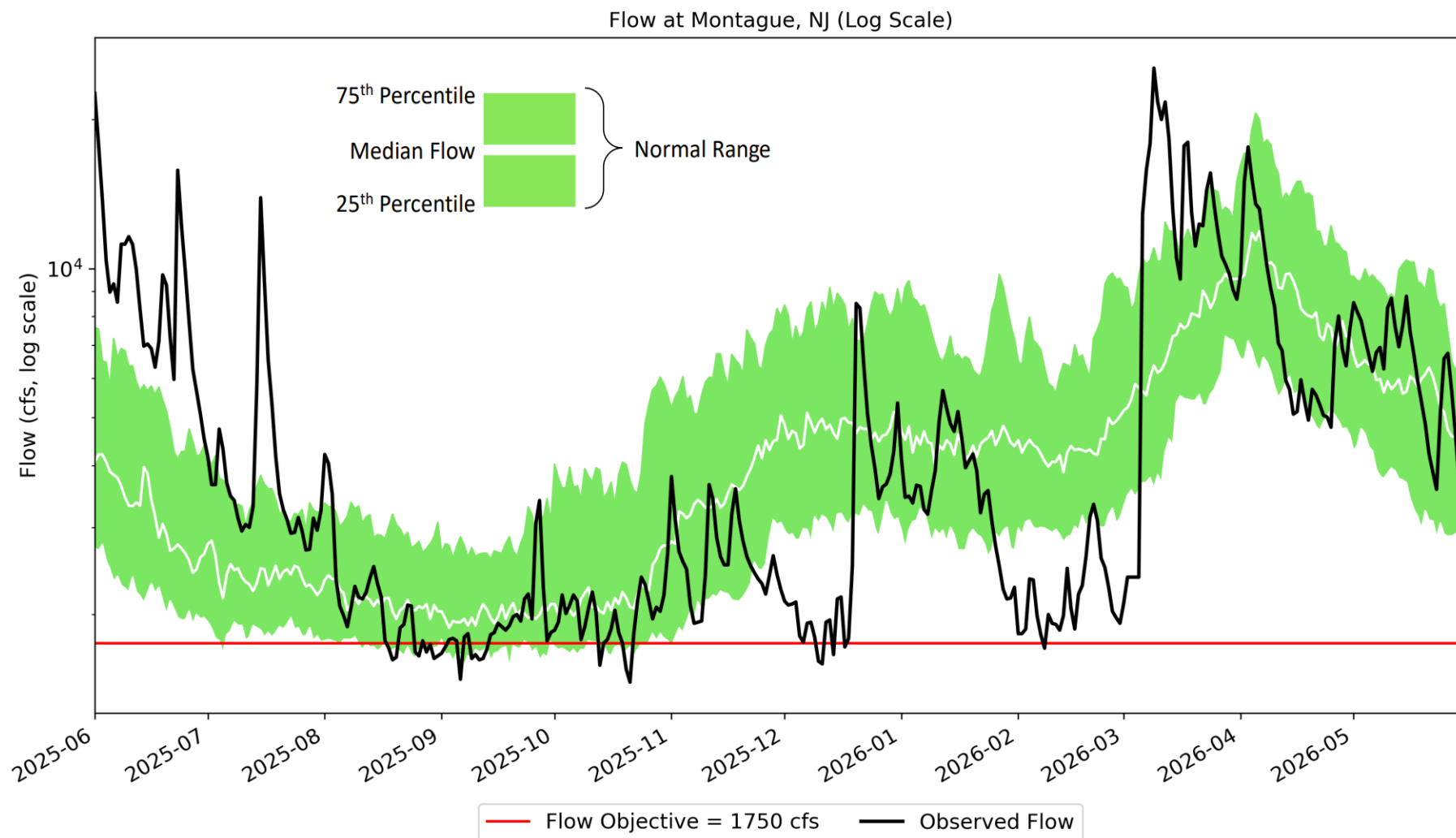
**Releases made to meet the Trenton Flow Objective are from a bank established by the FFMP (TEFO Bank) and are in addition to the directed release. Dates: 9/12-9/21, 9/30-10/5, 10/14-10/18, and 10/21-10/27.

