

# Delaware River Basin Commission

## Hydrologic Conditions

***Anthony Preucil***

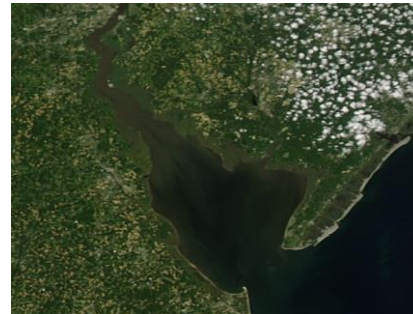
Water Resource Scientist

Water Management Advisory Committee

June 18, 2020

10:00 AM

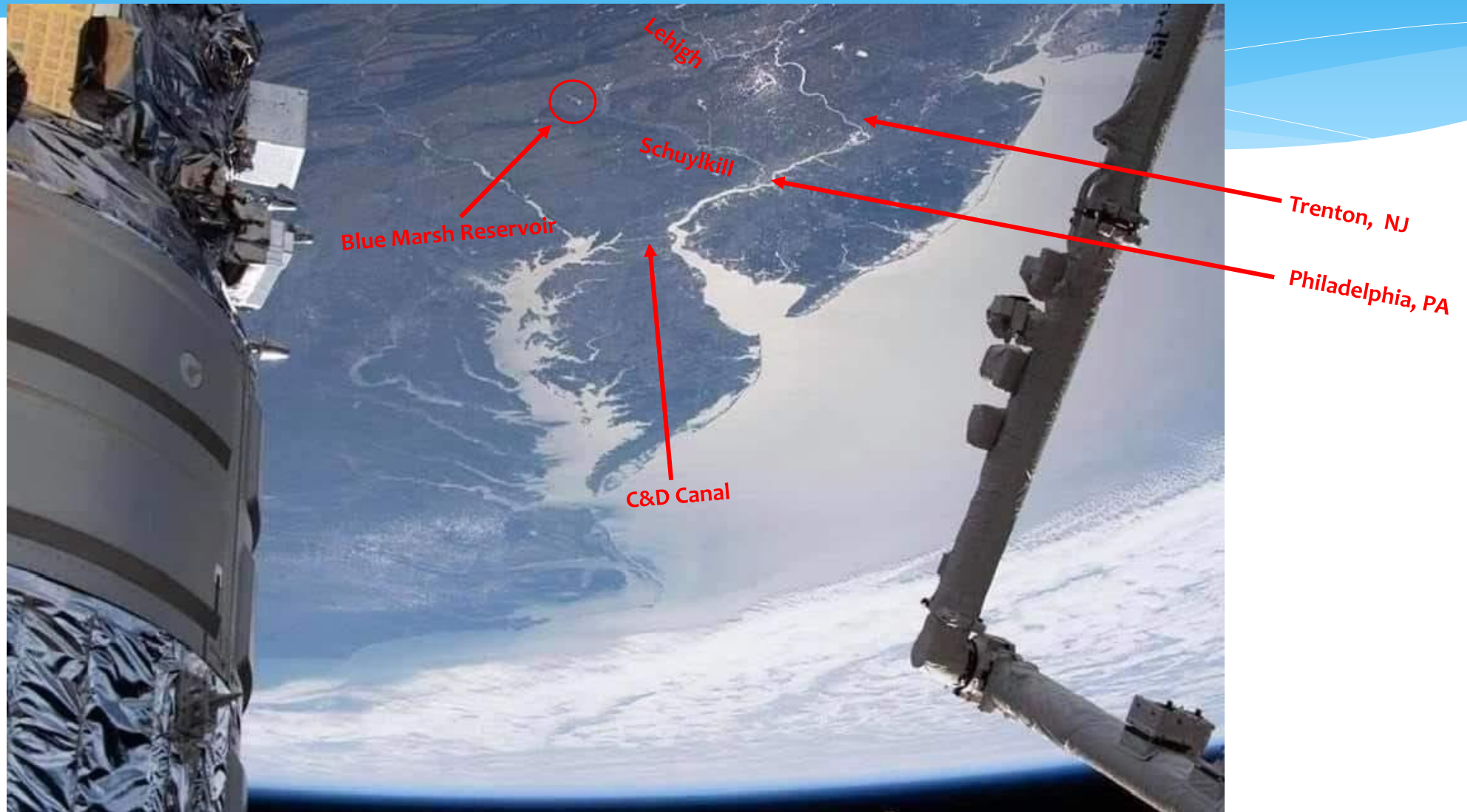
Presented to an advisory committee of the DRBC on June 18, 2020.  
Contents should not be published or re-posted in whole or in part  
without permission of DRBC.



**Delaware River Basin Commission**

DELAWARE • NEW JERSEY  
PENNSYLVANIA • NEW YORK  
UNITED STATES OF AMERICA

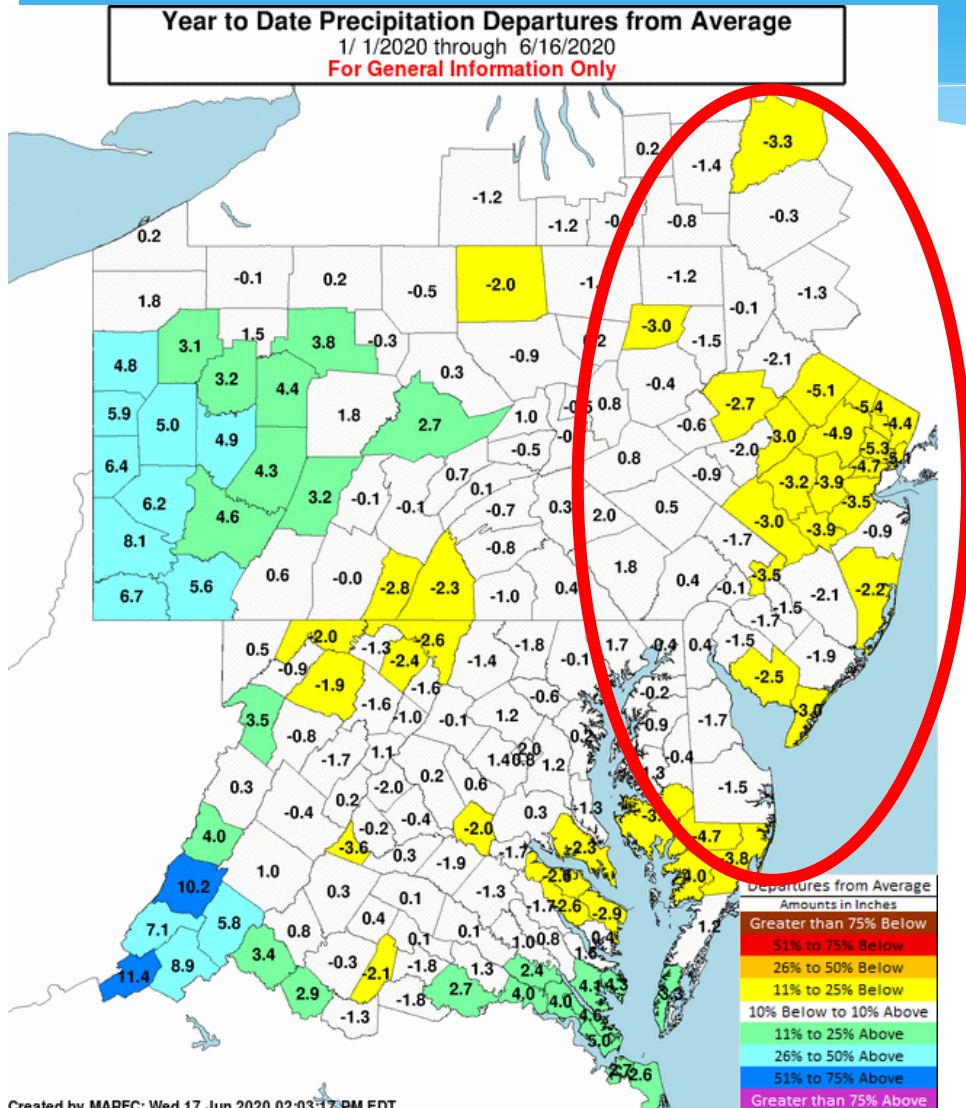
# View of the Chesapeake and Delaware from the International Space Station, taken June 8, 2020.



