Delaware River Basin Commission

Hydrologic Conditions

Anthony Preucil

Water Resource Scientist

Water Management Advisory Committee

February 17, 2022

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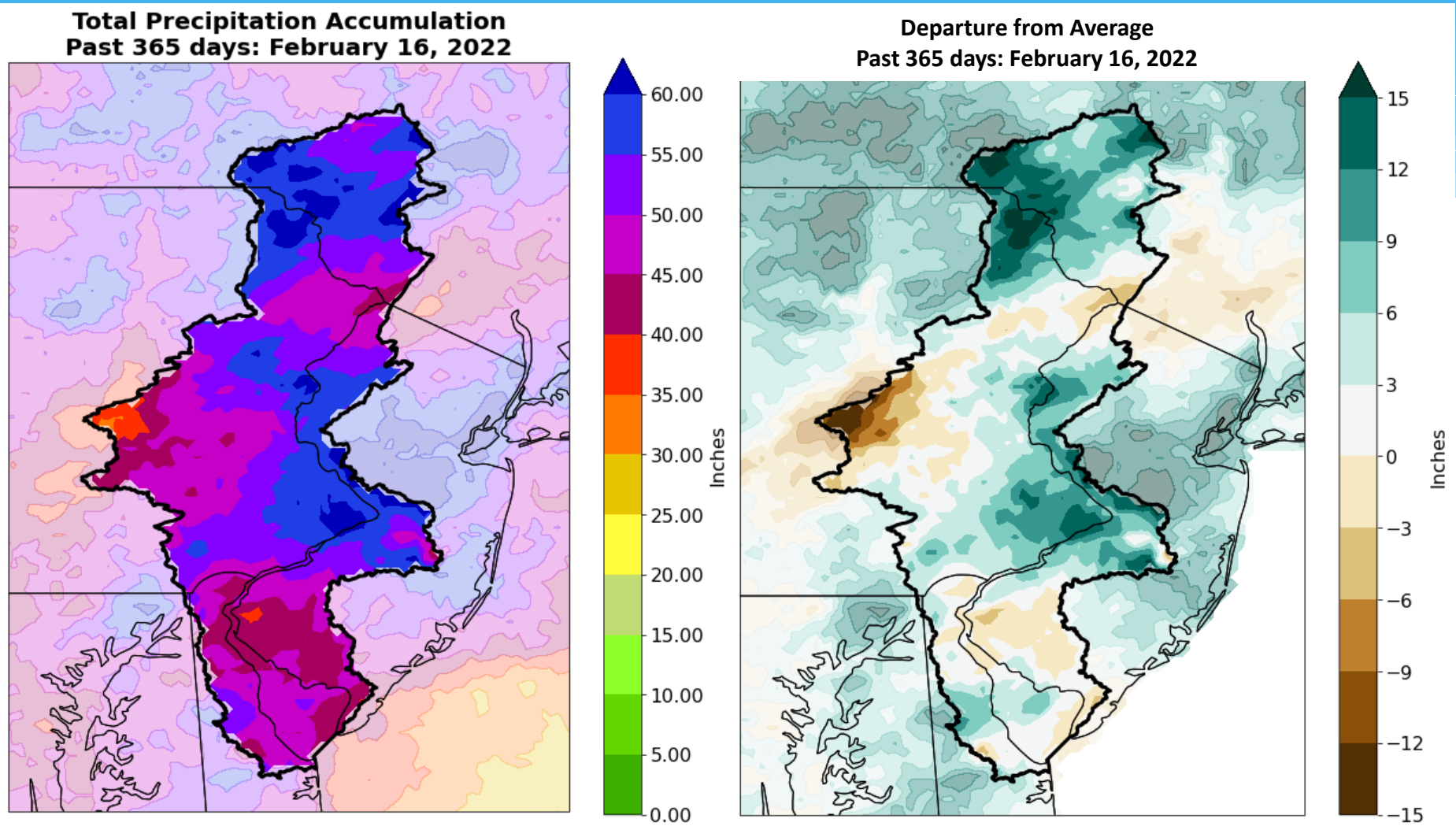
365 Day Precipitation



Data Source: AHPS

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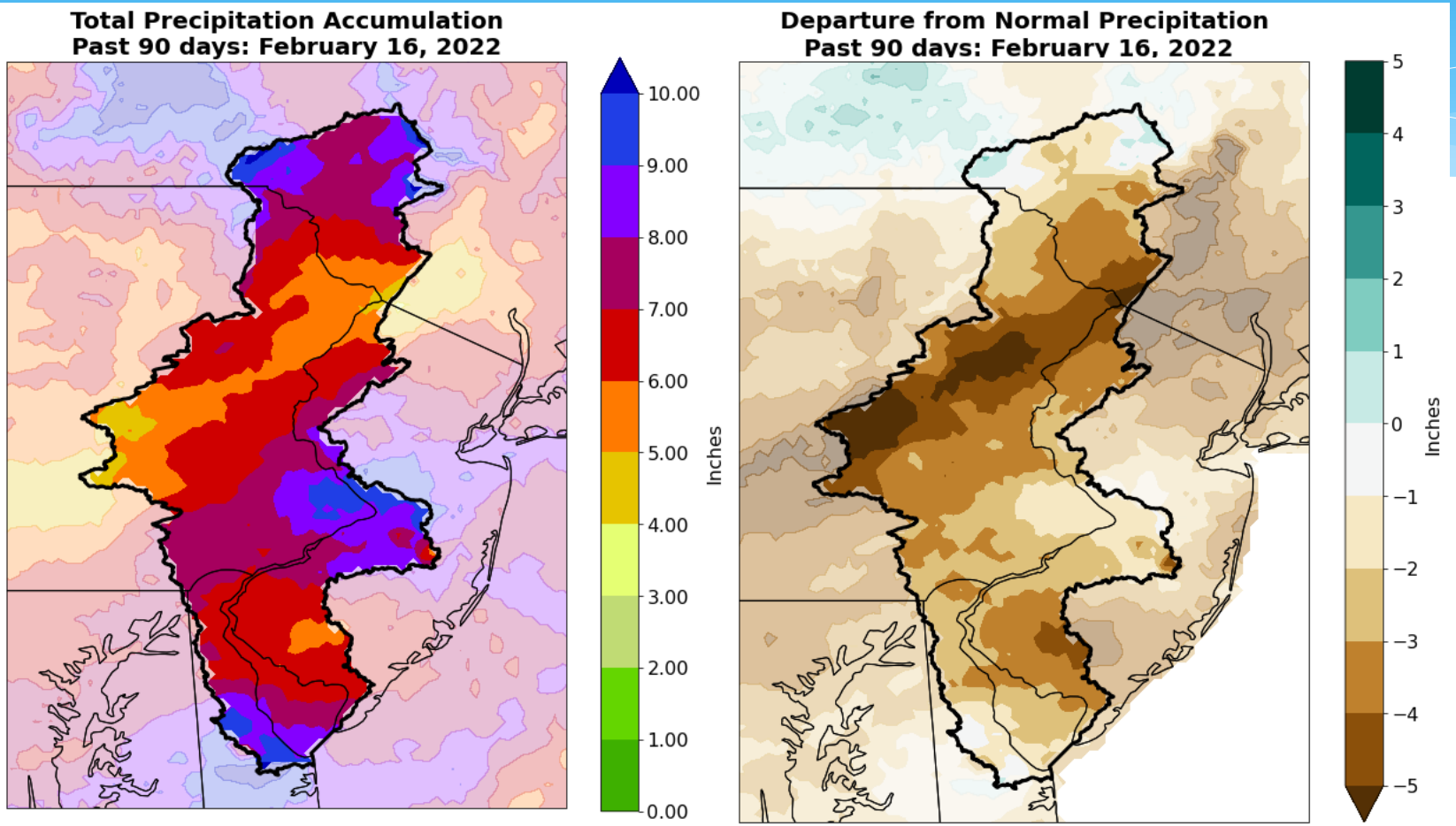
90 Day Precipitation



Data Source: AHPS

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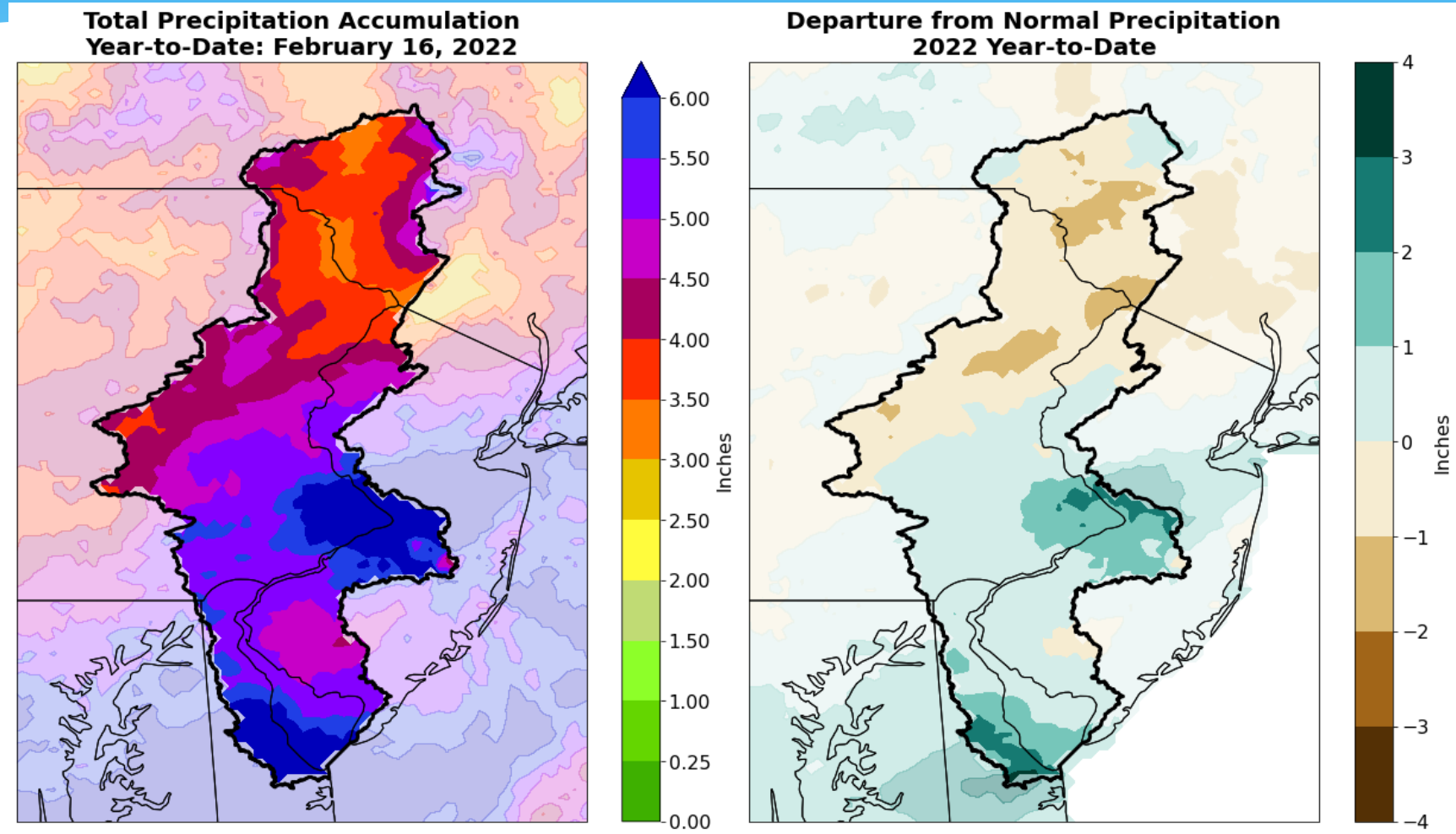
Year to Date Precipitation