*** Releases made from lower basin reservoirs for the Trenton Flow Objective exclude the conservation release.

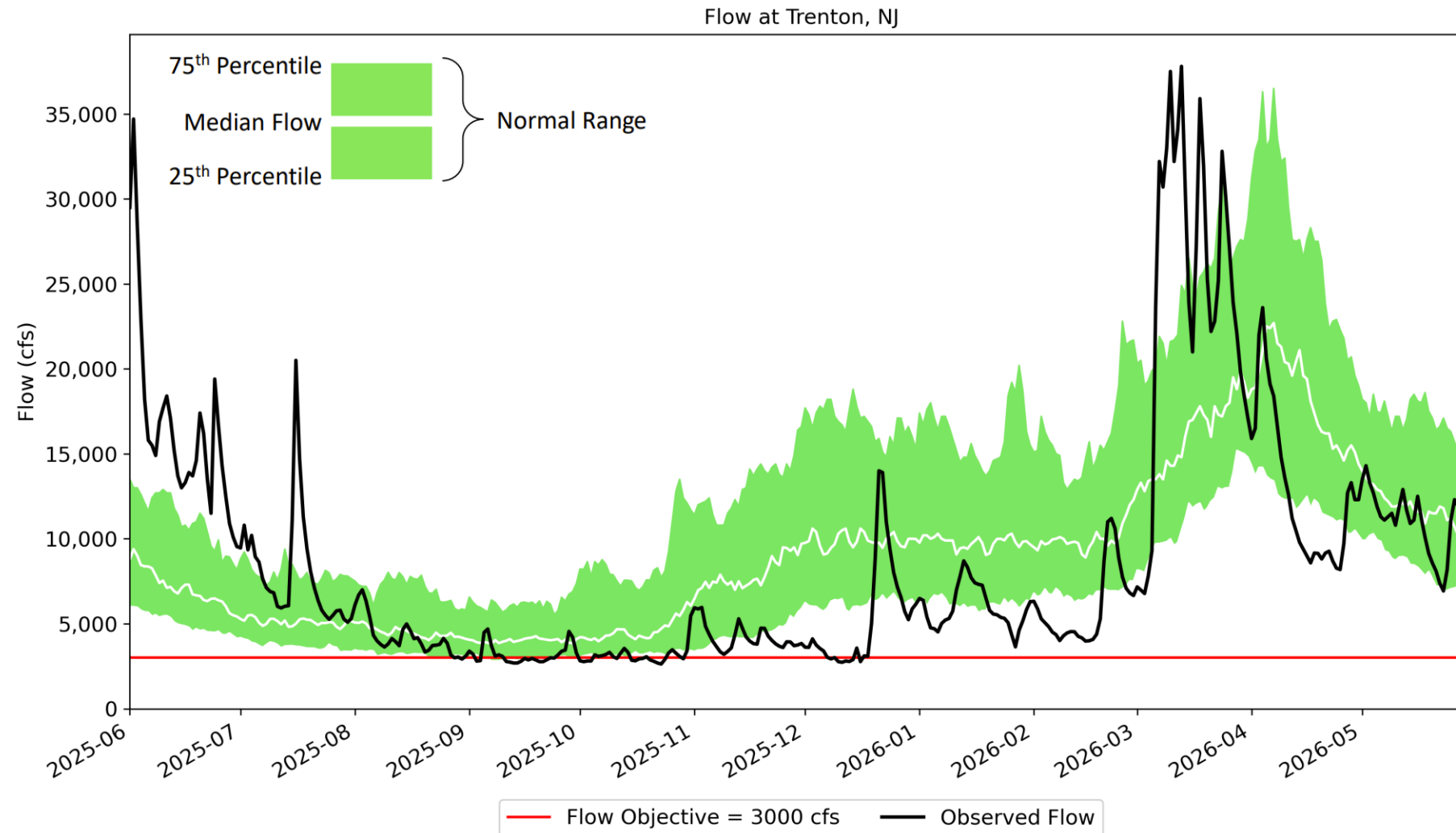
Flow at Montague



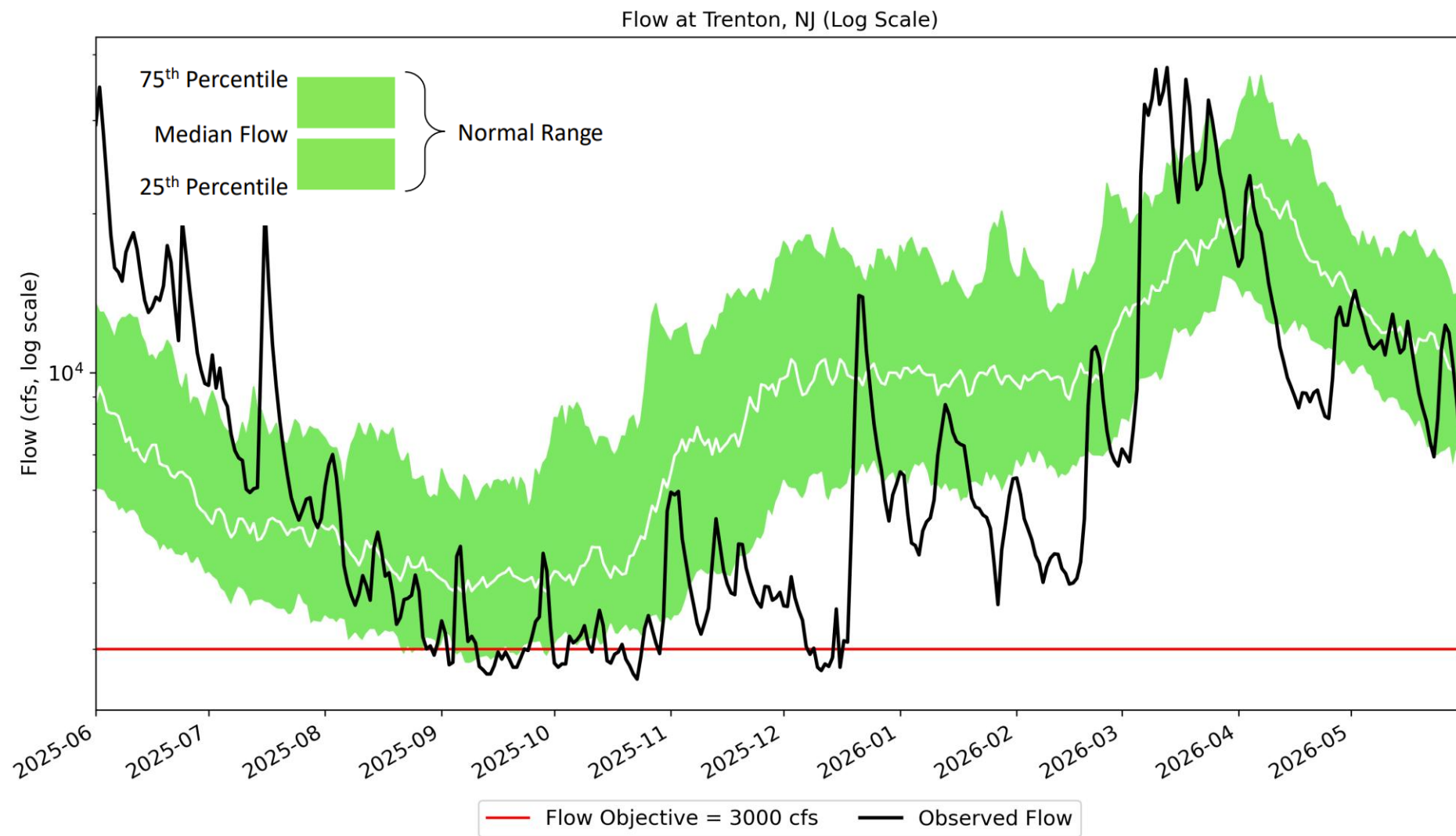
Flow at Montague (log scale)



Flow at Trenton

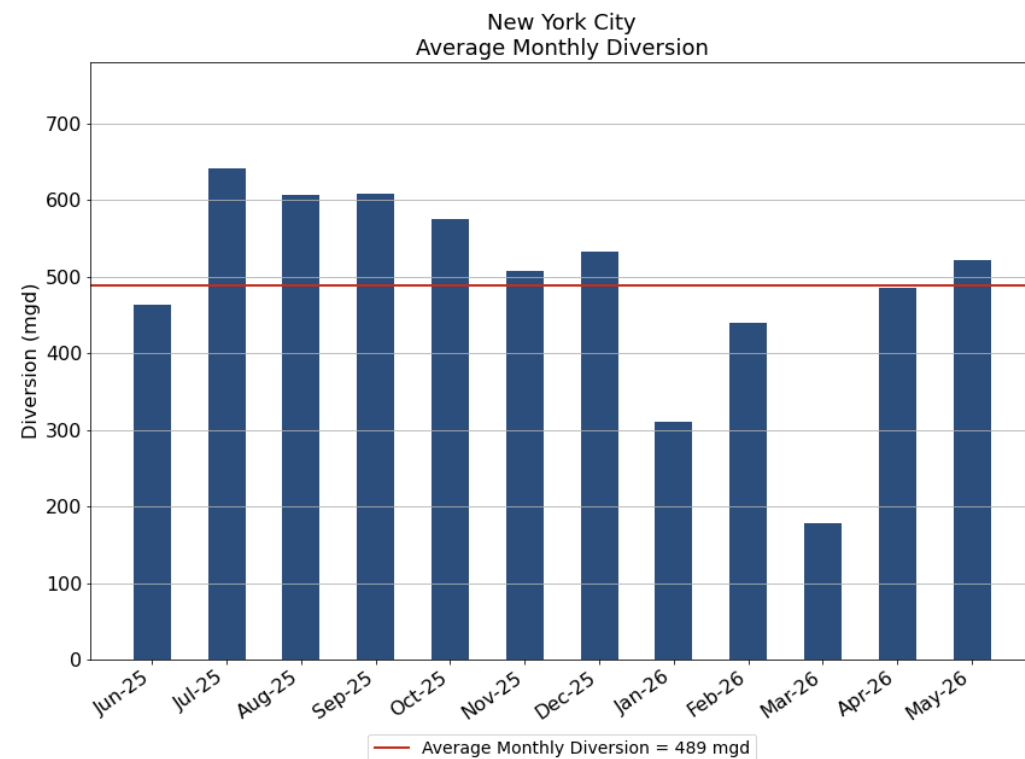
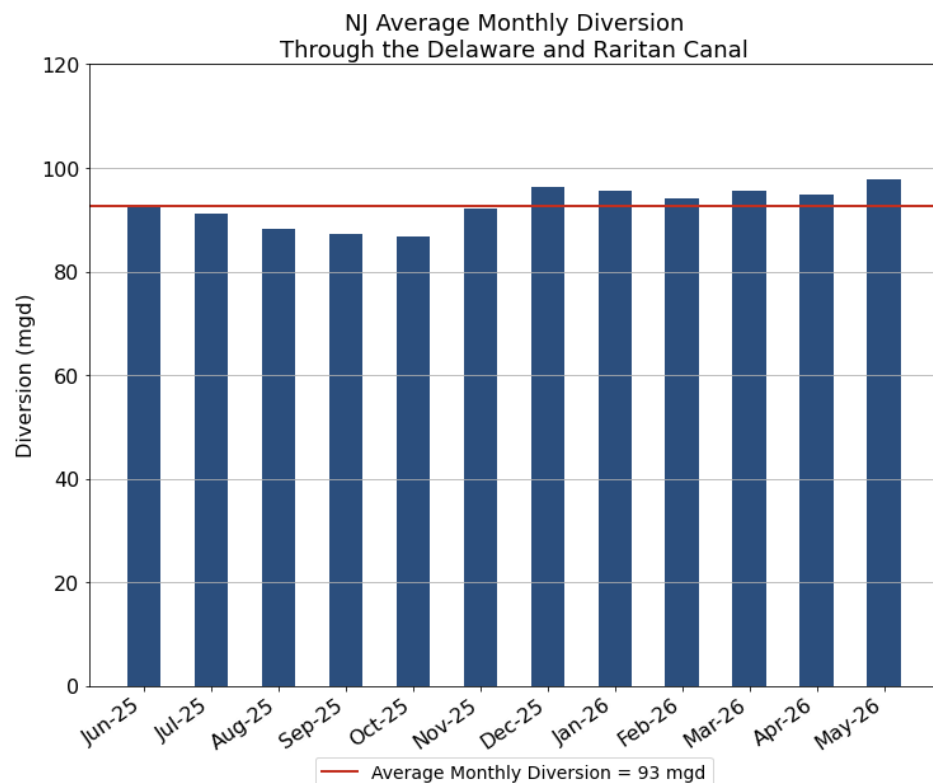