\*Source: ISS

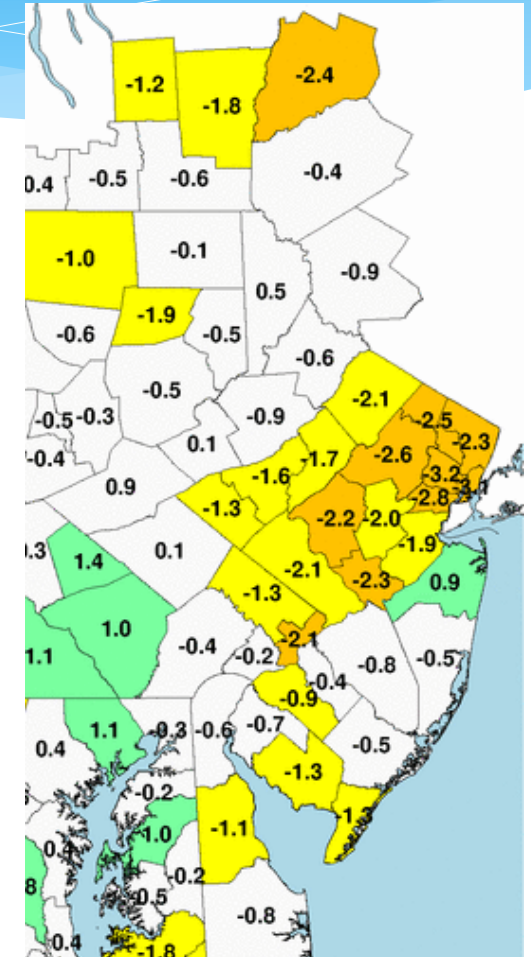


# Precipitation Departures



Left: 2020 so far --  
drier than normal

Right: Past 60 days --  
drier than normal

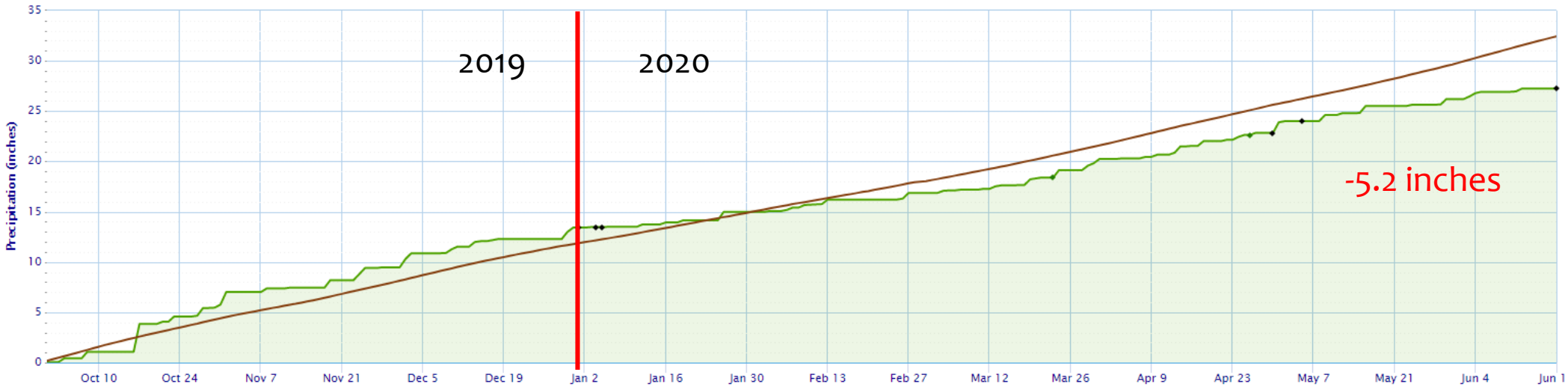


\*Source: MARFC

# Precipitation – Port Jervis

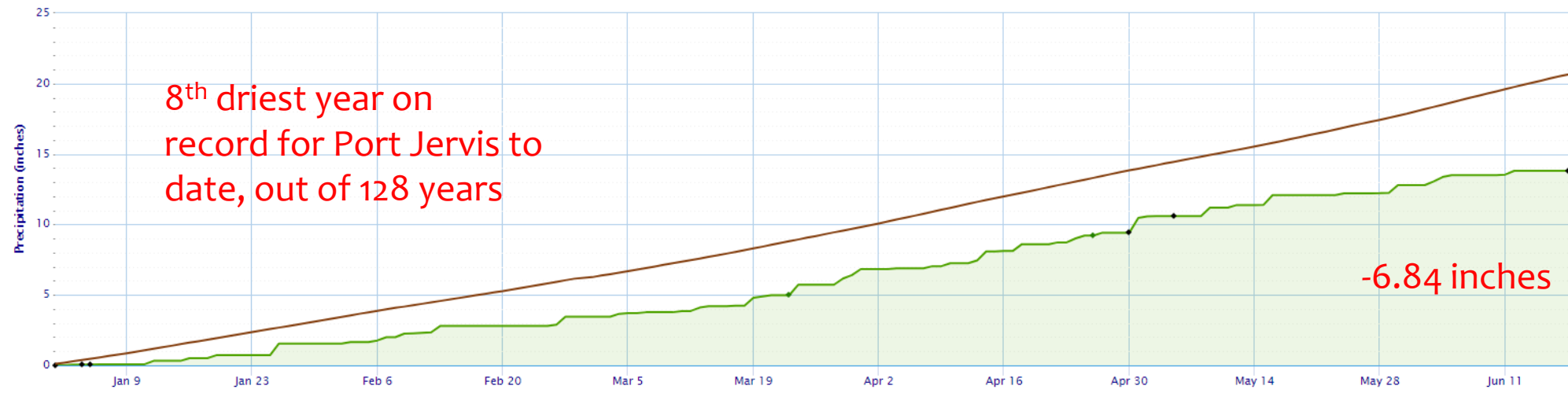
Accumulated Precipitation – PORT JERVIS, NY

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



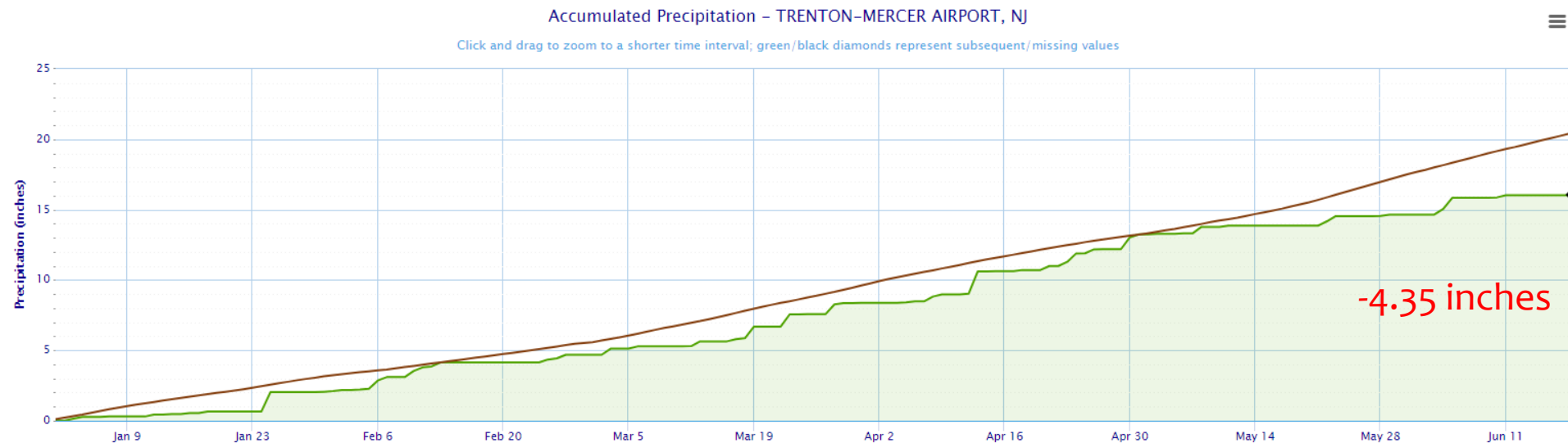
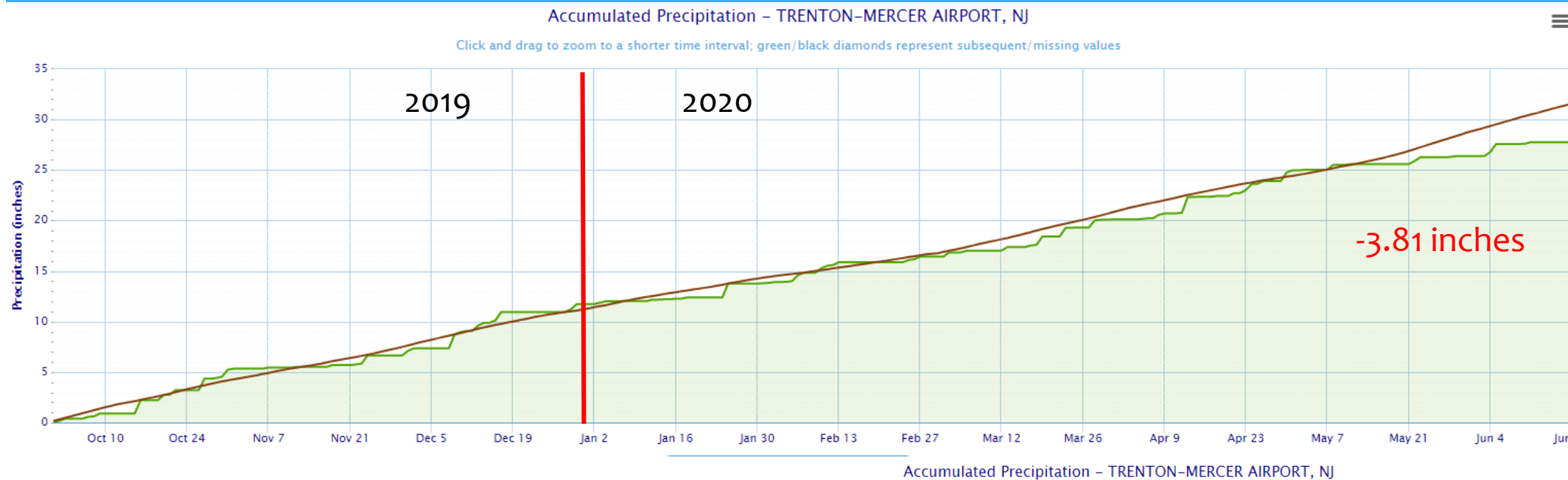
Accumulated Precipitation – PORT JERVIS, NY