Data Source: AHPS

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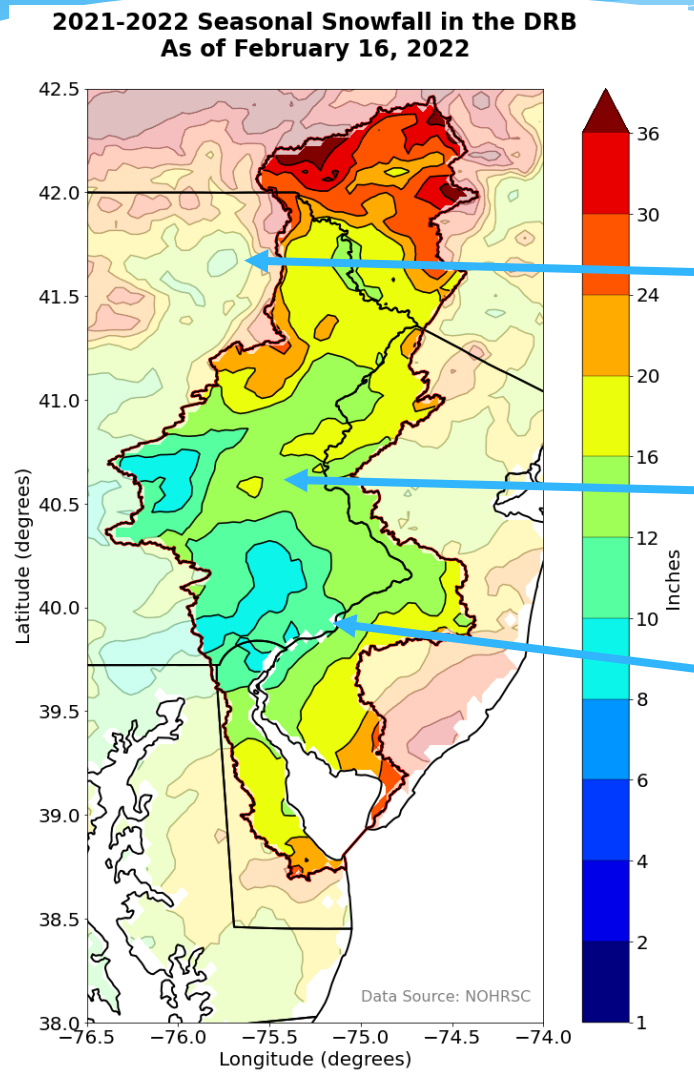
Winter 2021-2022



- Snowfall compared to normal
  - Scranton Airport, PA
    - 2021-2022: 13.8 inches
    - Seasonal Average: 43.7 inches (1948 – 2019)
  - Allentown-Lehigh Airport, PA
    - 2021-2022: 14.0 inches
    - Seasonal Average: 32.8 inches (1945 – 2019)
  - Philadelphia International Airport, PA
    - 2021-2022: 12.5 inches
    - Seasonal Average: 22.2 inches (1940 – 2019)

Data Sources: NOHRSC, ACIS

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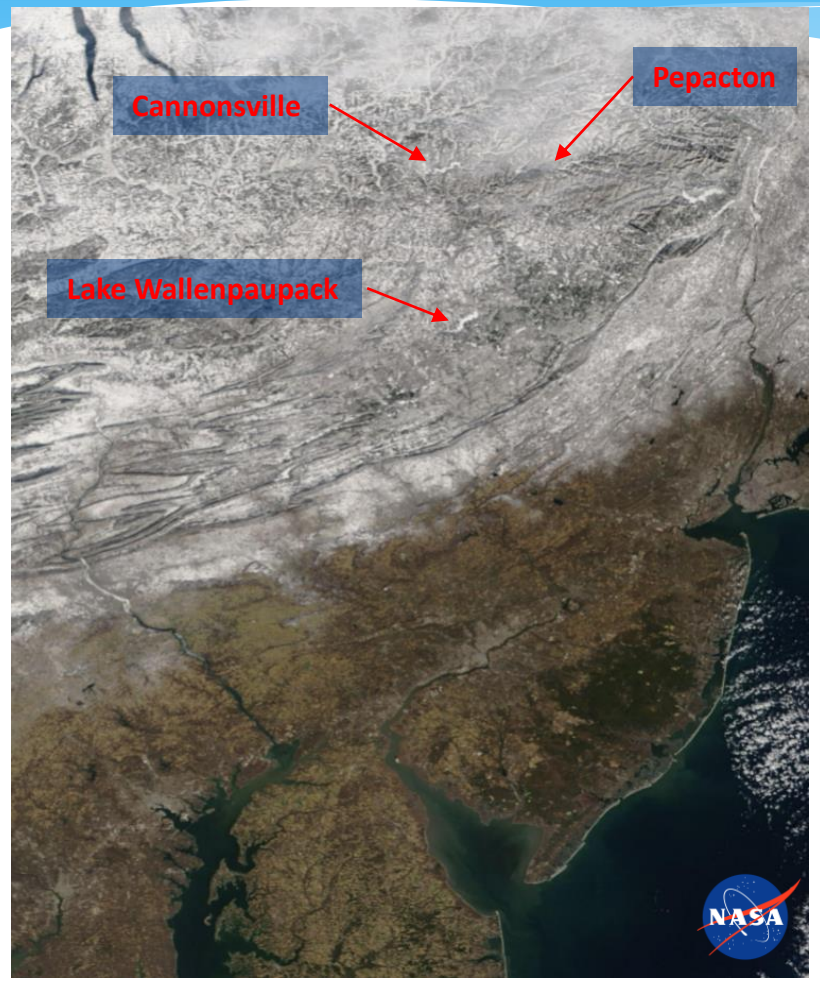
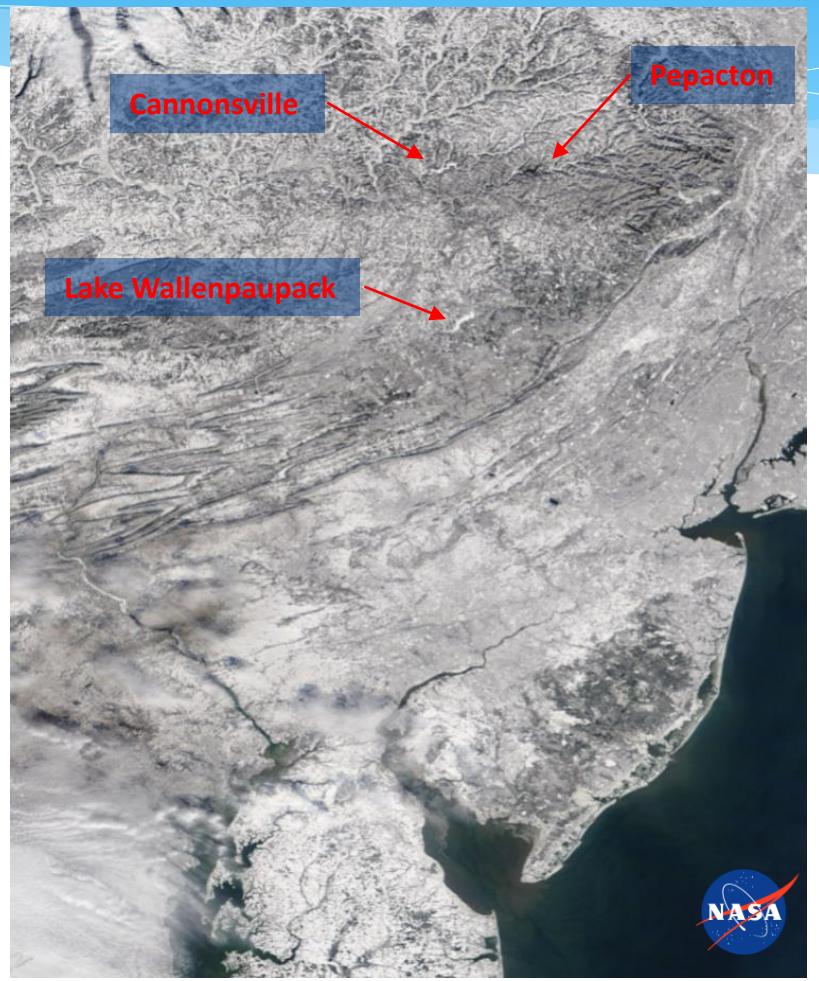
Basin Completely Snow-Covered

January 25, 2022



January 30, 2022



Following a Nor'Easter storm system on January 29, 2022, the basin was completely covered with snow