Flow at Trenton (log scale)



Diversions

Monthly Average Daily Diversion (June 1, 2025 – May 31, 2026)	
New Jersey	New York
93 mgd	489 mgd

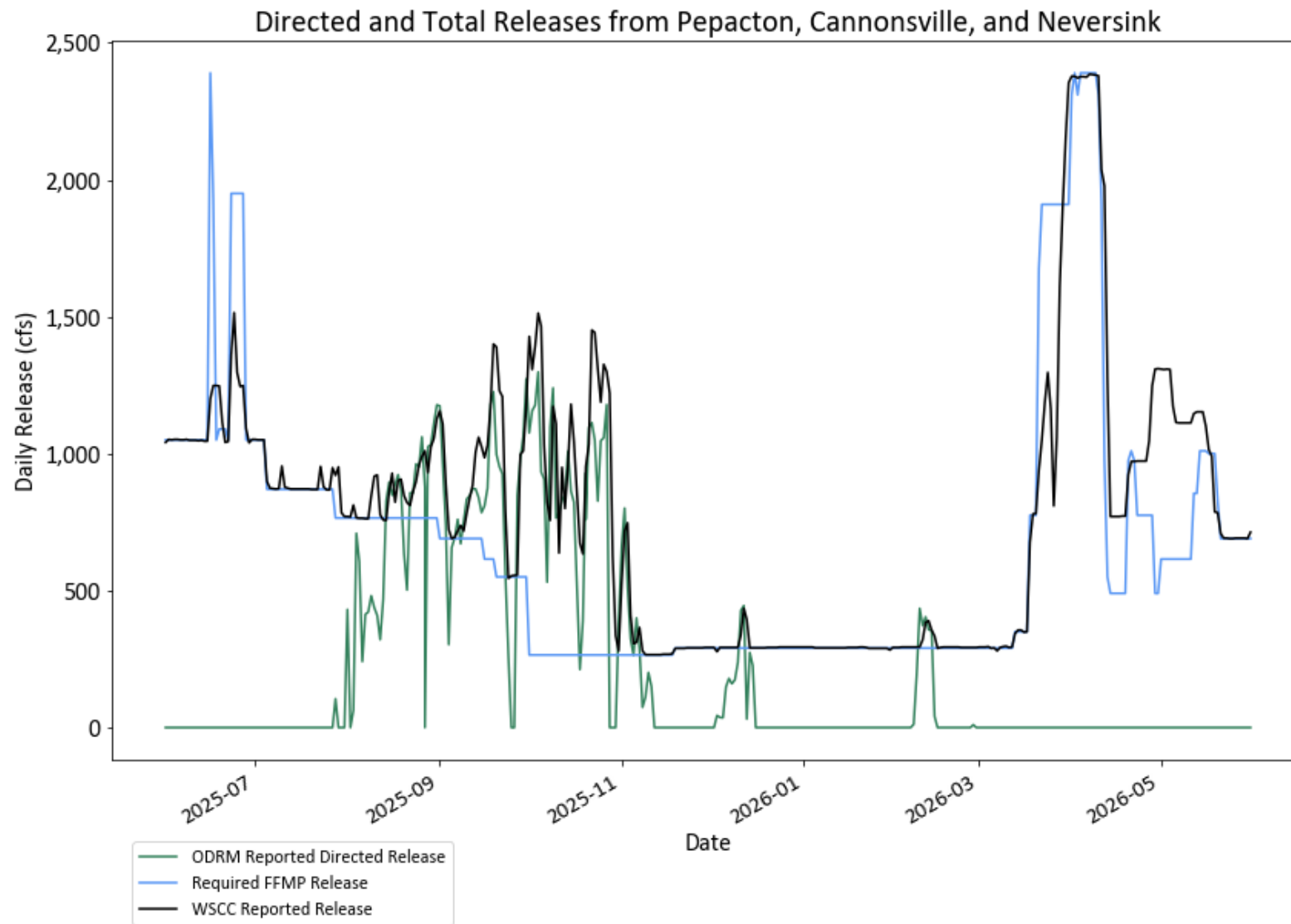


Conservation Releases

Total Volume of Conservation Releases (MG)			
	FFMP 2017 Tables Based on Storage (6/1/25 - 5/31/26)	REV1	Multiple of Revision 1
Cannonsville	98,363	20,665	4.8
Pepacton	35,848	14,561	2.5
Neversink	21,305	8,663	2.5
Values are the conservation releases required by the FFMP Tables Only. All or a portion of the release may have been used to meet the Montague Flow Objective. Additional release volume may have been required for bank use.			

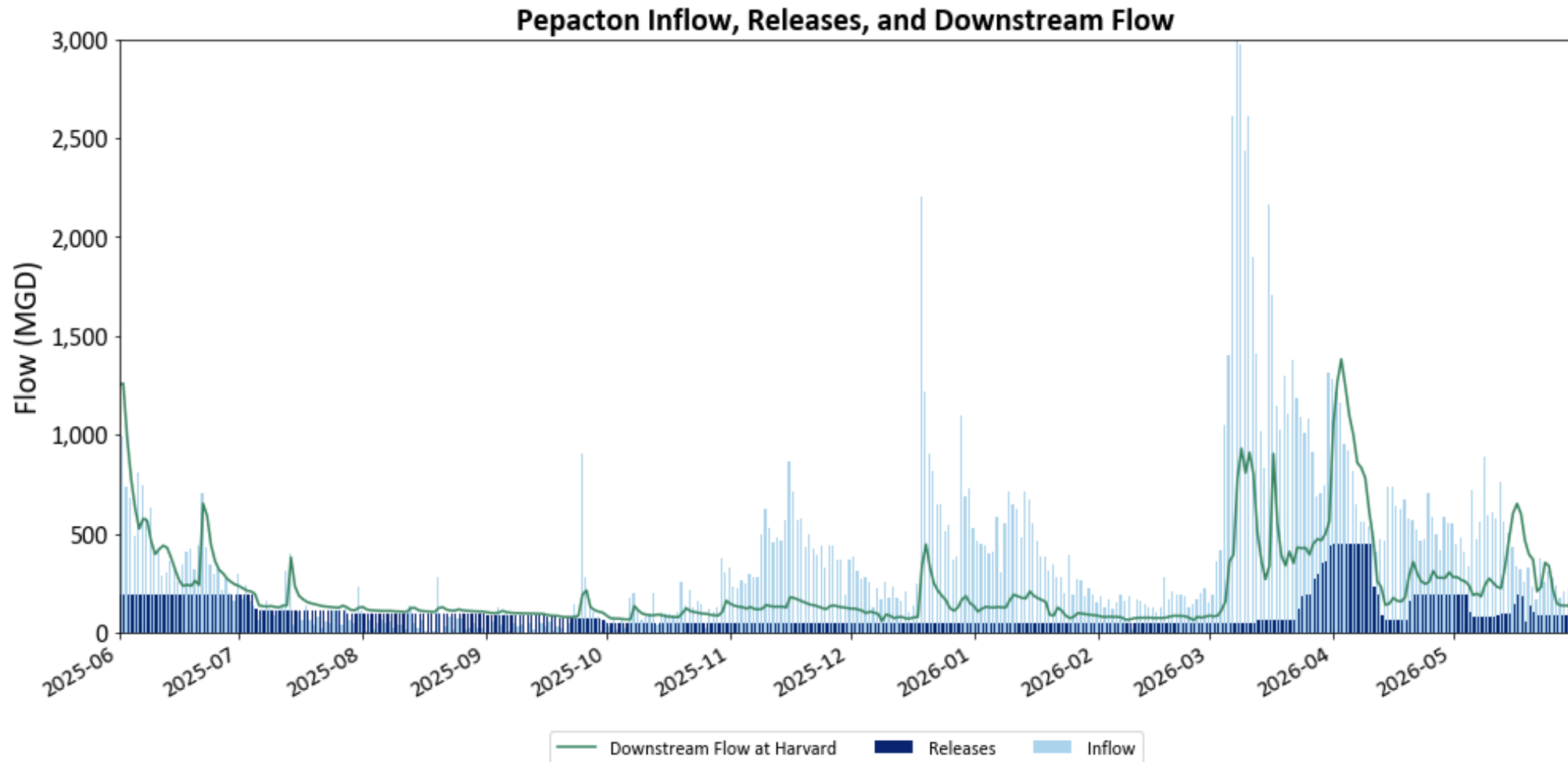
Percent of time in FFMP Table release rates used 6/2025-5/2026:
83% Table 4G, and 16% Table 4F.