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



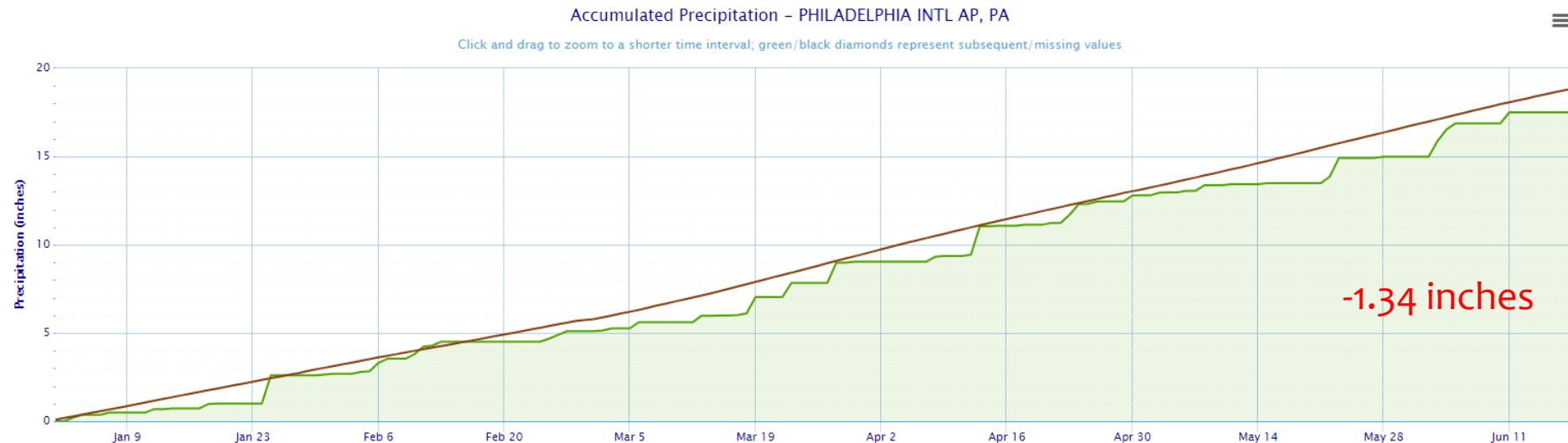
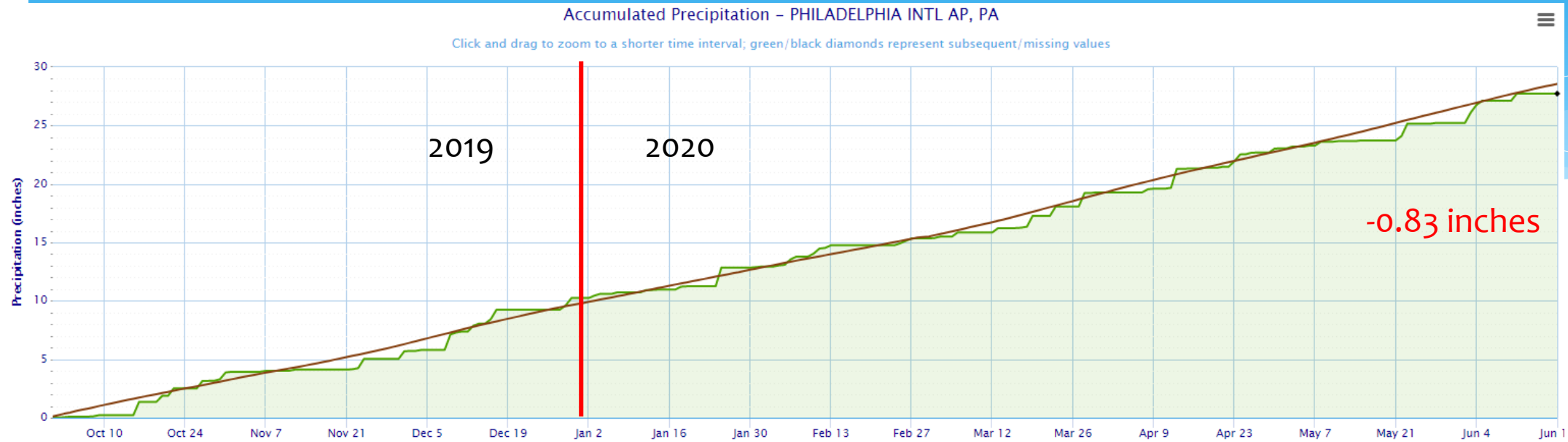
\* Source: ACIS