Data Source: NASA TERRA

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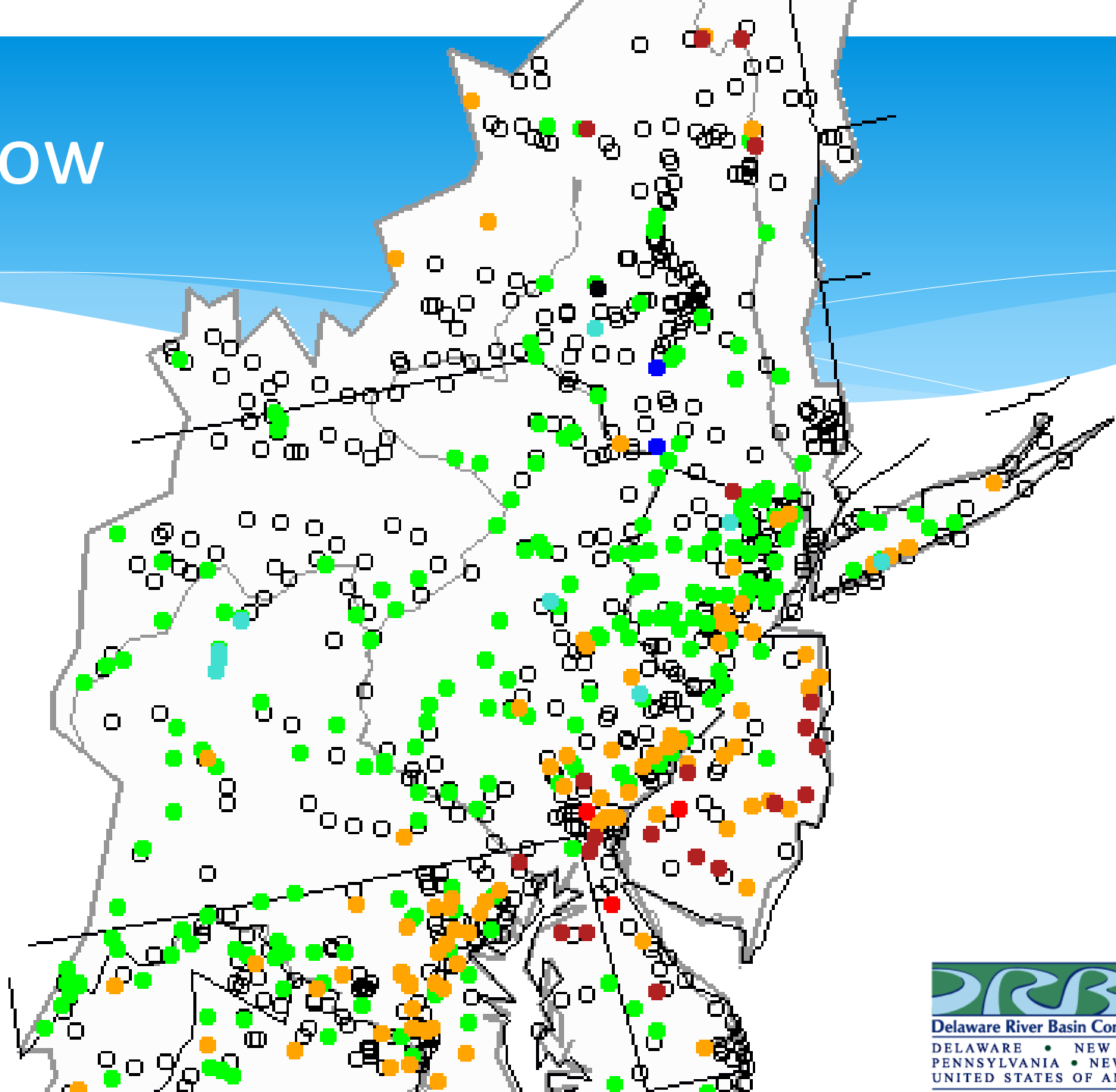
Streamflow

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

Map last updated: 8:30 AM
February 17, 2022



Data Source: USGS

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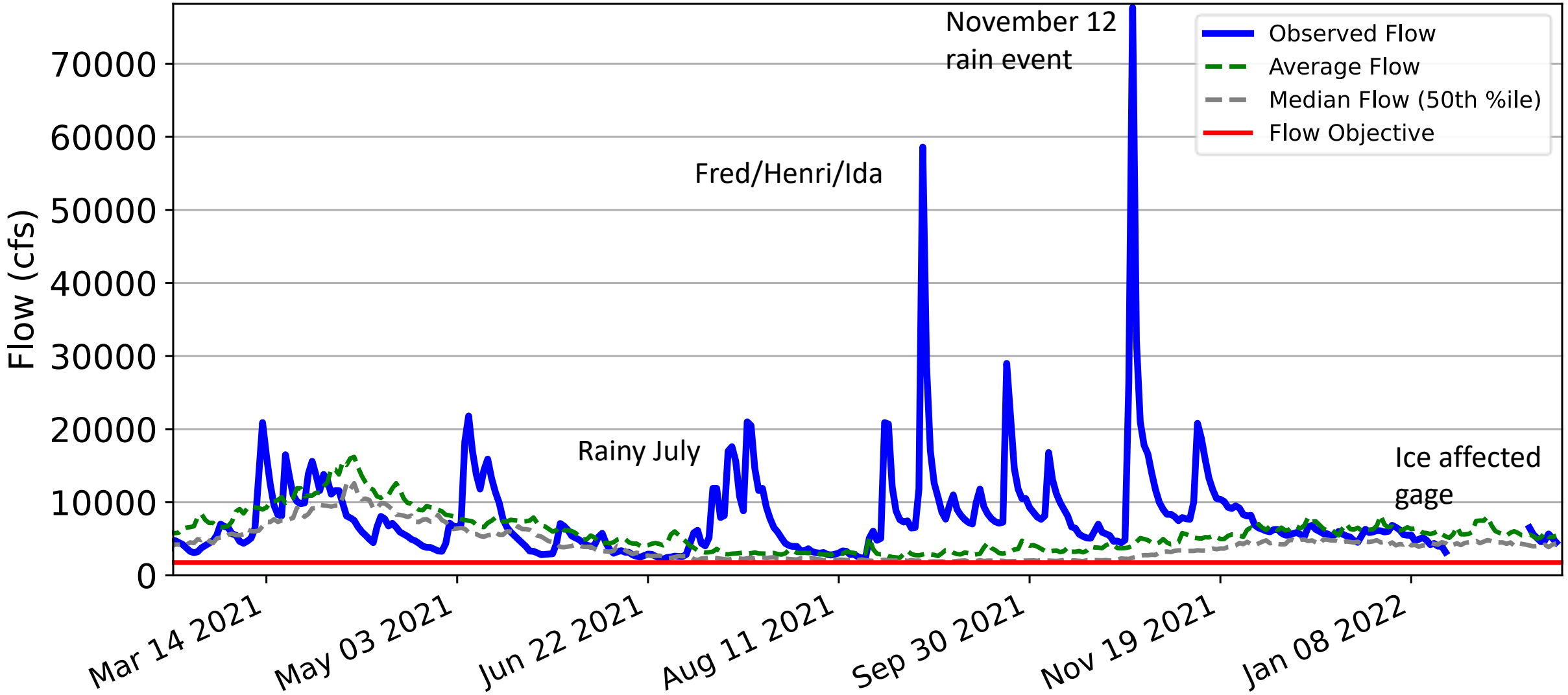
Updated: 2022-02-16 13:48

Flow at Montague, NJ



Data Source: USGS

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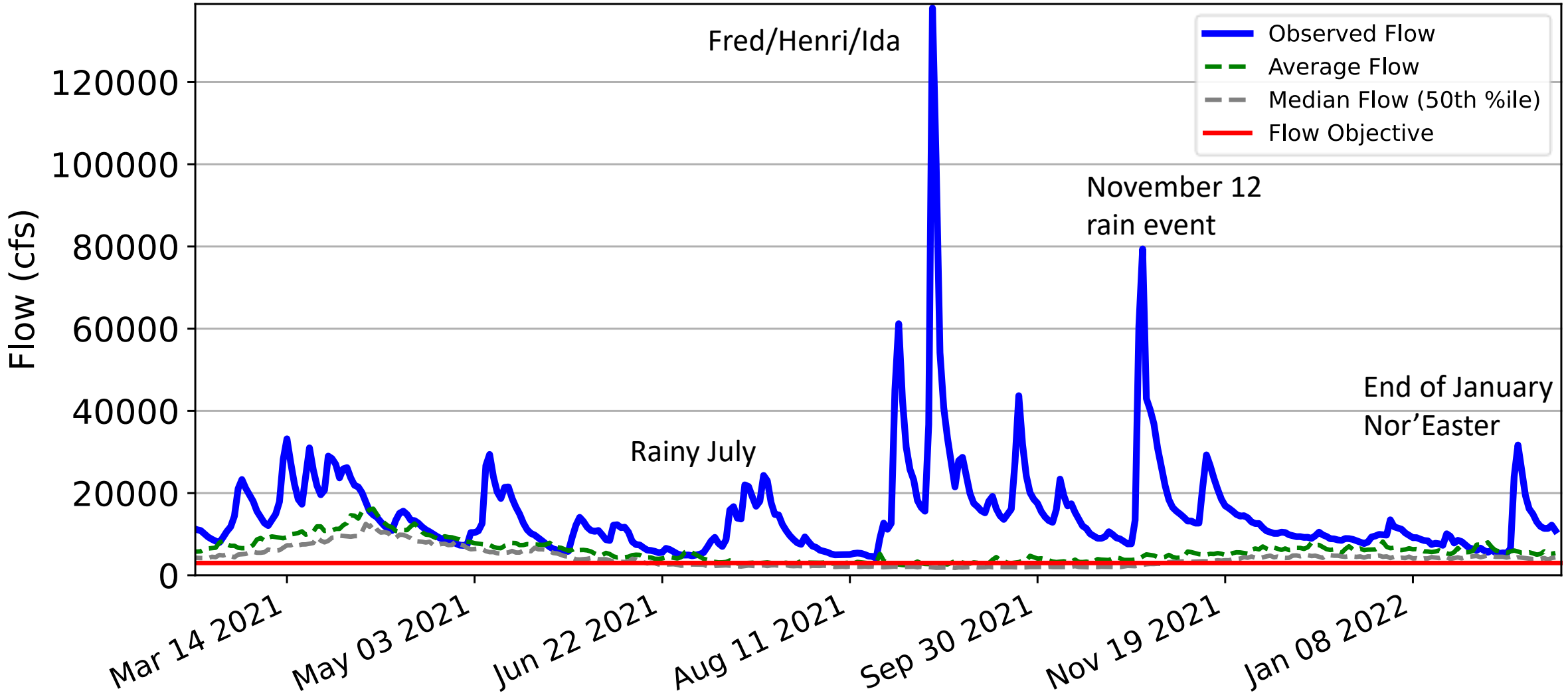
Updated: 2022-02-16 13:48