Combined Release History

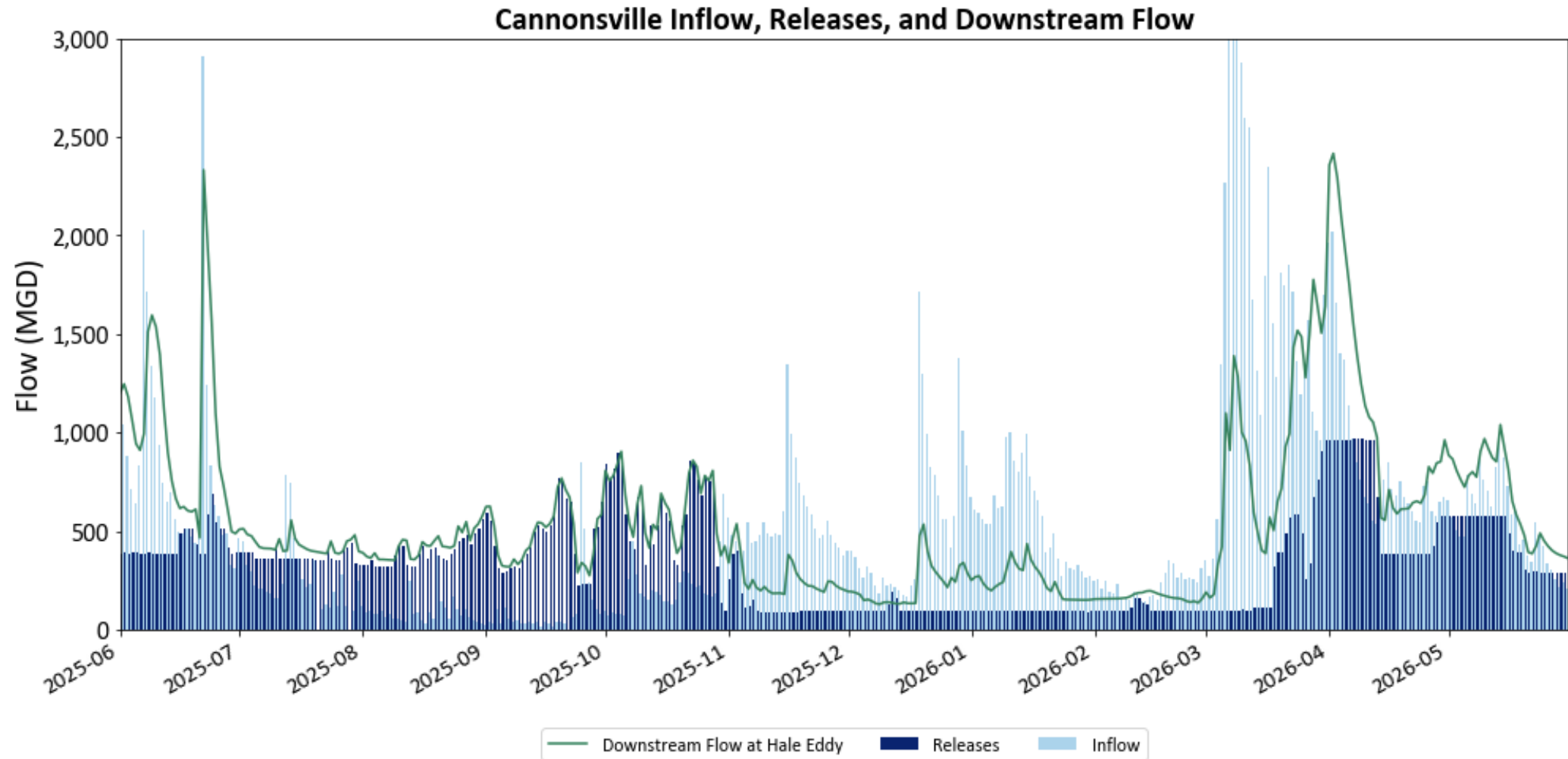


Data Source: NYCDEP, ODRM, USGS

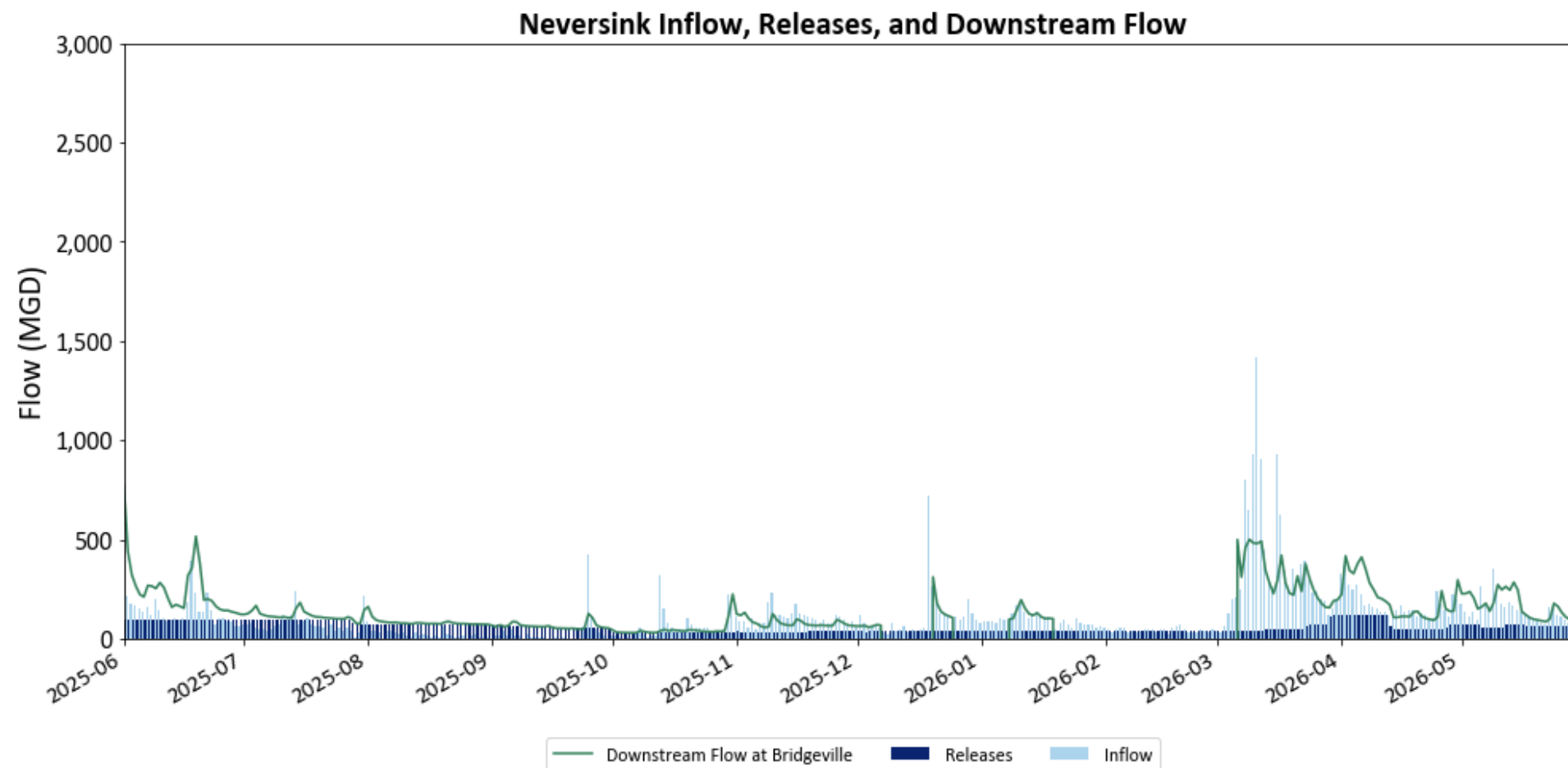
Pepacton: Inflow, Releases and Downstream Flow