# Precipitation – Trenton



\* Source: ACIS

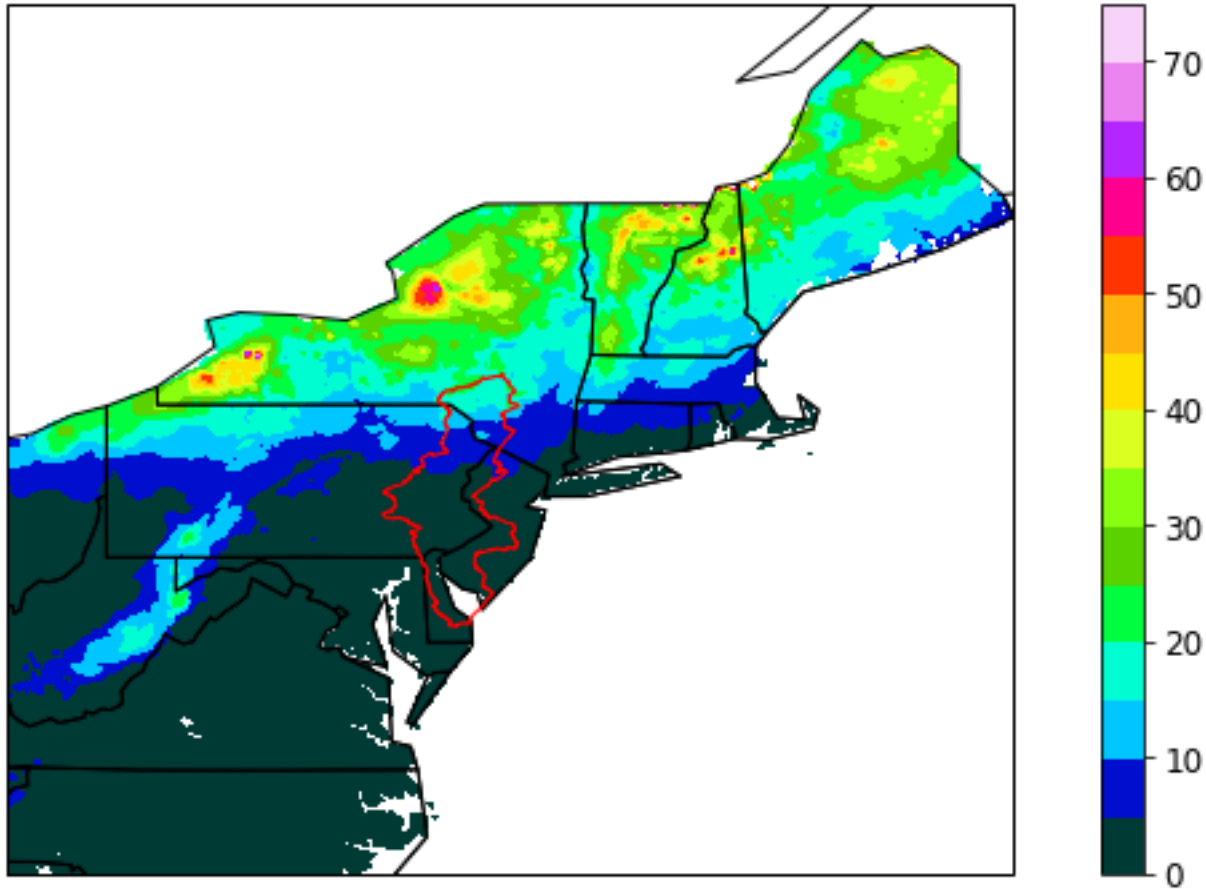
# Precipitation - Philadelphia



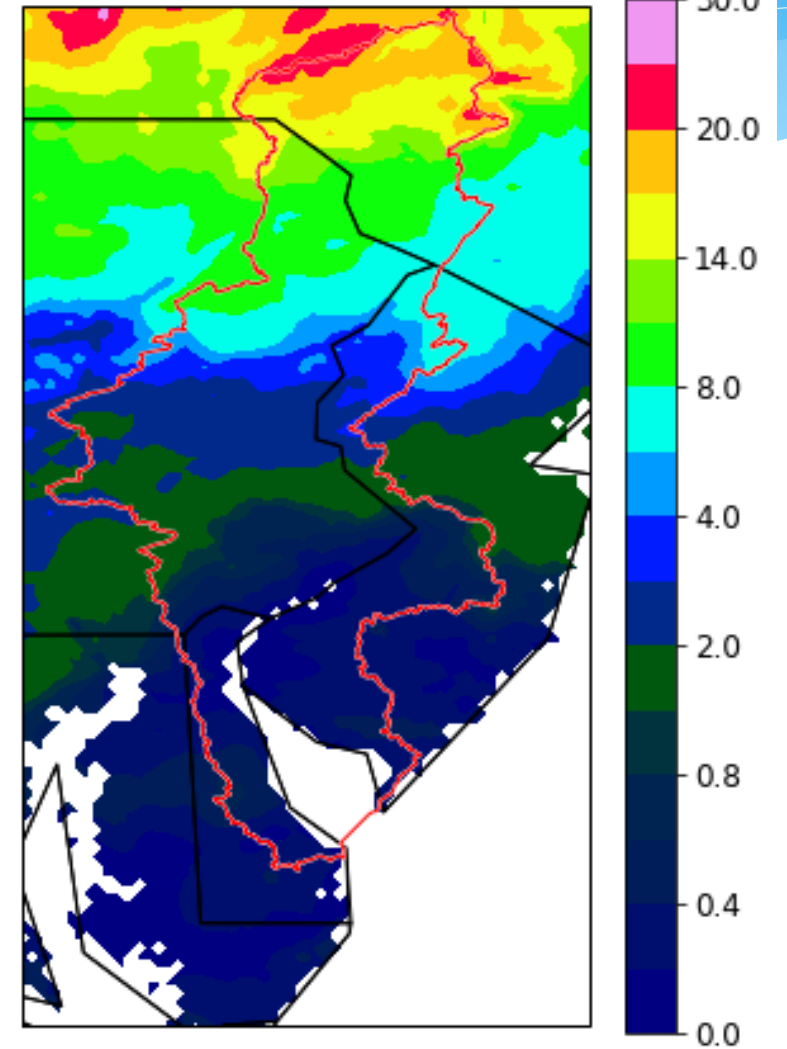
\* Source: ACIS

# Winter 2019-2020

Snowfall Northeast, 2019 - 2020











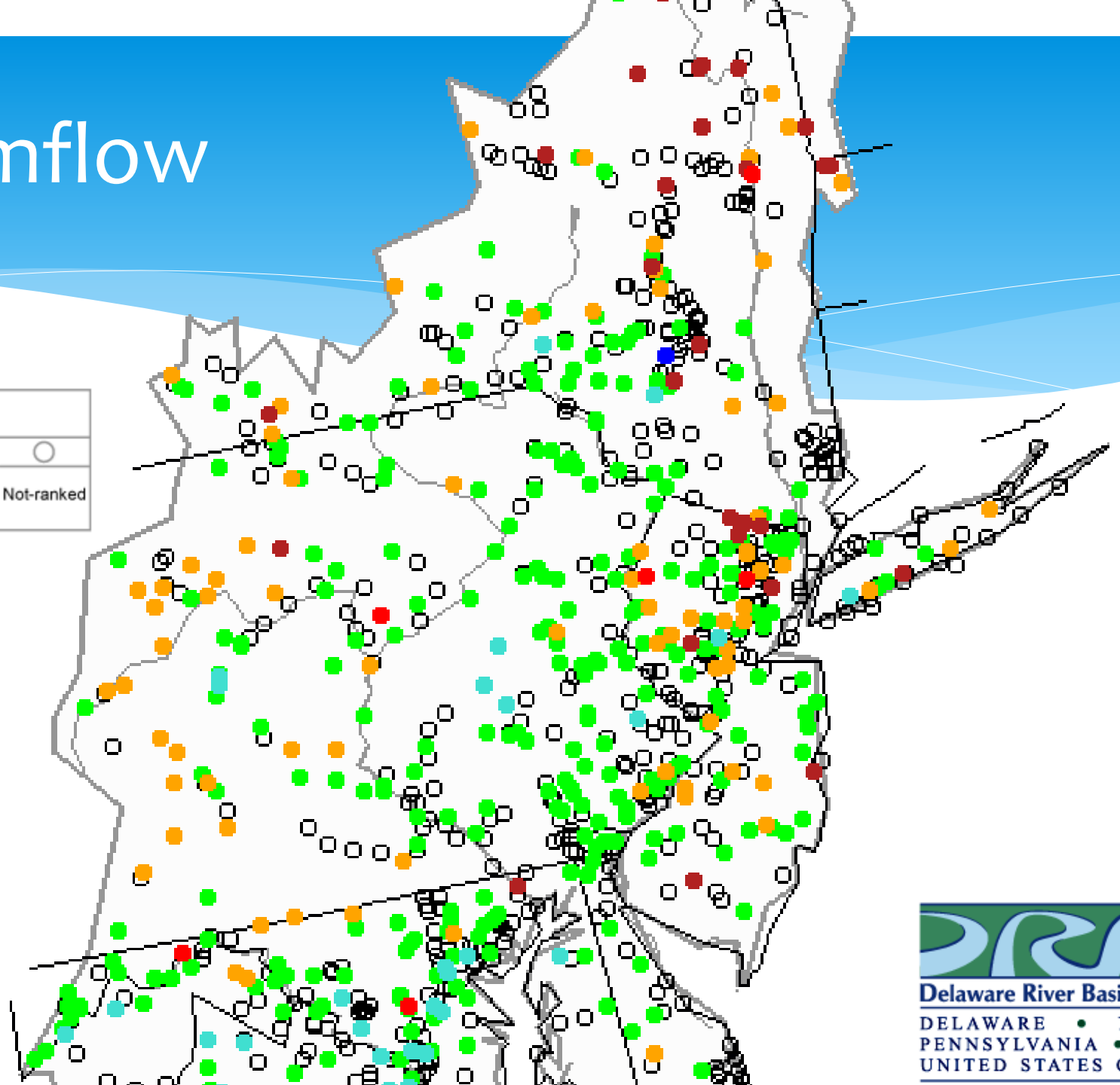
Snowfall in the DRB, 2019 - 2020



\*Source: NOAA: National Operational Hydrologic Remote Sensing Center (NOHRSC)