Flow at Trenton, NJ



Data Source: USGS

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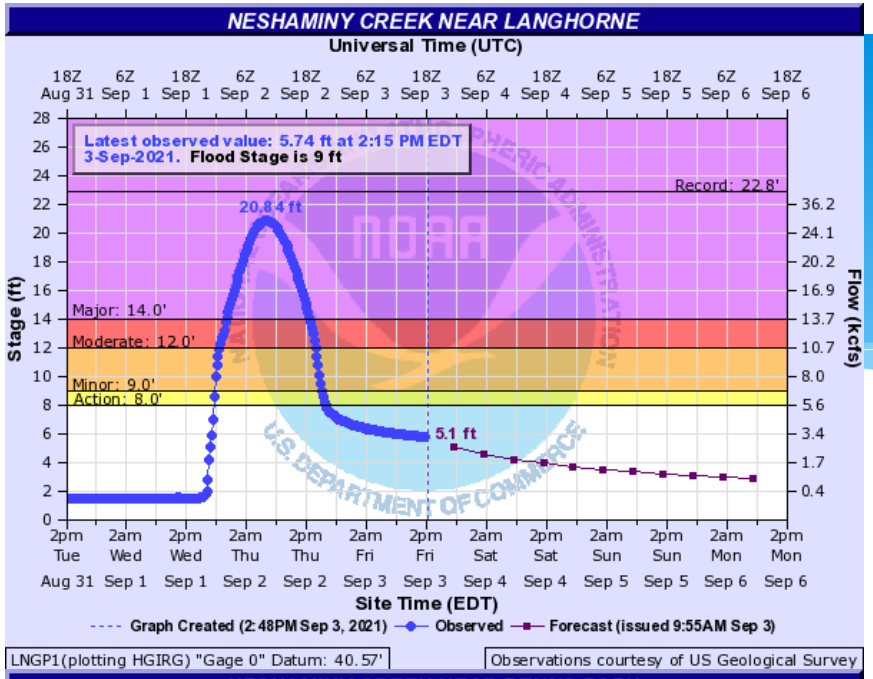
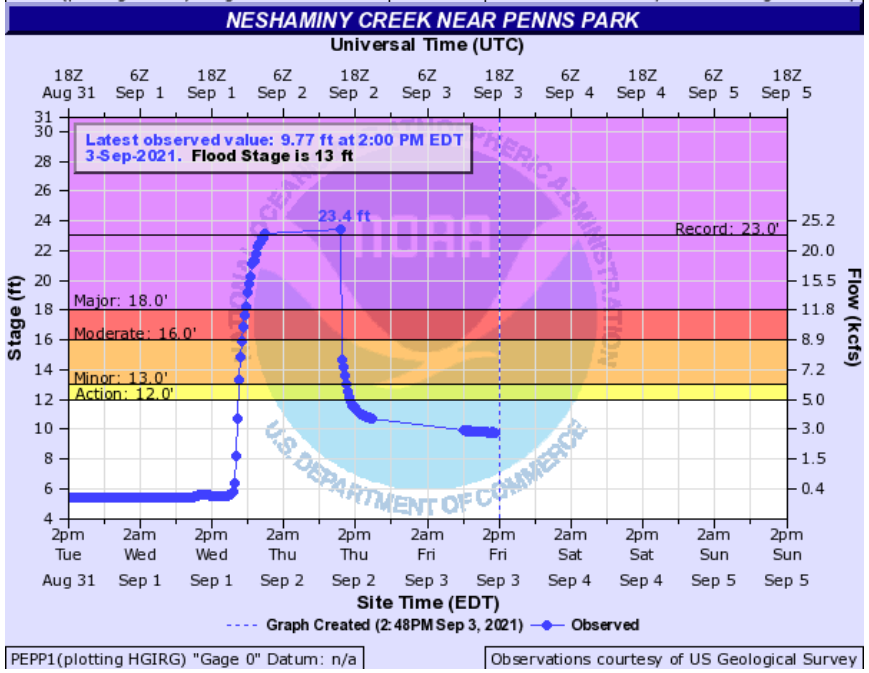
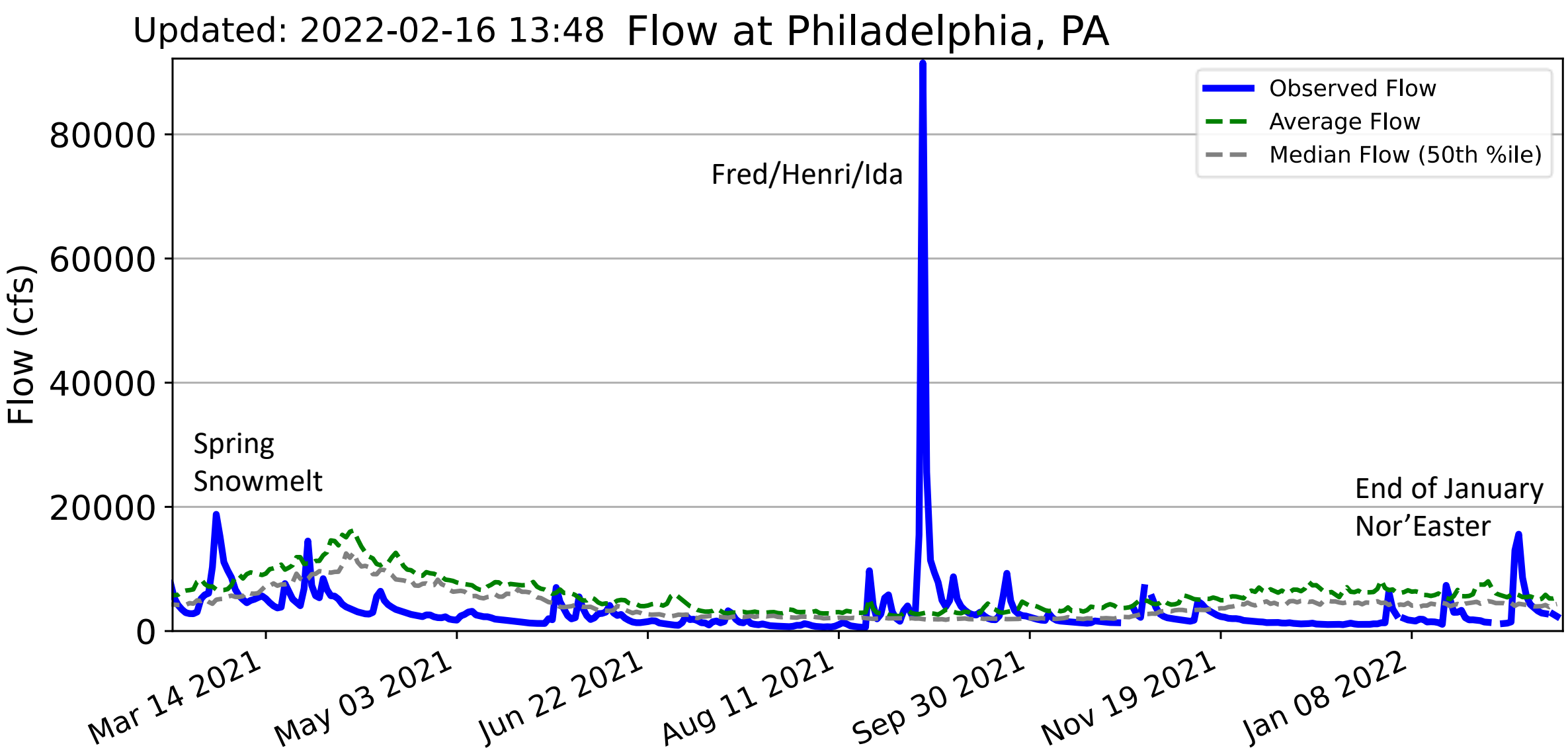




Data Source: AHPS

* Neshaminy Creek near Bensalem
* Images Courtesy of John Yagecic, DRBC



Data Source: USGS

Note – November 12 rain event was an upper basin event, and does not show up in the Schuylkill Basin

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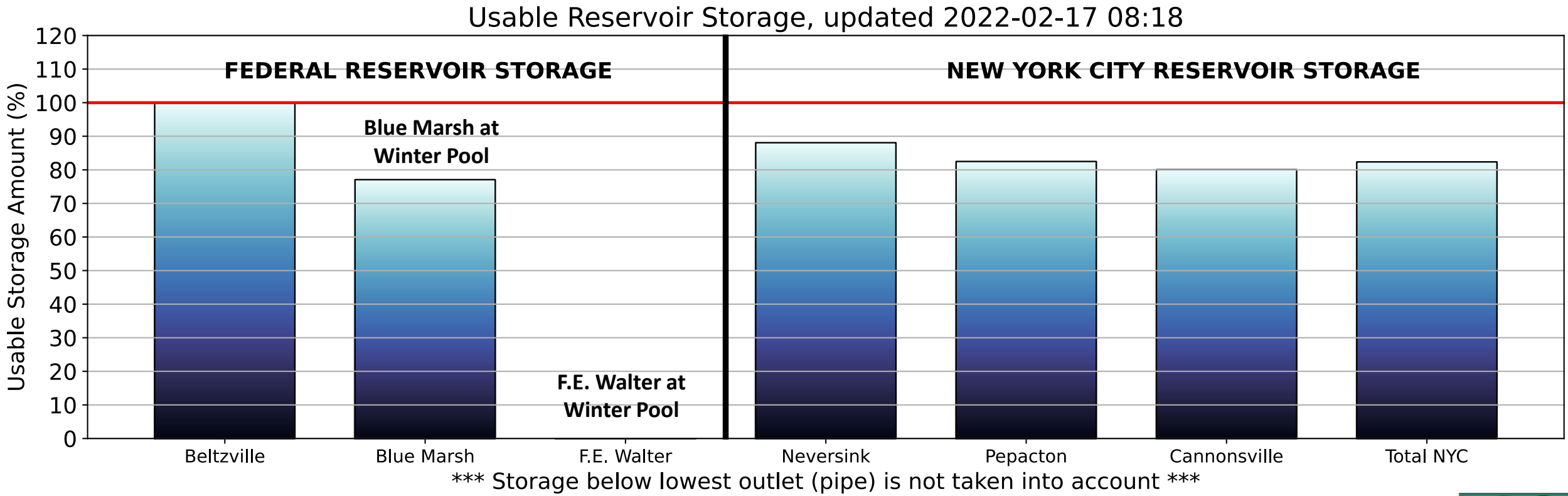
Basin Storage



Data Sources: USGS, AHPS

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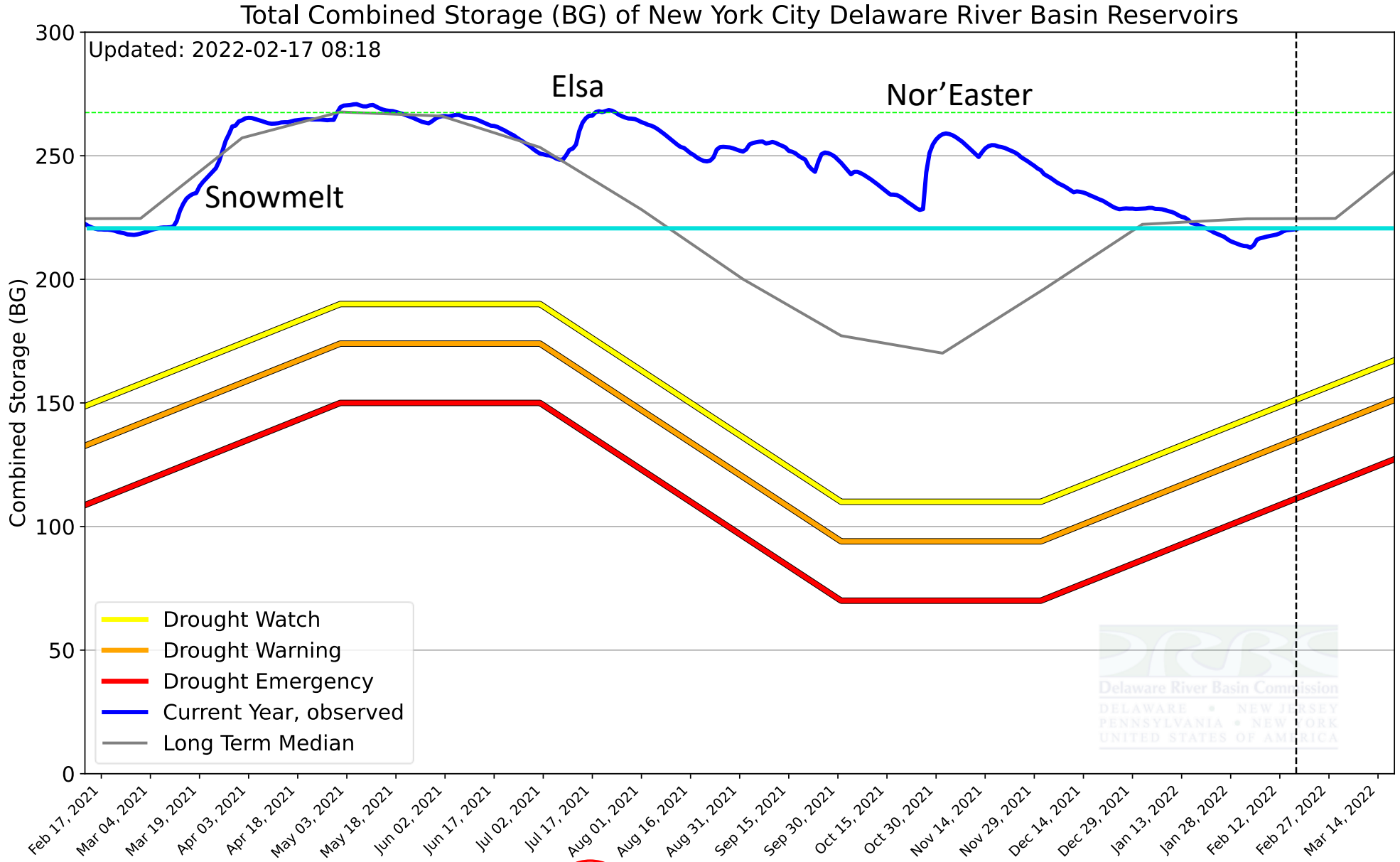