Cannonsville: Inflow, Releases and Downstream Flow



Neversink: Inflow, Releases and Downstream Flow



FFMP Bank Use

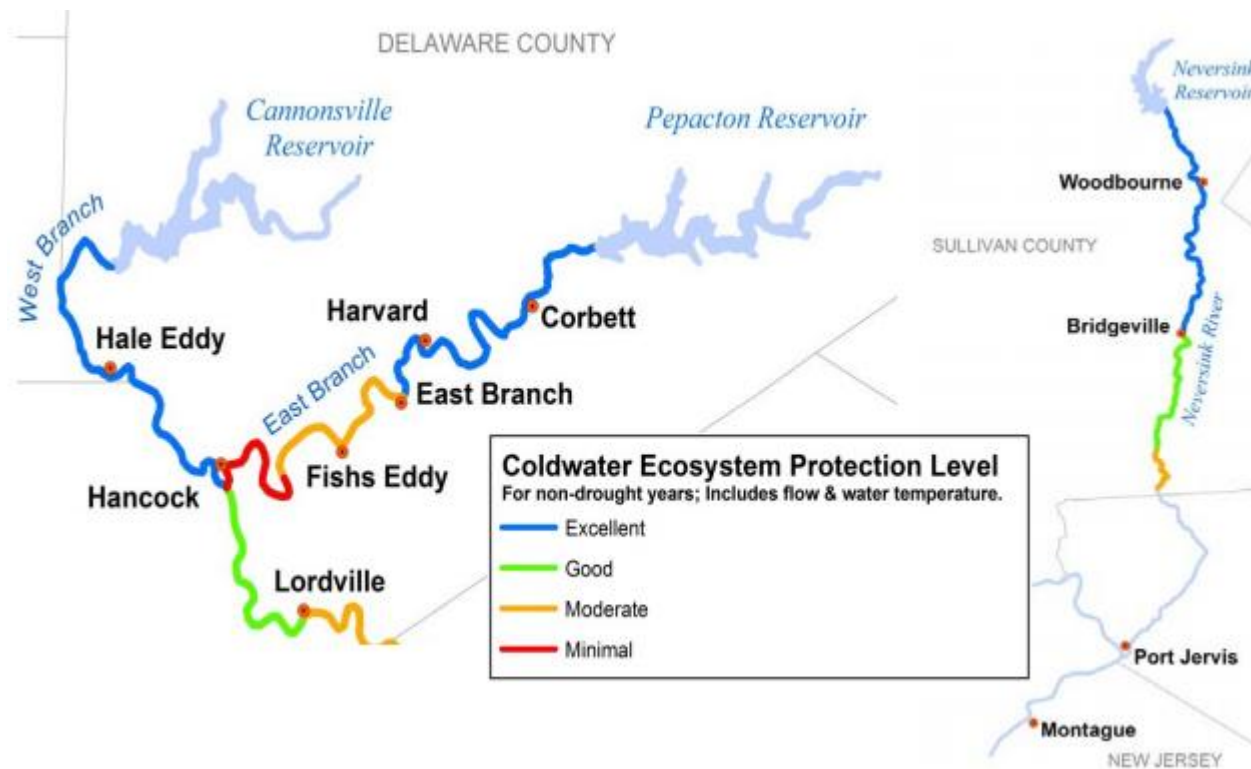
Available during normal only	Used	Size
Rapid Flow Change Mitigation Bank	1,009	of 1,000 cfs-days
Thermal Mitigation Bank	1,080	of 2,500 cfs-days
Trenton Equivalent Flow Objective Bank	6,700	of 9,423 cfs-days

Available during drought	Used	Size
NJ Diversion Amelioration Bank	0	of 2,545 cfs-days
NJ Diversion Offset Bank	0	of 2,300 cfs-days

Thermal Releases were made on 5 days for 3 events in July 2025, and 6 days for 3 events in August 2025. A total of 1,009 cfs-days were used.

Habitat Protection

(Temperature)



- **Goals for Excellent Habitat:**
 - Summer Temperature typical less than 20 °C
 - Rare Exceedances of 24 °C

Water Temperature

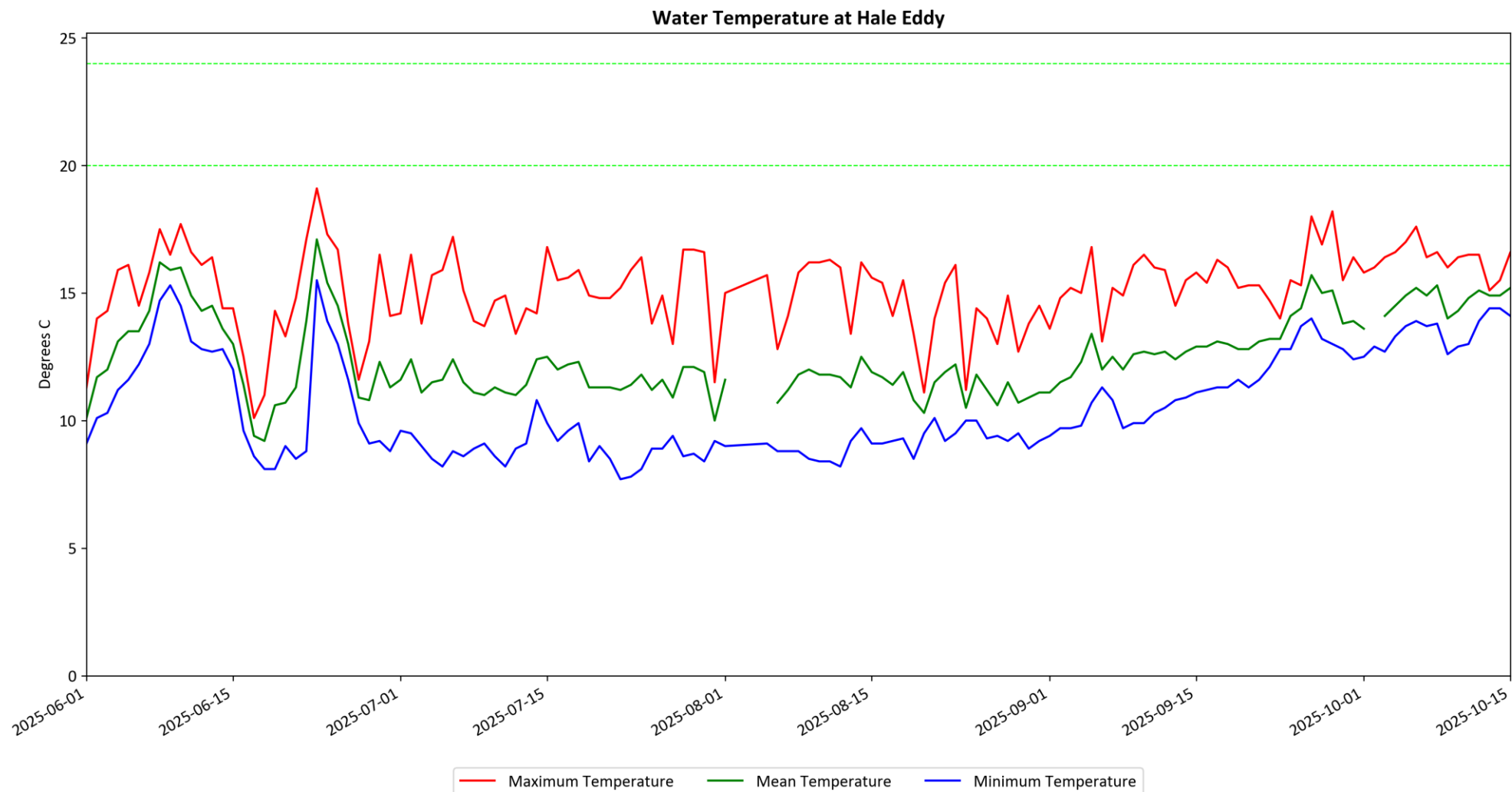
Location	Exceedances of 24 ⁰ C		Exceedances of 20 ⁰ C	
	Days Maximum Temperature above 24 ⁰ C	Days Average Temperature above 24 ⁰ C	Days Maximum Temperature above 20 ⁰ C	Days Average Temperature above 20 ⁰ C
Hale Eddy	0	0	0	0
Harvard	0	0	2	0
Hancock	0	0	2	0
Lordville	1	0	57	38
Bridgeville	0	0	43	4