# Streamflow

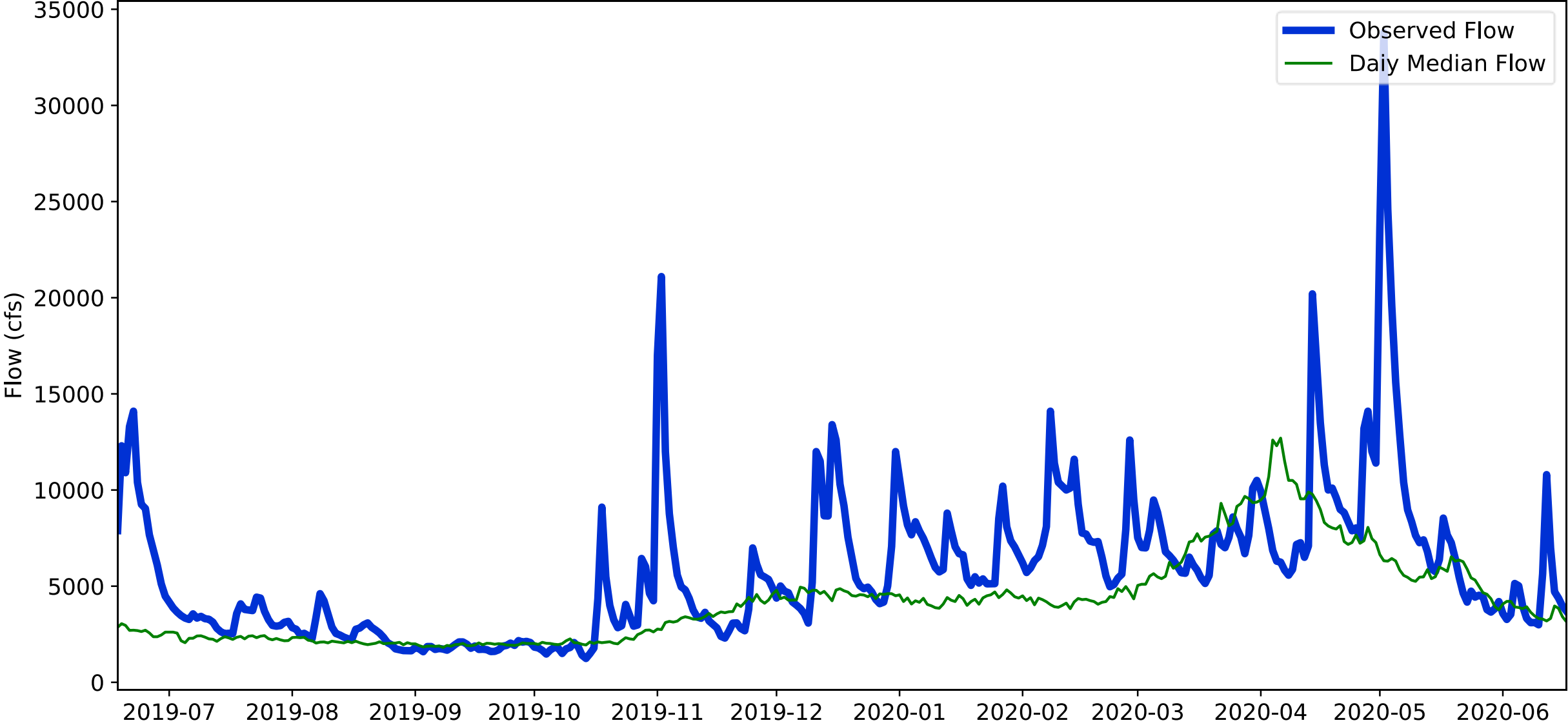
Explanation - Percentile classes							
							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		