Usable Storage	Cannonsville	Pepacton	Neversink	Total
BG	74.8	114.9	30.6	220.3
%	80.1	82.5	88.1	82.4

BG above drought watch = 69.0
BG above drought warning = 85.0
BG above drought = 109.0
BG below median = 4.3
BG above one year ago = 0.2

Data Source: USGS

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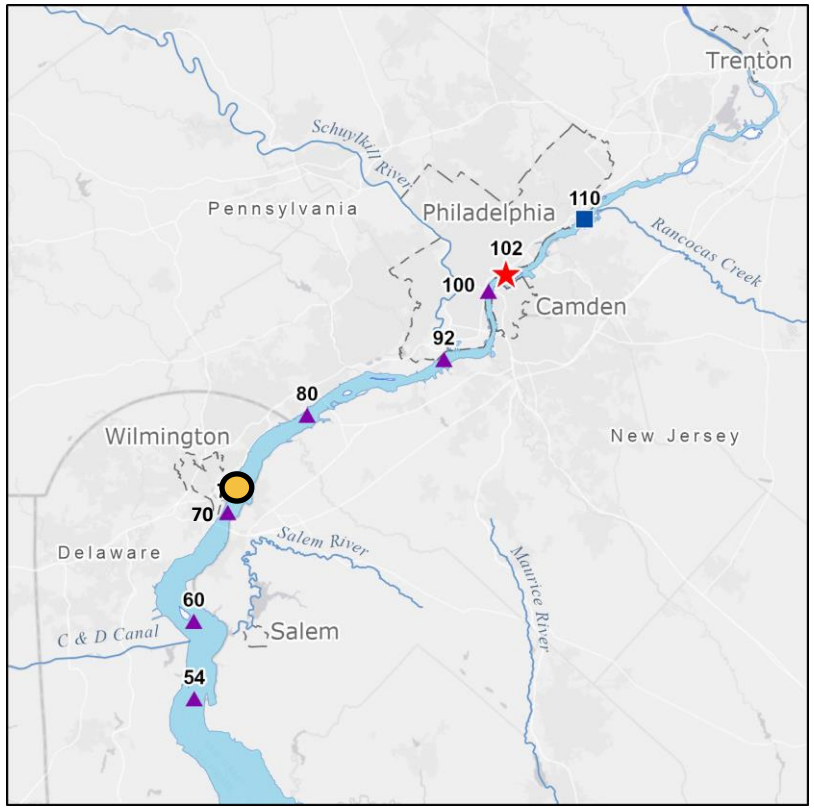
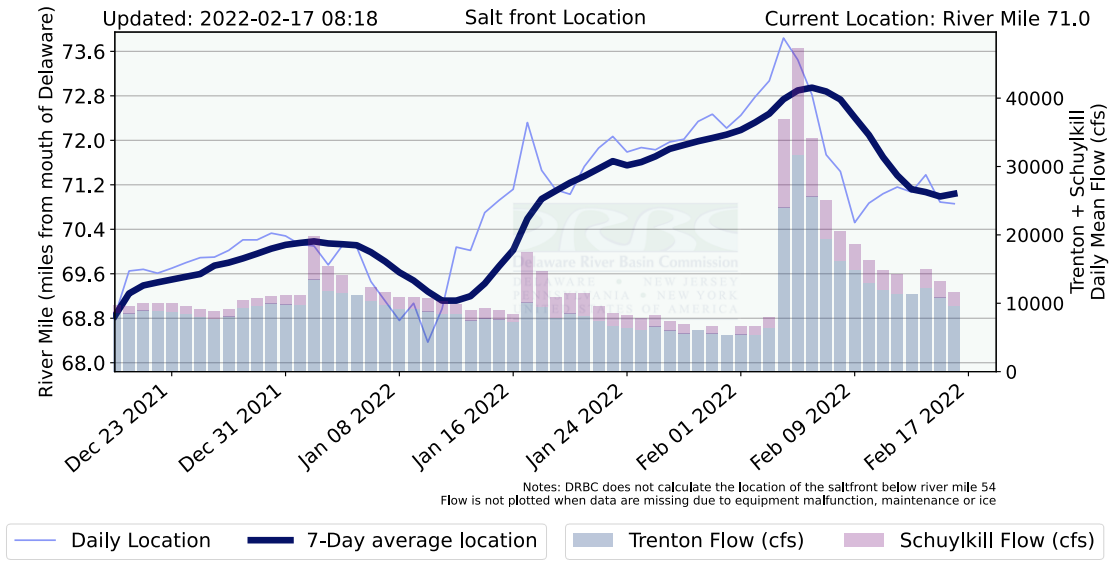
Salt Front

hydrosnap.drbc.net

Current Location: Near mouth of the Christina River, DE



= current location



Chlorides

7-Day Average RM Location of 250 mg/L

Current (02/17/2022): 71.0

February Median: 71.0

The Flow Objective at Trenton was designed to repel salinity for the protection of drinking water treatment facilities and industrial intakes.

Combined Trenton and Schuylkill Flow has been added to the salt front graphic

Data Source: USGS

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Groundwater Conditions

COUNTY	STATE	DATA SOURCE	WELL ID	INDICATOR AS OF 2022-02-16
Wayne	PA	USGS	WN 64	Normal
Monroe	PA	USGS	MO 190	Drought Watch
Carbon	PA	USGS	CB 104	Normal
Schuylkill	PA	USGS	SC 296	Normal
Lehigh	PA	USGS	LE 372	Normal
Bucks	PA	USGS	BK 1020	Normal
Chester	PA	USGS	CH 10	Normal
Delaware	PA	USGS	DE 723	Drought Watch
Lebanon	PA	USGS	LB 372	Normal
Burlington	NJ	USGS	050689	Normal
Cumberland	NJ	USGS	110042	Normal
New Castle	DE	USGS	db24-18	Below Normal
Woodbourne	NY	USGS	sv-535	Normal

Data Source: USGS

Drought Status is an indicator of current water levels compared to previous water levels for this time of the year