Goals for Excellent Habitat: Summer Temperature typical less than 20⁰C, Rare Exceedances of 24⁰C

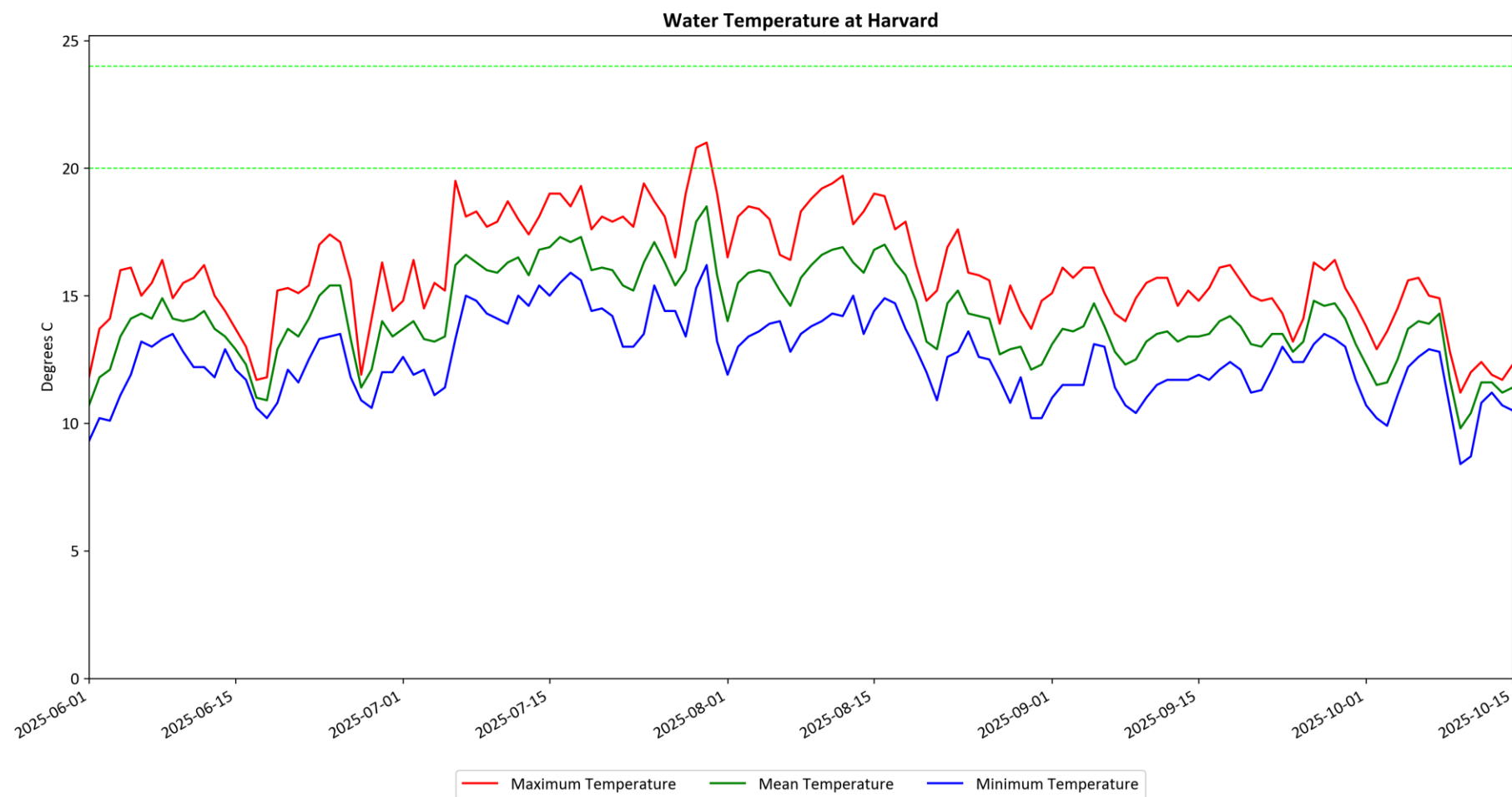
For June- Aug 2025, the Upper Basin air temperature was ranked the 20th warmest and Lower Basin air temperature ranked 16th warmest

Thermal Releases were made on 5 days for 3 events in July 2025, and 6 days for 3 events in August 2025. A total of 1,009 cfs-days were used.