\*Source: USGS

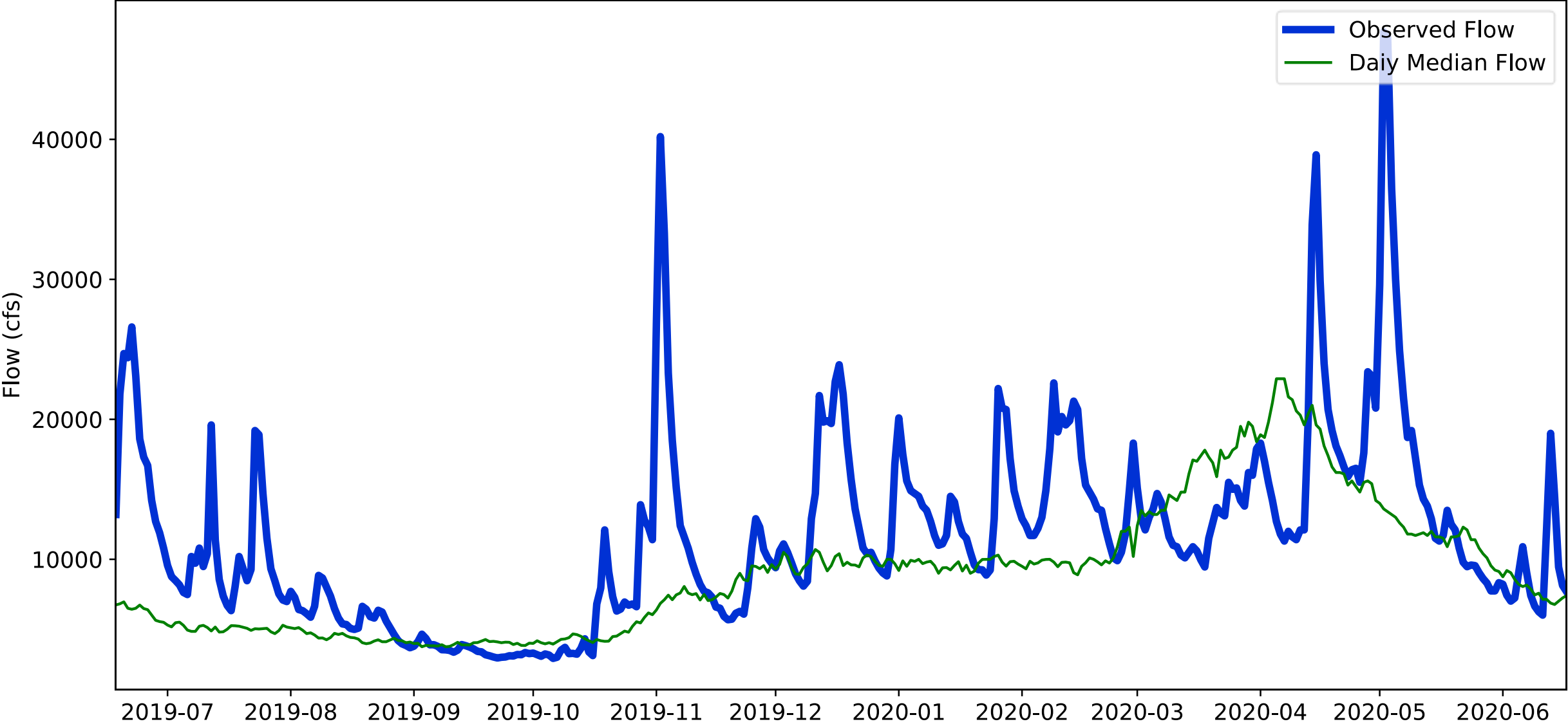


# Delaware River at Montague



\* Source: USGS

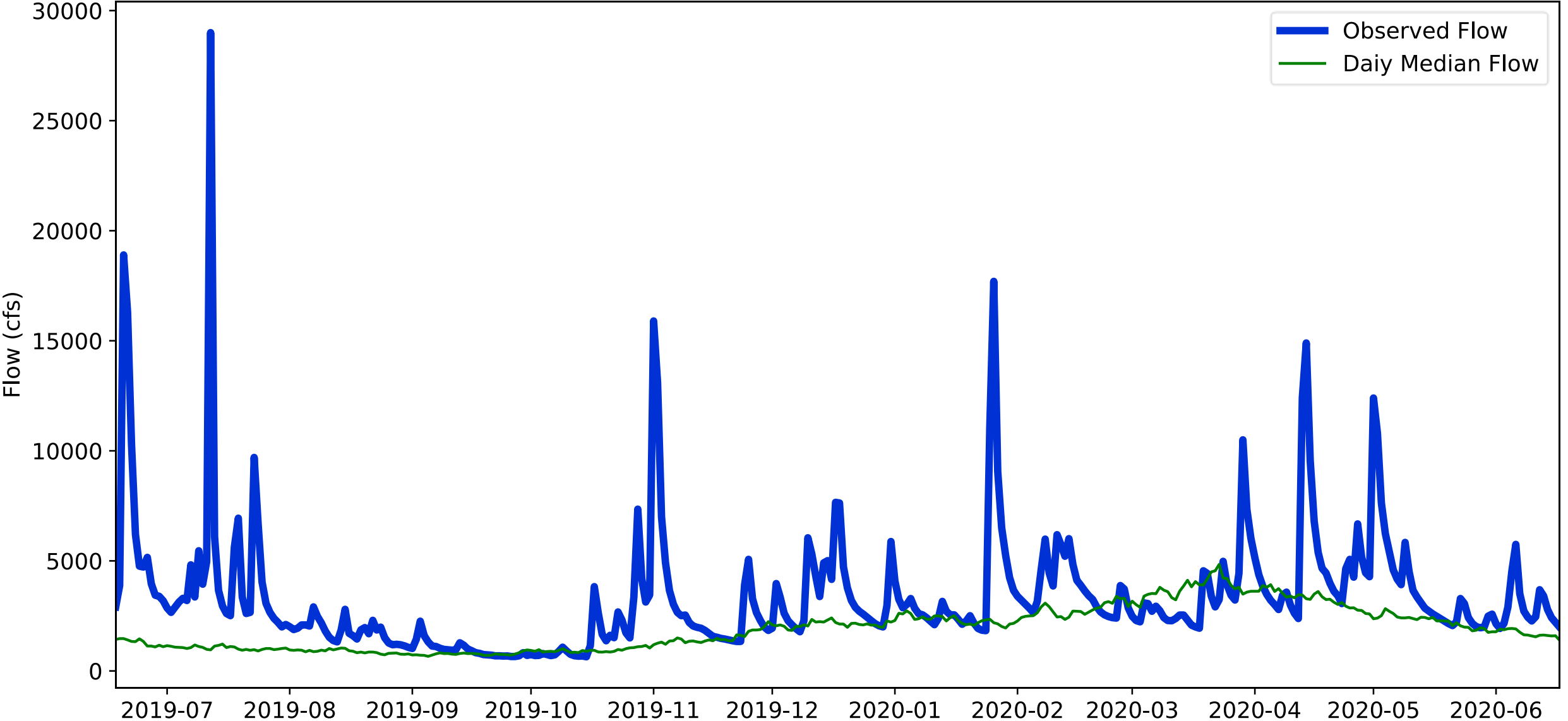
Delaware River at Trenton



\* Source: USGS



# Schuylkill River at Philadelphia

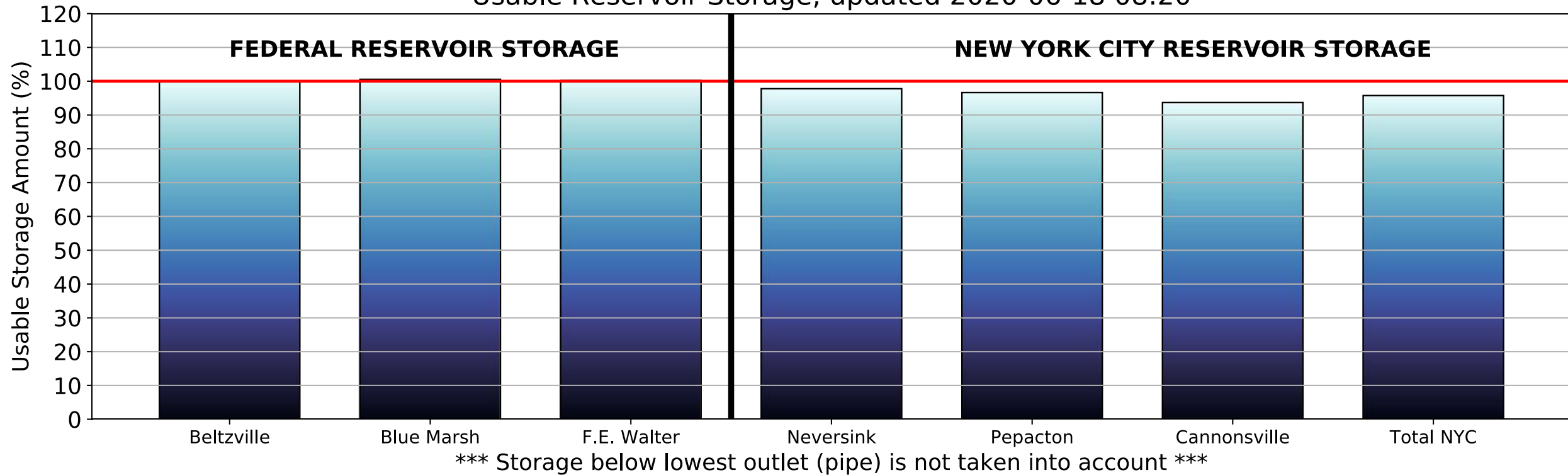


\* Source: USGS



# Basin Storage

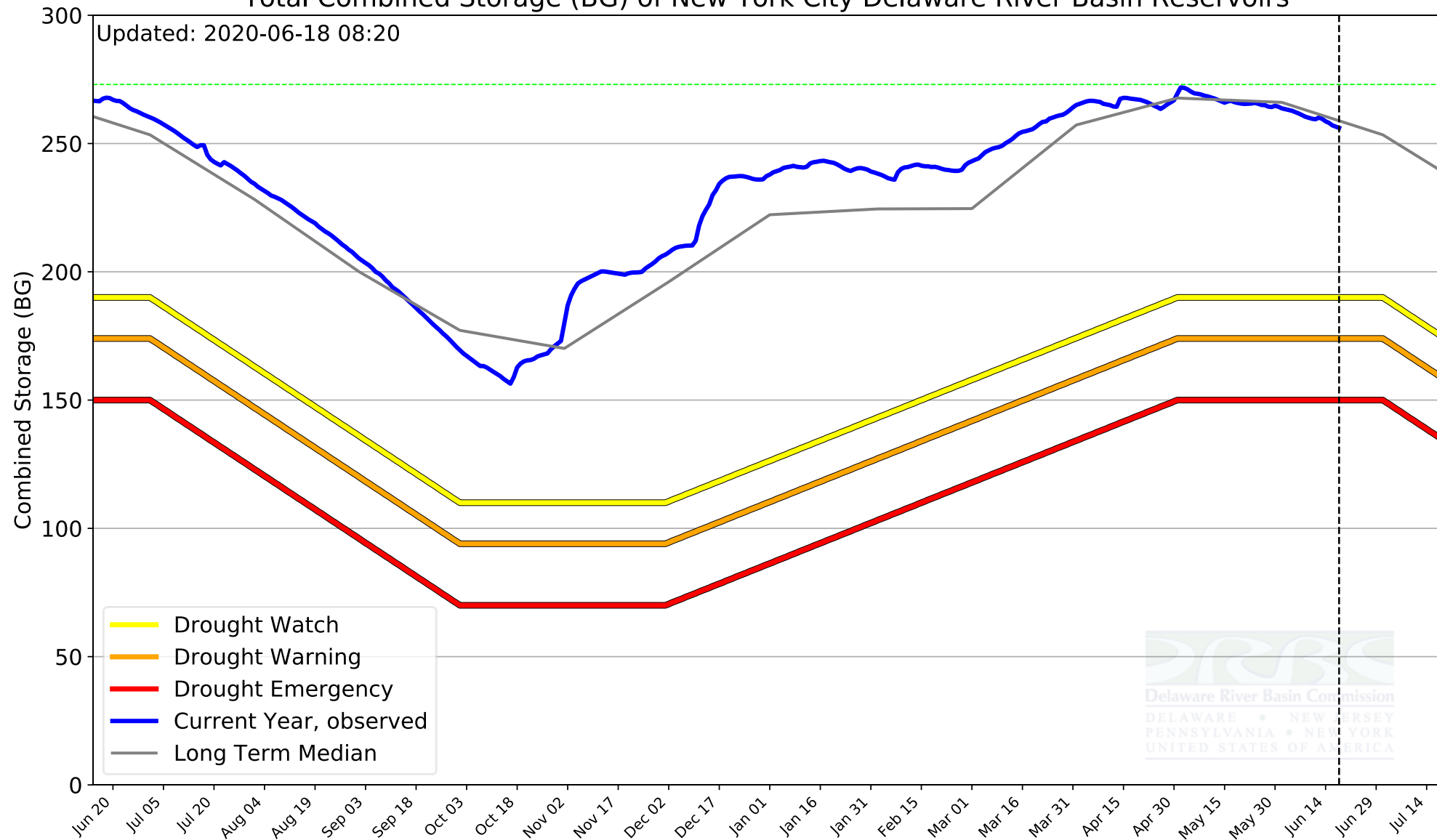
Usable Reservoir Storage, updated 2020-06-18 08:20