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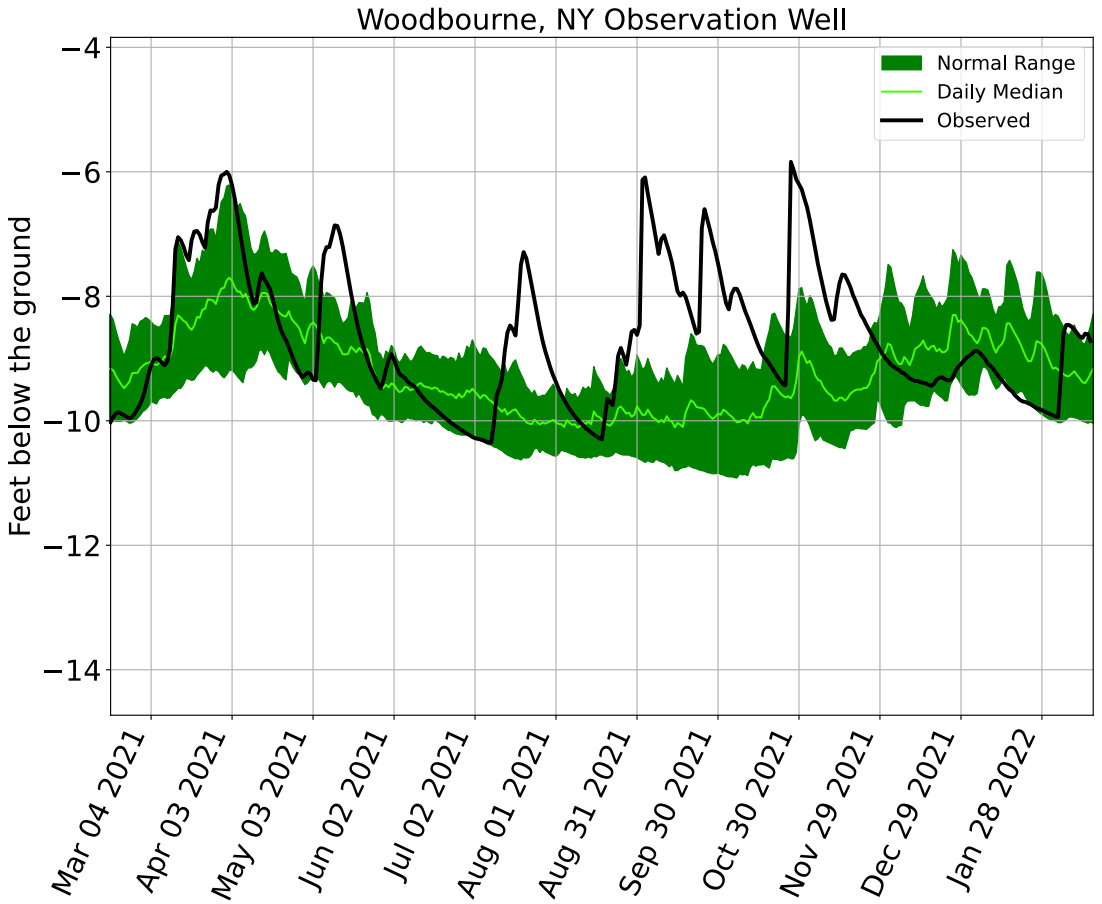
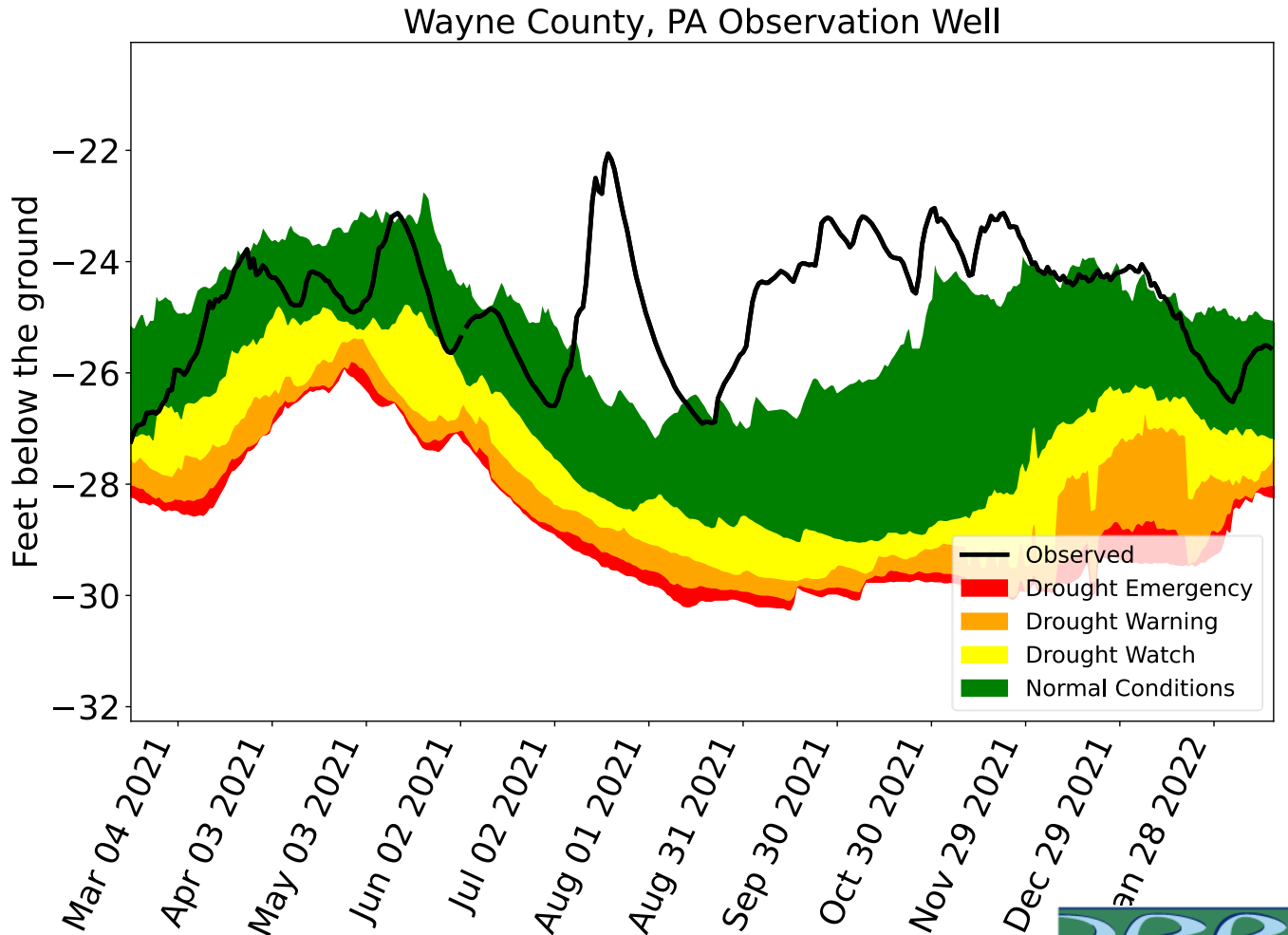
Upper Basin





Data Source: USGS

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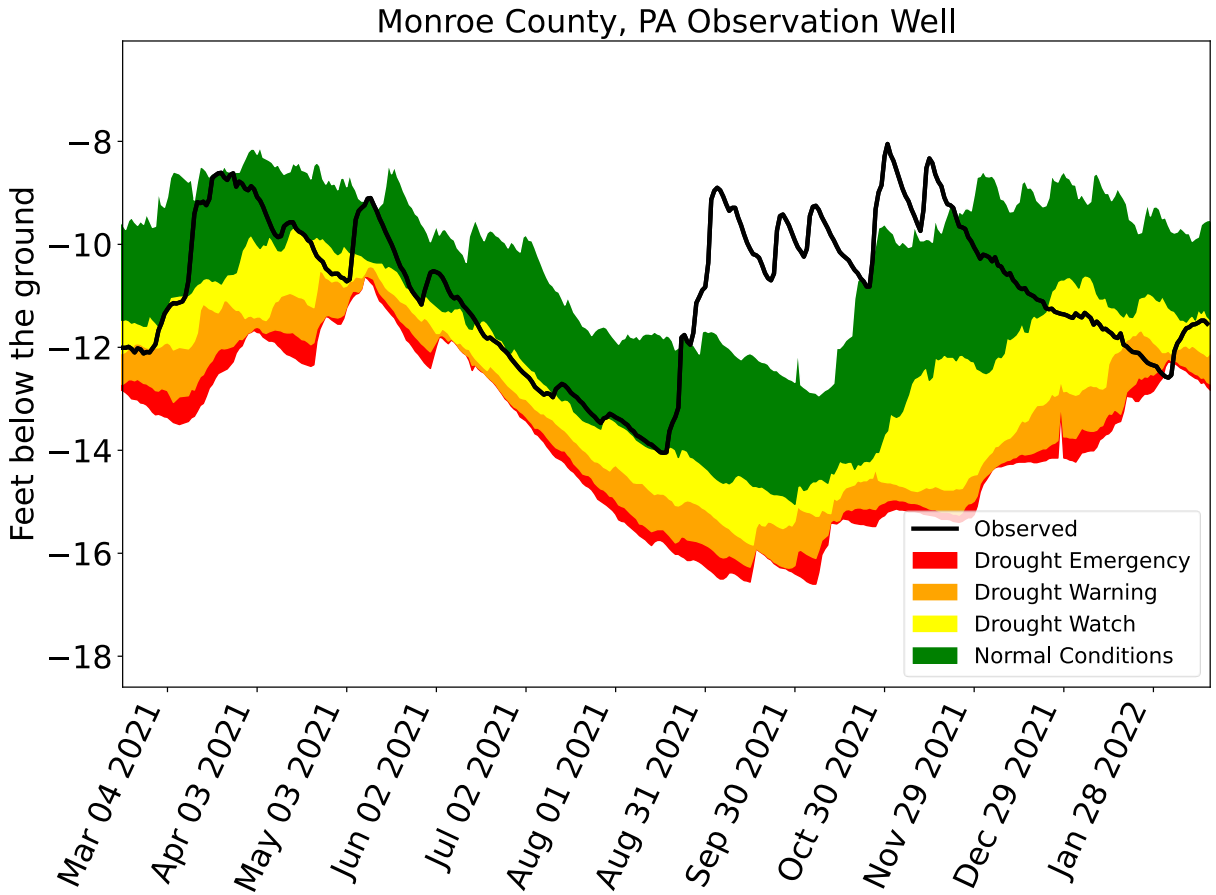
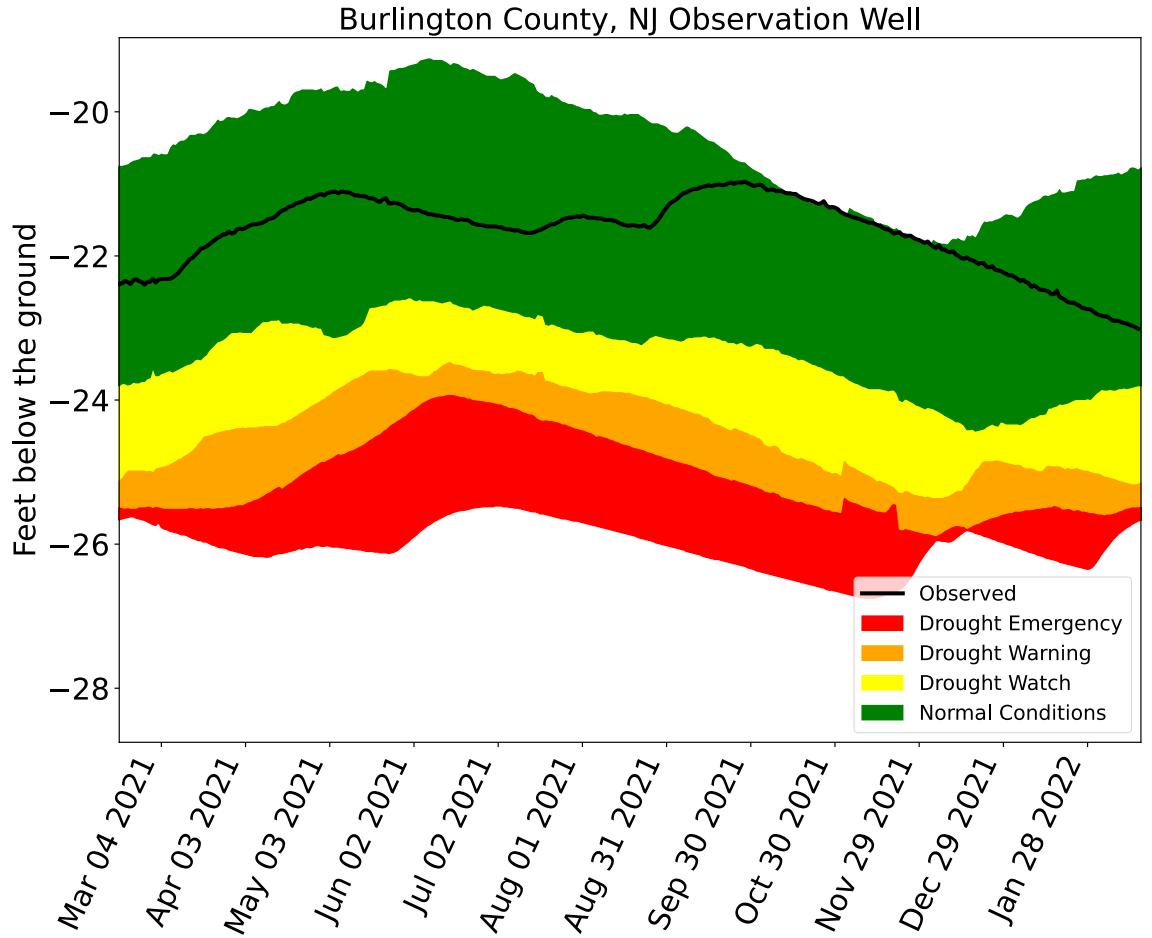
Middle Basin