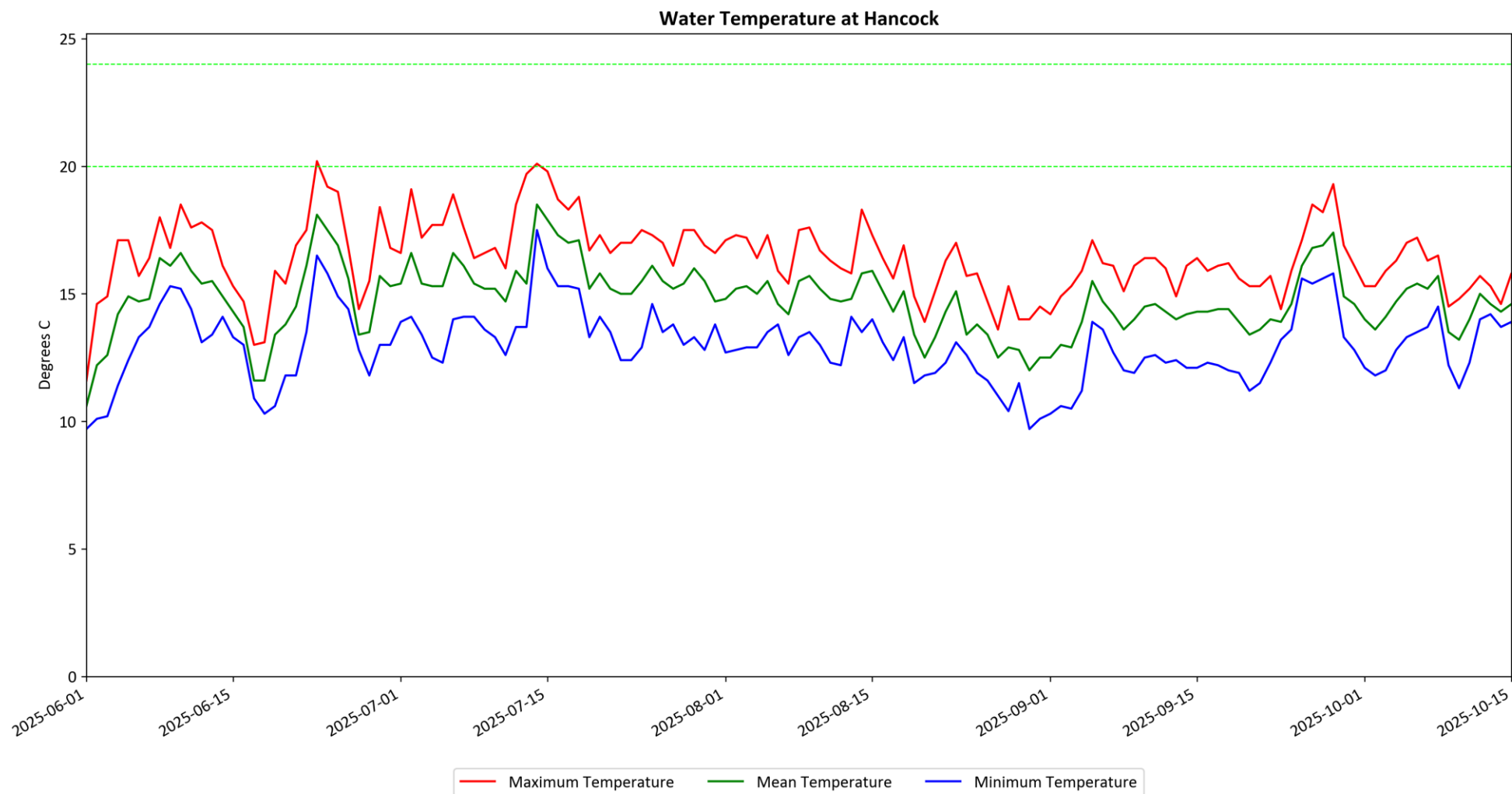
Water Temperature at Hale Eddy



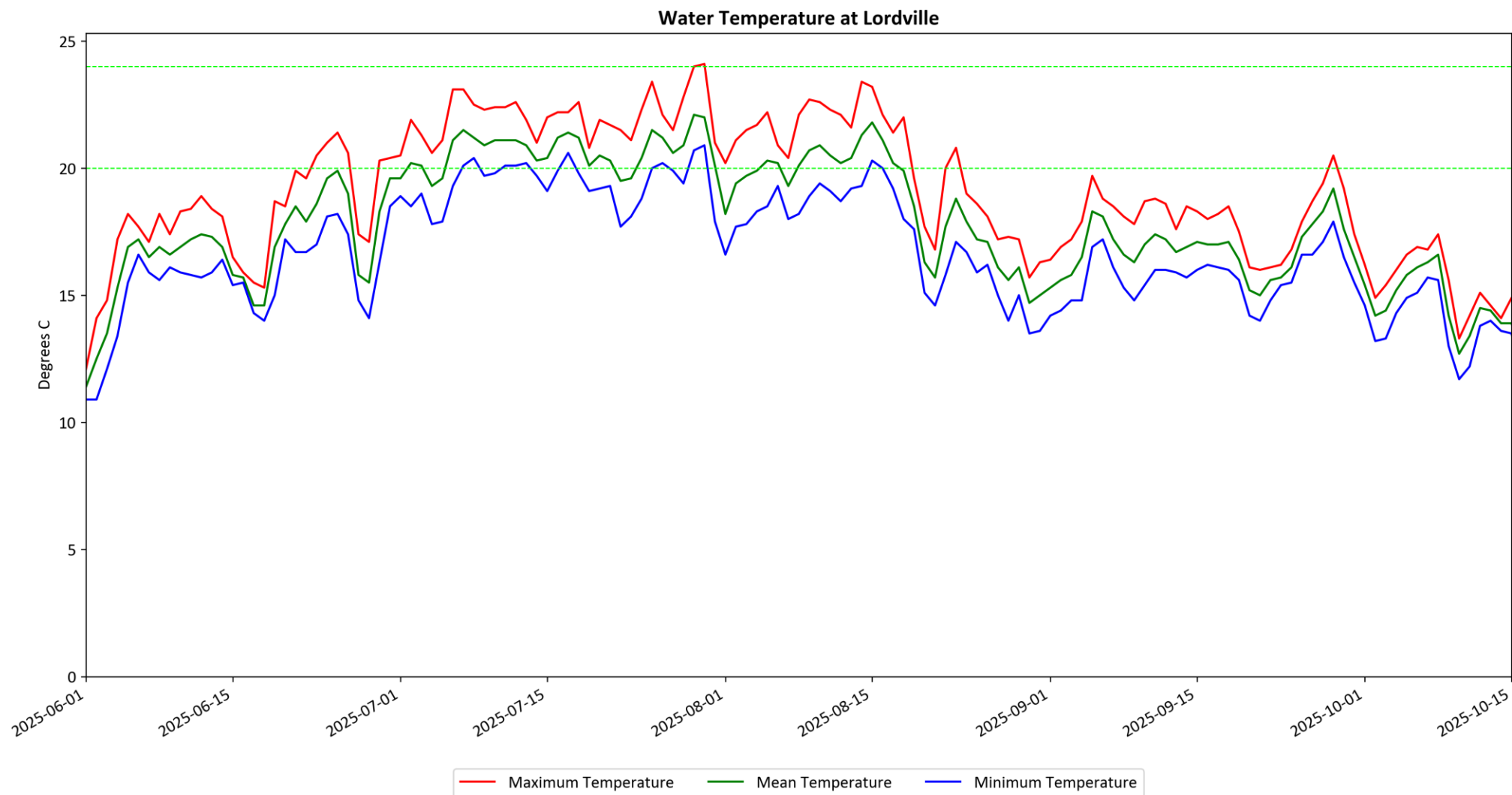
Water Temperature at Harvard



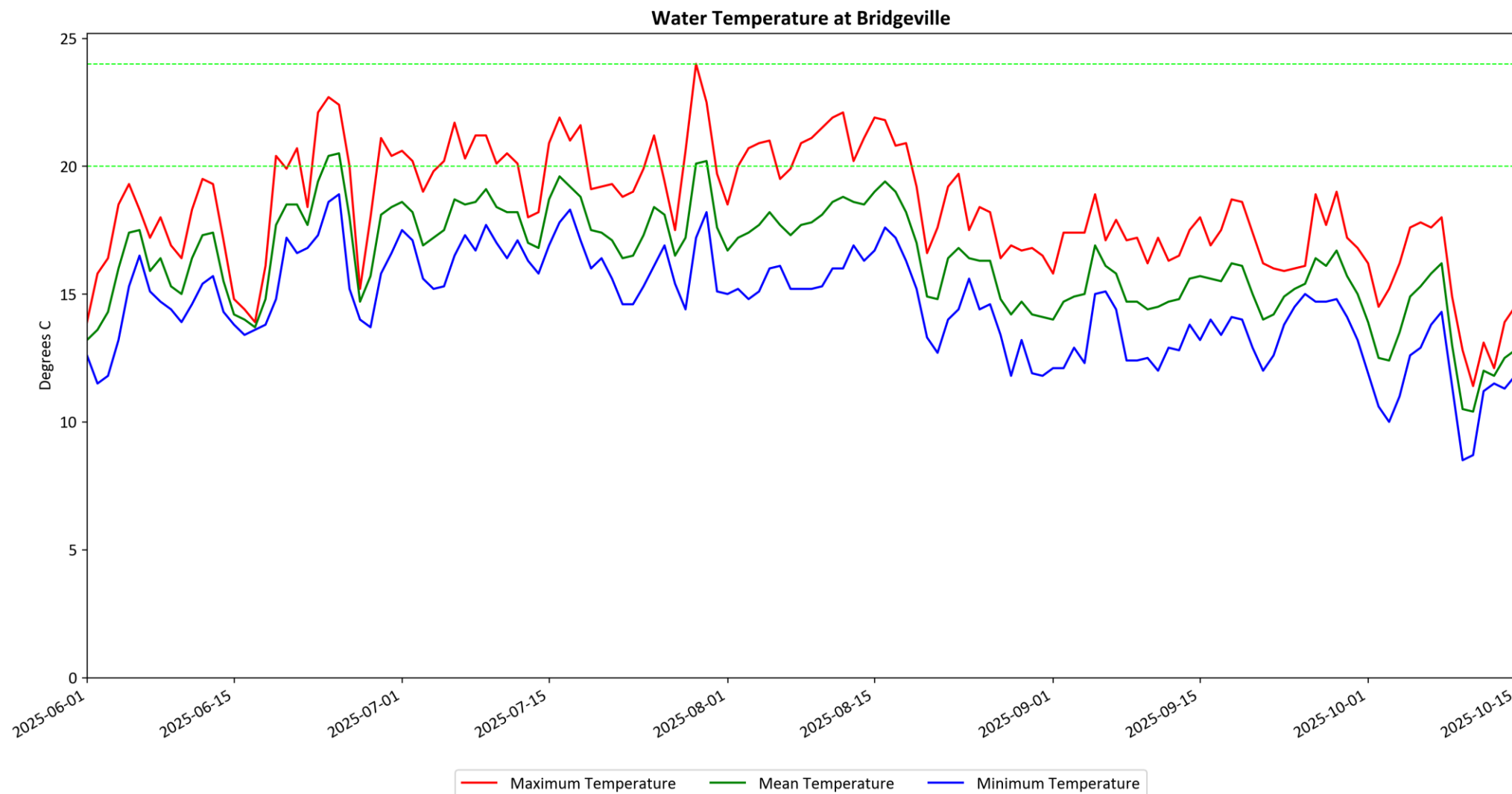
Water Temperature at Hancock



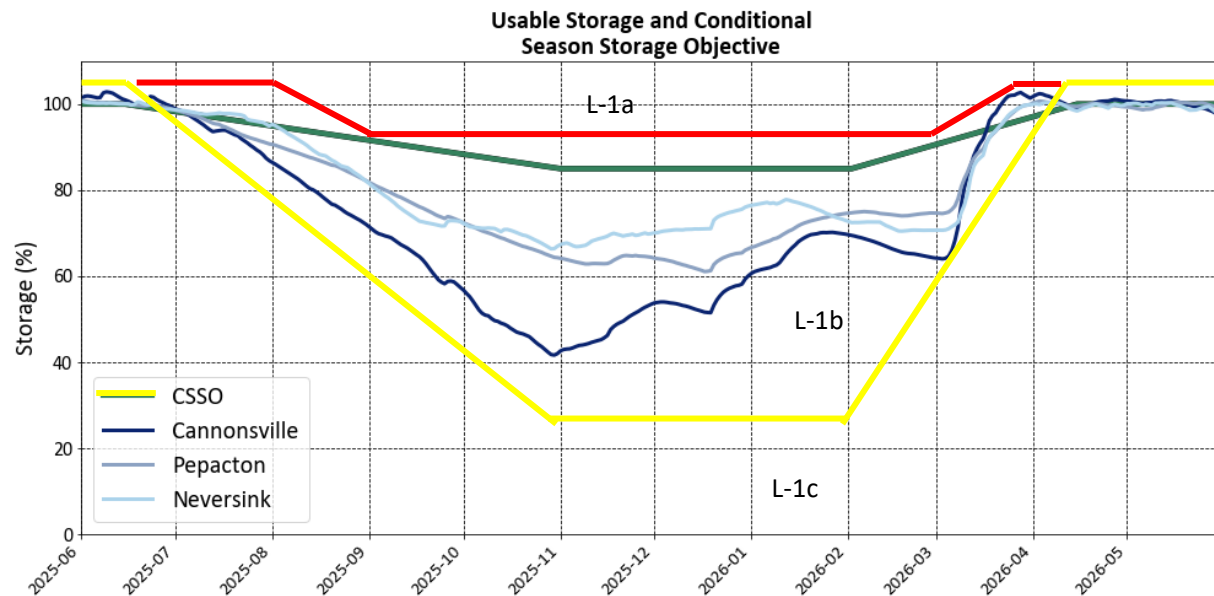
Water Temperature at Lordville



Water Temperature at Bridgeville



Discharge Spill Mitigation



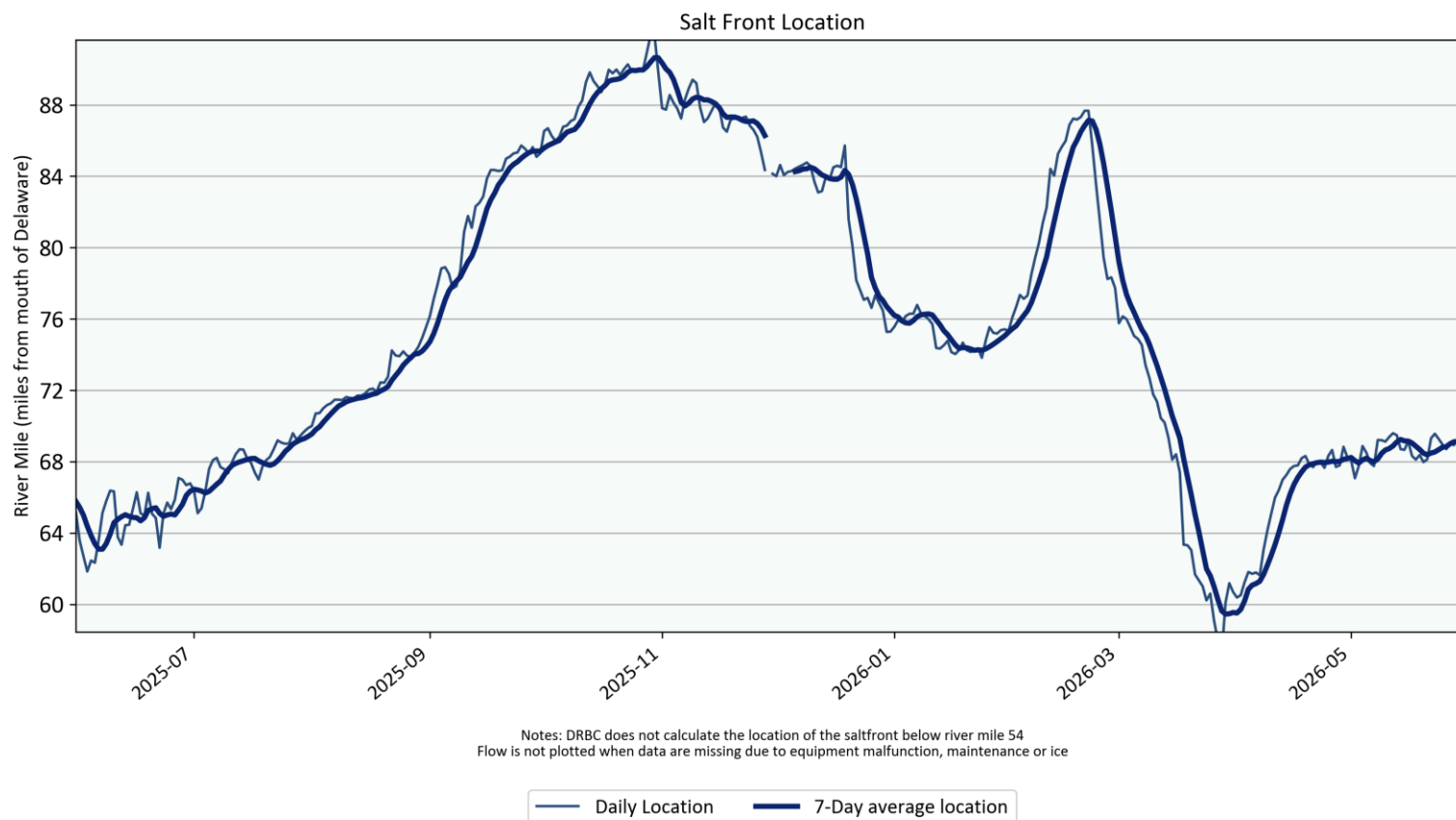
	Spill Volume (MG)	Days
Cannonsville	23,912	77
Pepacton	8,044	47
Neversink	2,518	44

	All L1 Discharge Mitigation Releases (MG)*	Number of days Above the CSSO
Cannonsville	51,541	77
Pepacton	20,007	66
Neversink	9,366	83

*The CSSO is the yellow line, per FFMP Figure 2.

- Locations below the reservoirs can reach NWS Action Flood Stage in the absence of, or prior to, significant spills.
- Hale Eddy gage was above action stage for 2 sequential days.
- Harvard gage was above action stage for 4 non-sequential days and above minor flood stage for 1 day.

Salinity Management (DRB Water Code)



- DRBC is responsible for making releases to manage the salt front
- The Montague Flow Objective is based on the location of the salt front **only during a drought emergency.**
- No drought emergency occurred during this FFMP release year.

Delaware River Basin Water Code: The Delaware River Basin Commission directs reservoir releases from Basin Reservoirs to meet the Trenton Flow Objective under normal and drought conditions.

Summary

- Normal operations were in effect for the release year.
- Montague and Trenton flow objectives were met within operational constraints (weather forecasts, power generation)
- Conservation releases were mixed. 83% Table 4G, and 16% Table 4F.
- Thermal Releases were made for 11 days in summer 2025.