\* Sources: USGS, AHPS



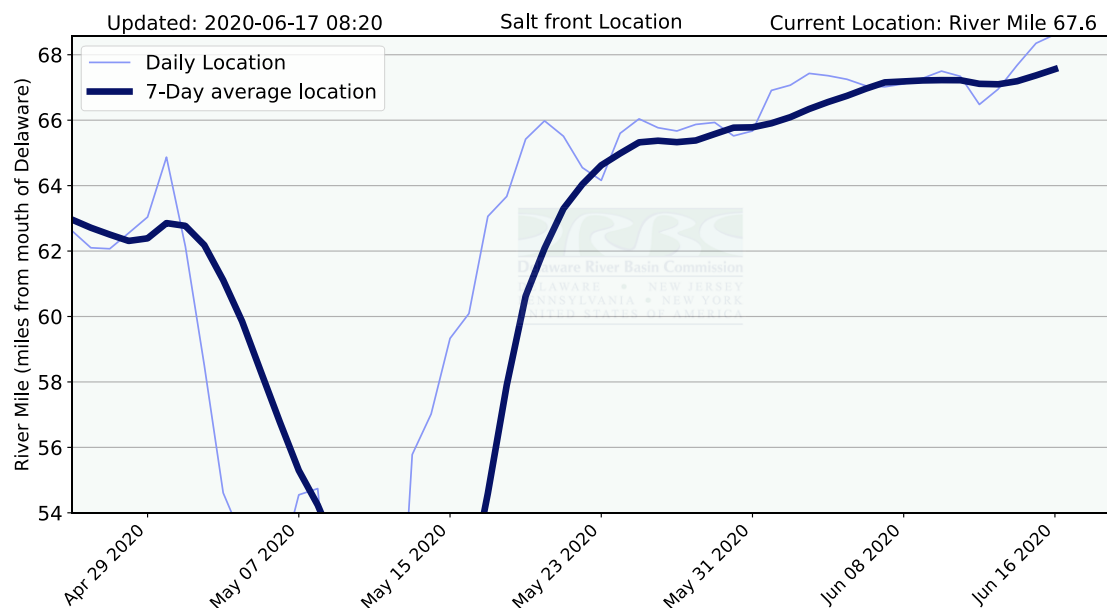
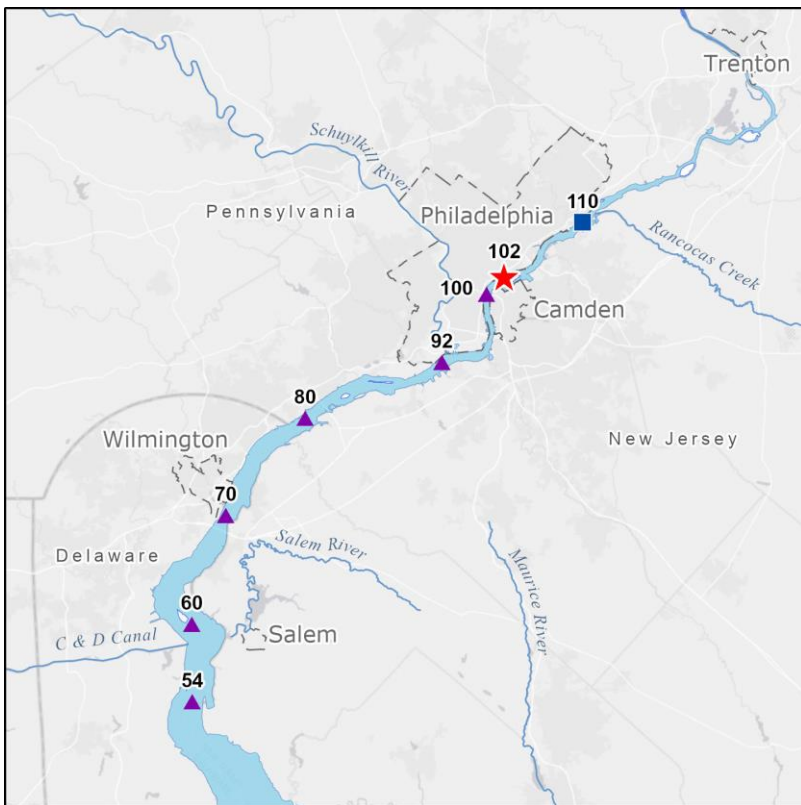
# Total Combined Storage (BG) of New York City Delaware River Basin Reservoirs



Usable Storage	Cannonsville	Pepacton	Neversink	Total	BG above drought watch = 66.1	BG below median = 2.8
BG	87.5	134.6	33.9	256.1	BG above drought warning = 82.1	BG below one year ago = 10.9
%	93.7	96.6	97.8	95.8	BG above drought = 106.1	

\* Source: USGS

# Salt Front



**Chlorides**  
**7-Day Average RM**  
**Location of 250 mg/L**

**Current: 67.6**  
**June Normal: 69**

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

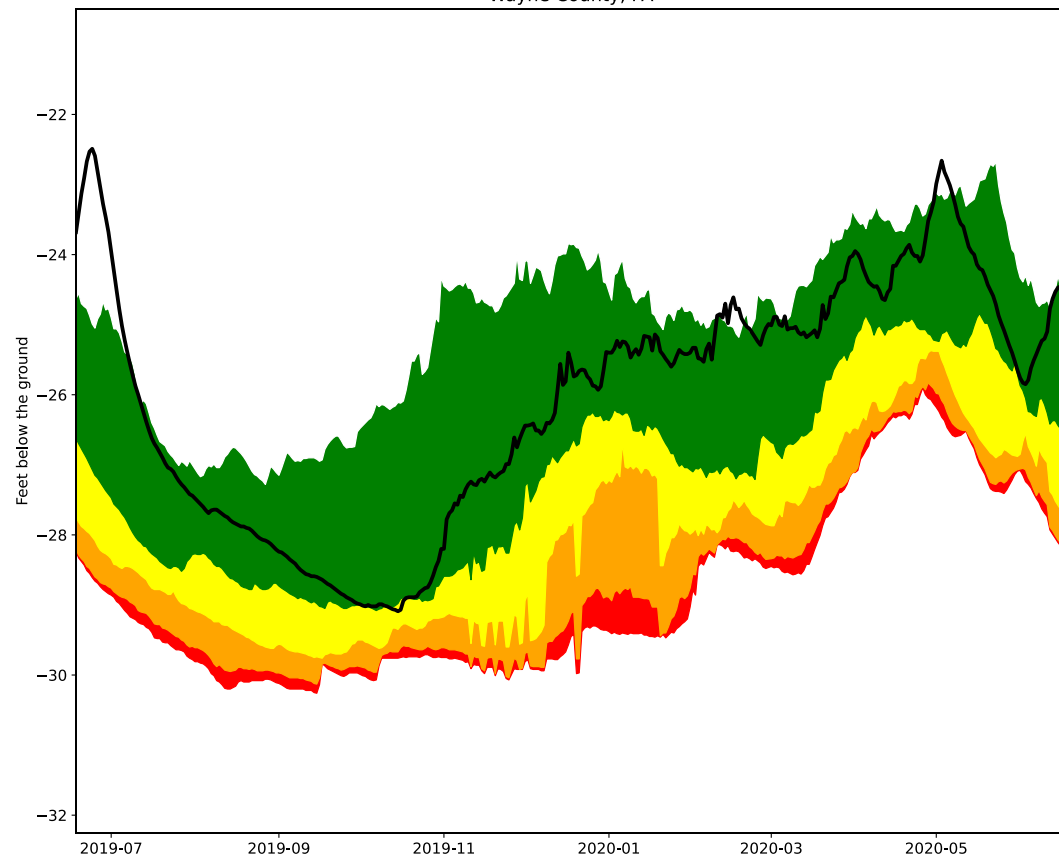
[hydrosnap.drbc.net](https://hydrosnap.drbc.net)

# Groundwater

COUNTY	STATE	DATA SOURCE	WELL ID	INDICATOR AS OF 2020-06-09
Wayne	PA	USGS	WN 64	Above Normal
Monroe	PA	USGS	MO 190	Normal
Carbon	PA	USGS	CB 104	Above Normal
Schuylkill	PA	USGS	SC 296	Above Normal
Lehigh	PA	USGS	LE 372	Normal
Bucks	PA	USGS	BK 1020	Normal
Chester	PA	USGS	CH 10	Normal
Delaware	PA	USGS	DE 723	Normal
Lebanon	PA	USGS	LB 372	Normal
Burlington	NJ	USGS	050689	Normal
Cumberland	NJ	USGS	110042	Normal