Data Source: USGS

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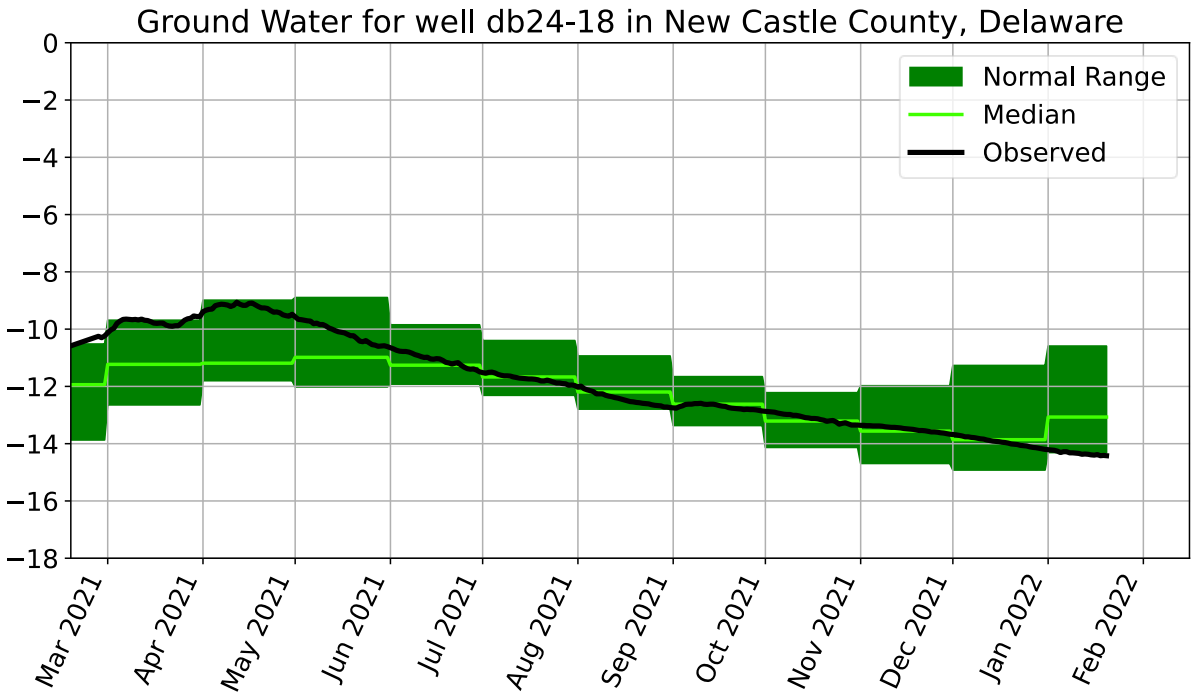
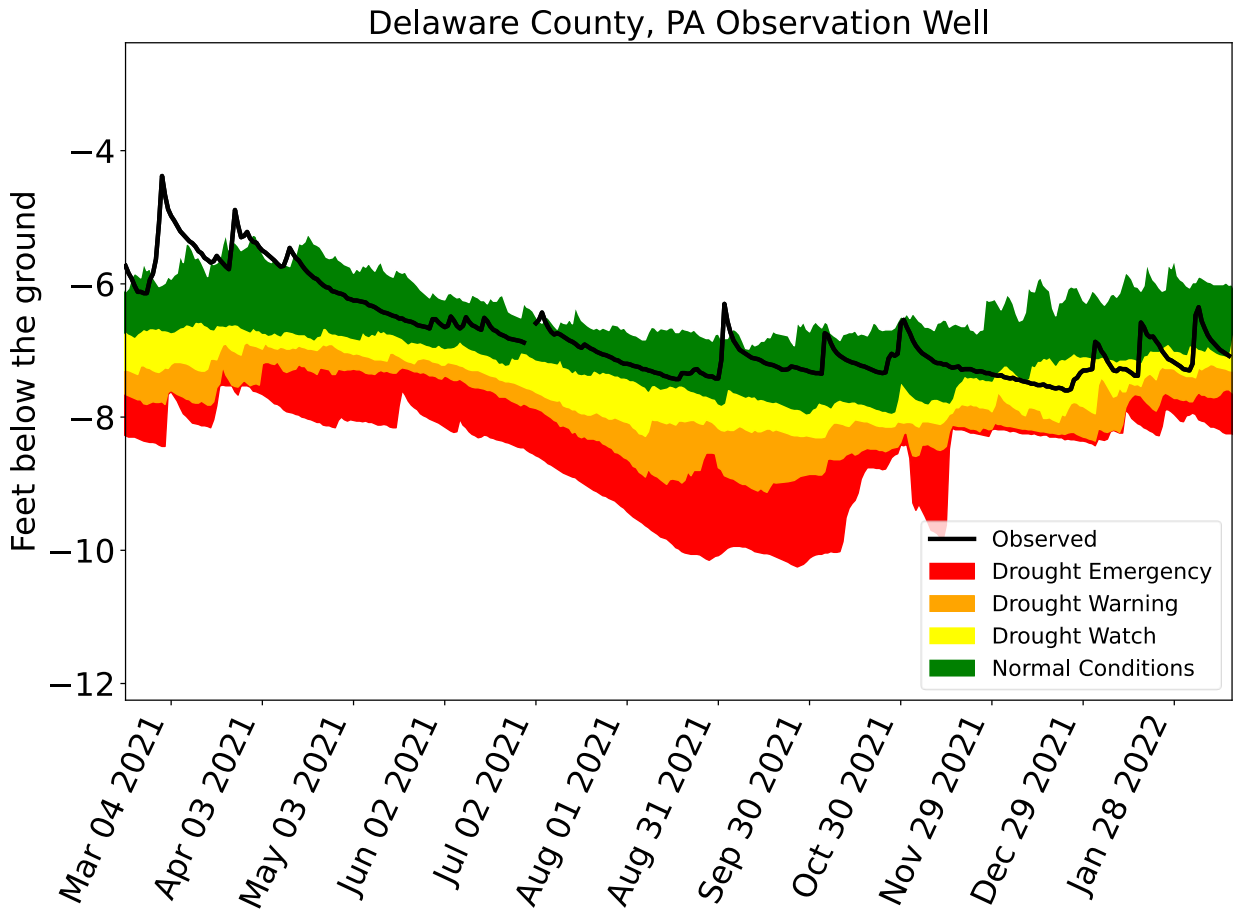
Lower Basin





Note: Data for New Castle County, DE is updated through January 15, 2021.

Data Source: USGS, DGS

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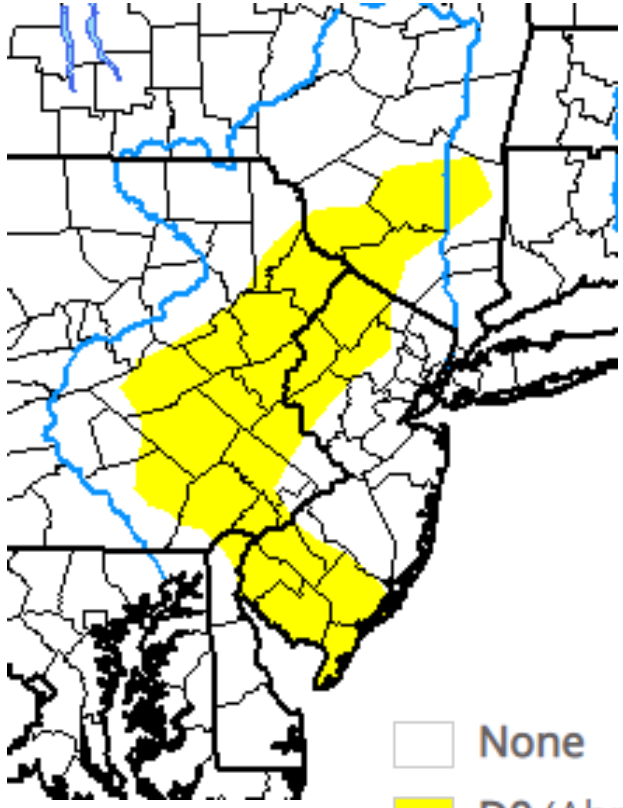
Drought Monitor

February 15, 2022



None

D0 (Abnormally Dry)

D1 (Moderate Drought)

Data Source: NOAA CPC

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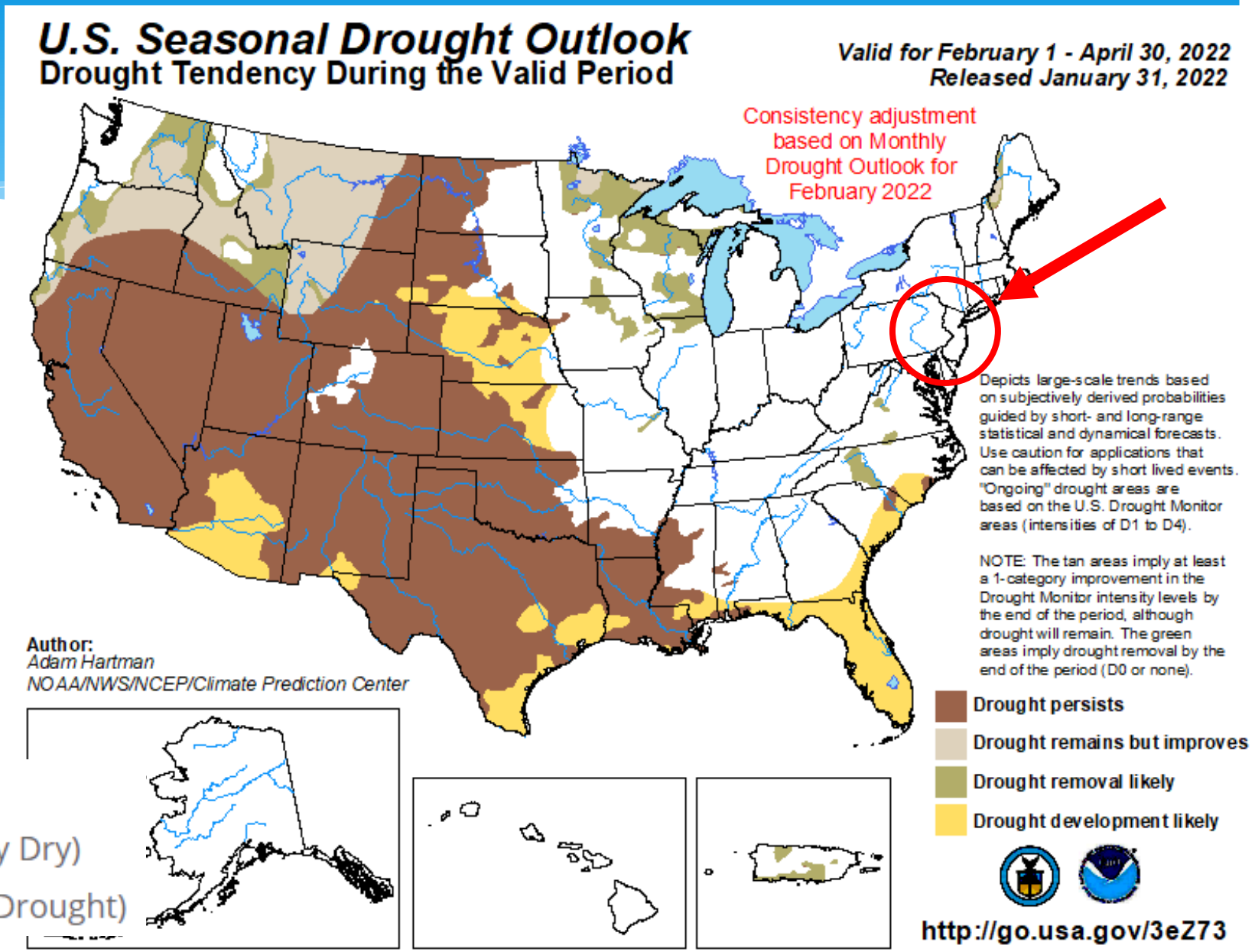