- Discharge mitigation releases (L1-a, L1-b, L1c) were required at all three reservoirs due to the above average rainfall and inflow.

Methodology

- **Flow Objectives:** Amount of water released for flow objectives is calculated by summing the NYC WSCC spreadsheet directed release column for each reservoir. FFMP Bank releases (e.g., thermal releases) are excluded from the releases for Montague.
- **Diversions:**
 - NJ Diversion is calculated using the daily discharge observations from the USGS Port Mercer gage, 01460440. The averages are of the daily discharge for each month and the average of the daily discharge for the entire year (release year 6/1-5/31).
 - NYC diversion is determined from the WSCC data spreadsheet (column E, daily total). The averages are of the daily discharge for each month and the average of the daily discharge for the entire year (release year 6/1-5/31).
- **Conservation release volume:** the sum of the conservation released based on the zone (L1, L1-a, L1-b, L1-c, L2) and FFMP Table (4E, 4F, 4G). It should be noted that more water may have been released for Montague. For example, if no releases were required for Montague, this is the amount of water that would have been released with minor differences related to transitions among tables and zones. REV1 amounts refer to the first revision of D-77-20 CP and are the total amount over the release year that would have been released based on this release program.
- **Bank Use:** was obtained from the accumulated Daily River Master Data, dated June 1, 2026.
- **Discharge Mitigation Releases (CSSO)** – volume of water released when a reservoir is in L1. Number of days above CSSO: days when reservoir is in L1-a or L1-b.