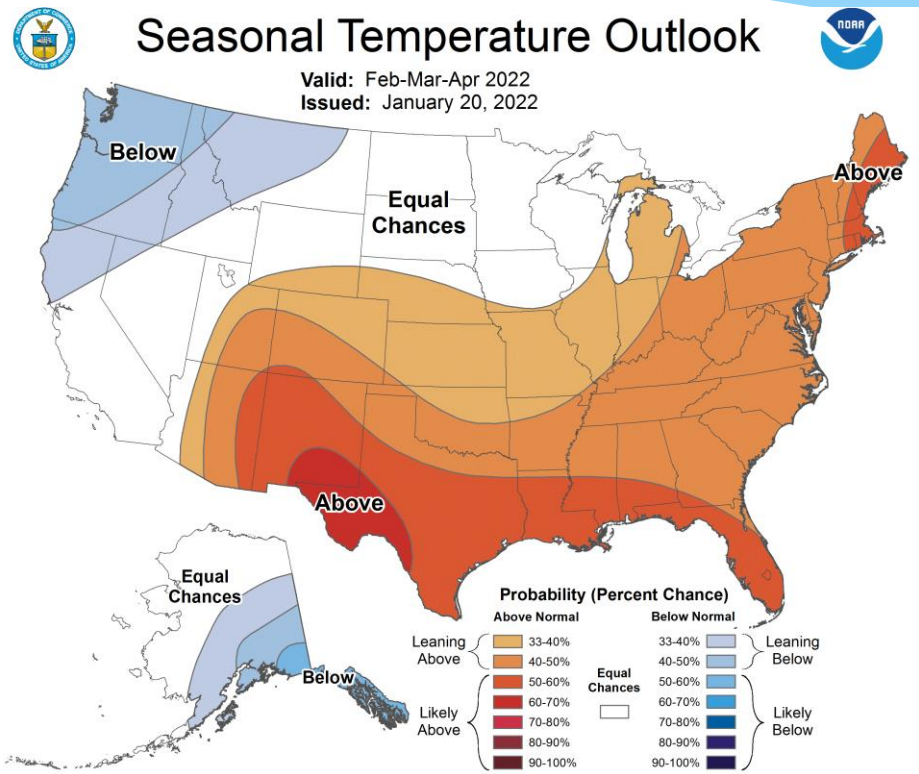
Spring Outlook 2021 - 2022

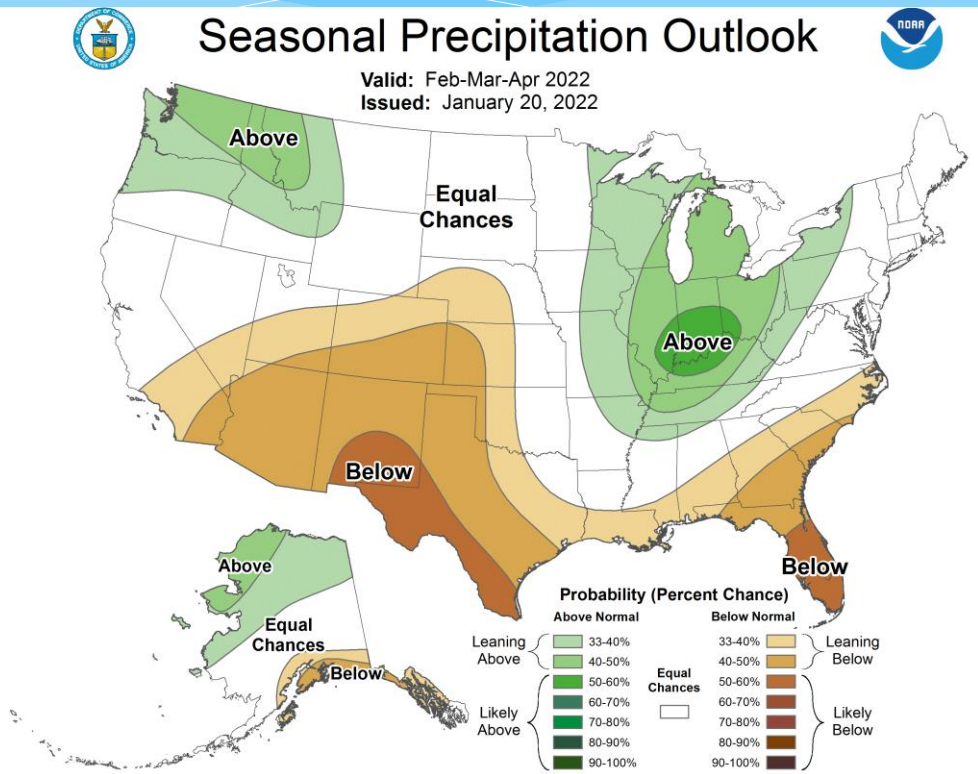
La Nina continuing

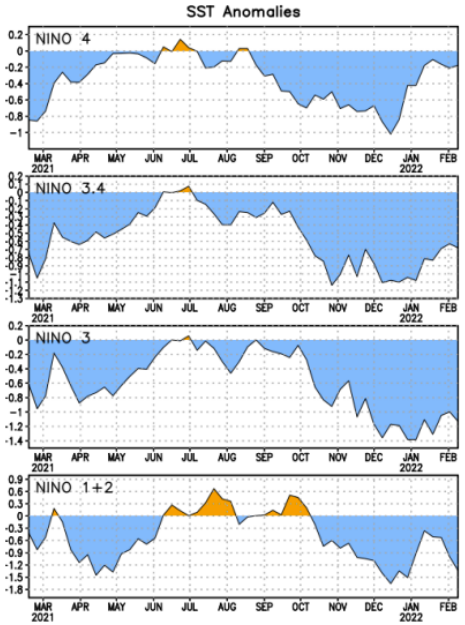
6 more weeks of winter

VS

Spring Outlook calls for warmer than average temperatures and equal chances for above/below average precipitation







Blue = La Nina Conditions

Data Source: NOAA, CPC

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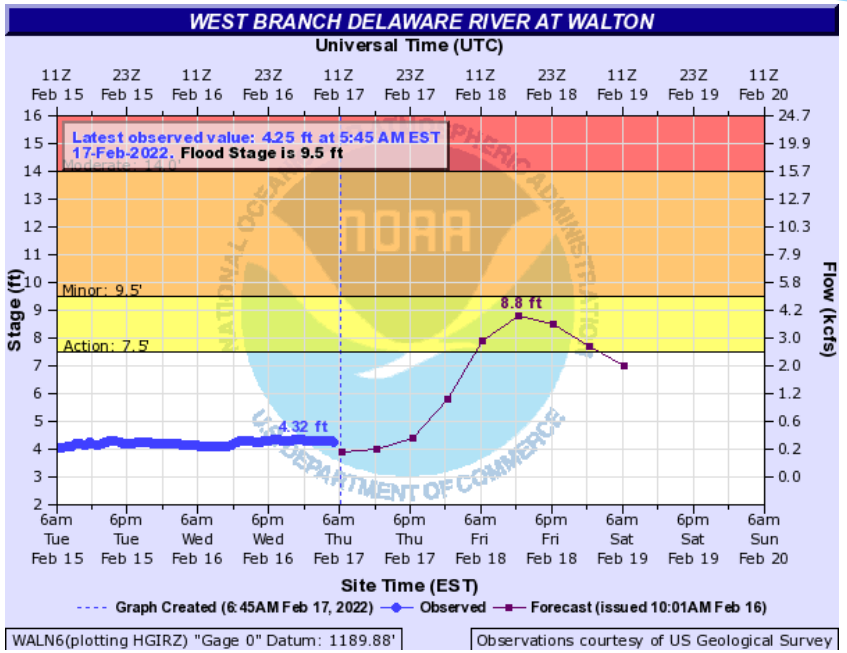
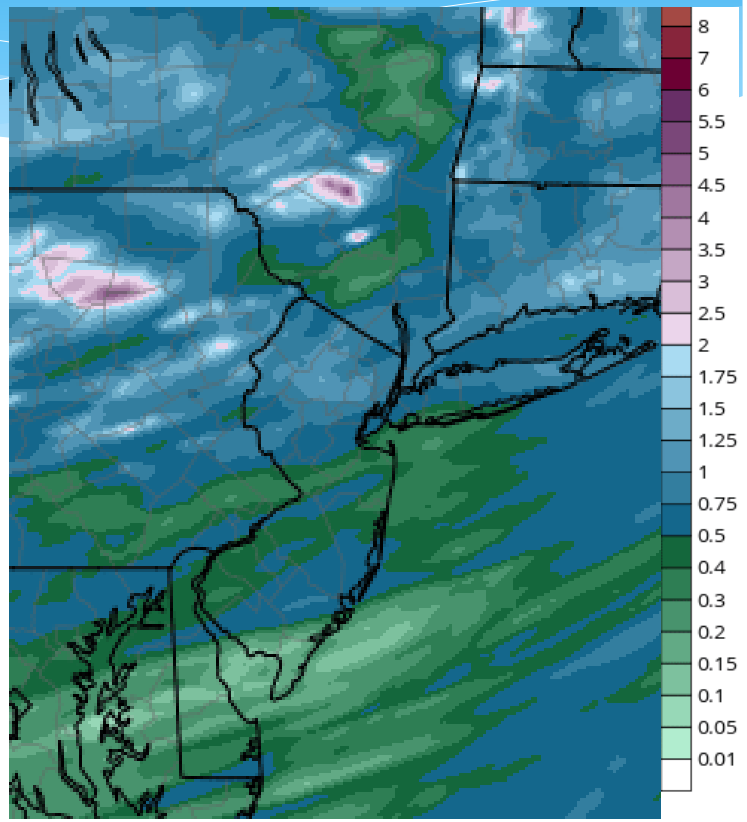
High Flows Anticipated

- Combined snowmelt and heavy rain Thursday evening (1-2 inches) will lead to action stage flooding above the NYC reservoirs
- This water will be intercepted by Cannonsville Reservoir



NAM Model Output



Data Source: AHPS, TropicalTidbits

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