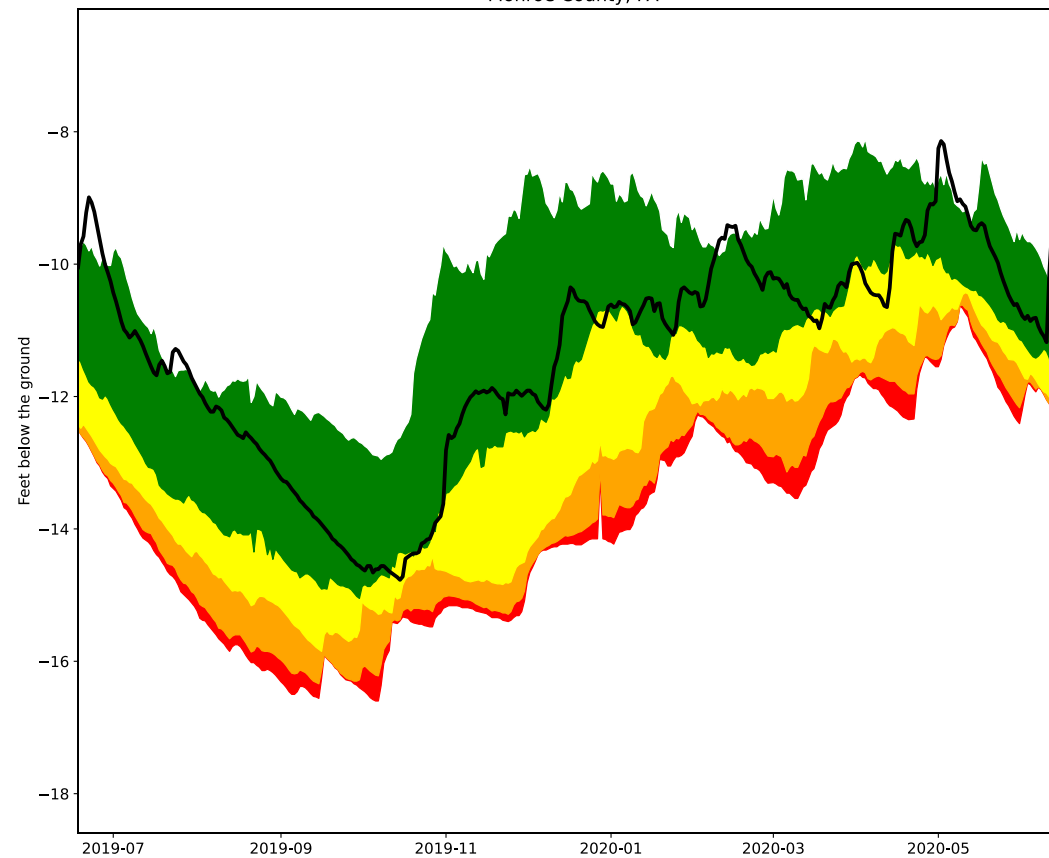
## Upper Basin

Wayne County, PA



## Middle-Upper Basin

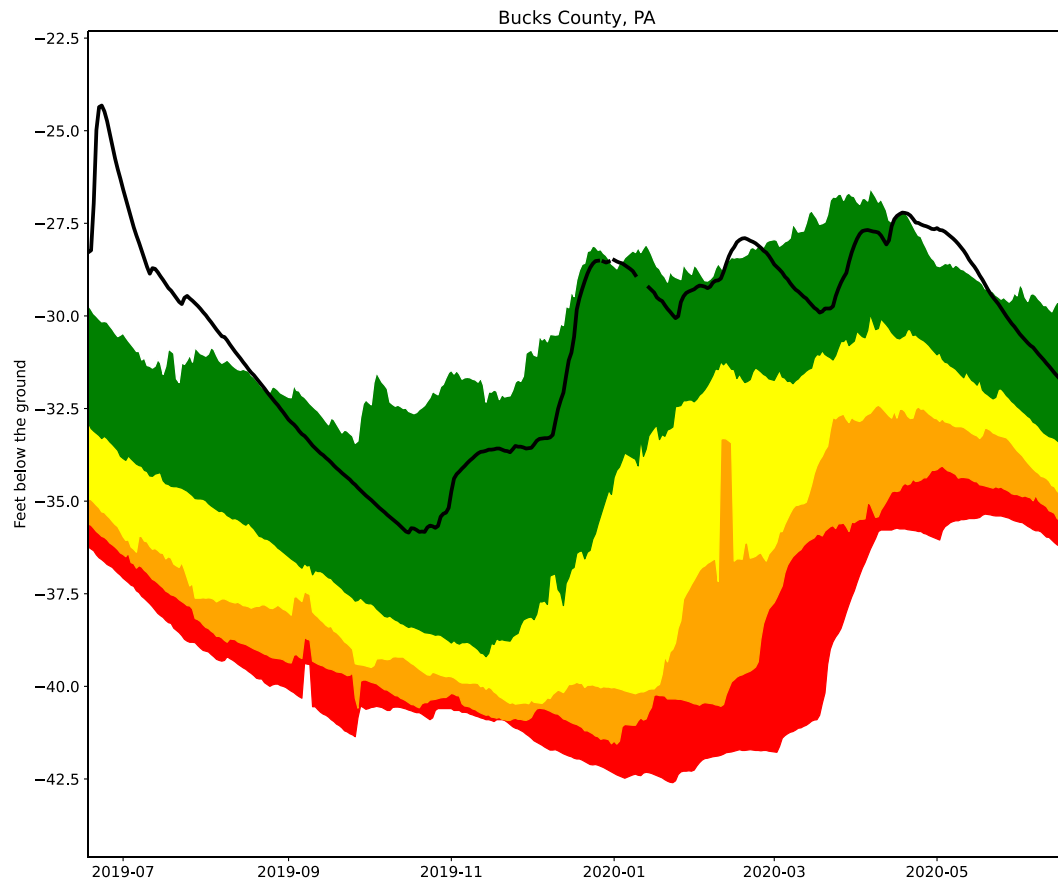
Monroe County, PA



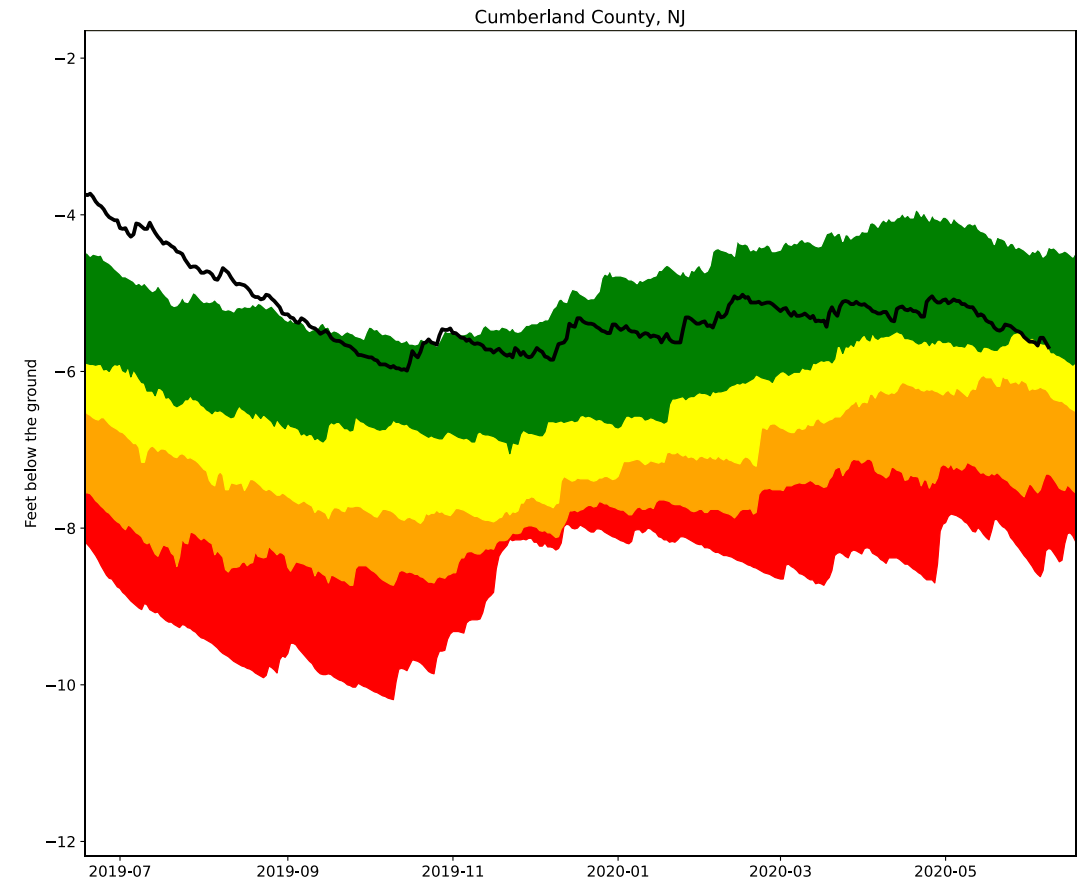
\* Source: USGS



## Middle-Lower Basin



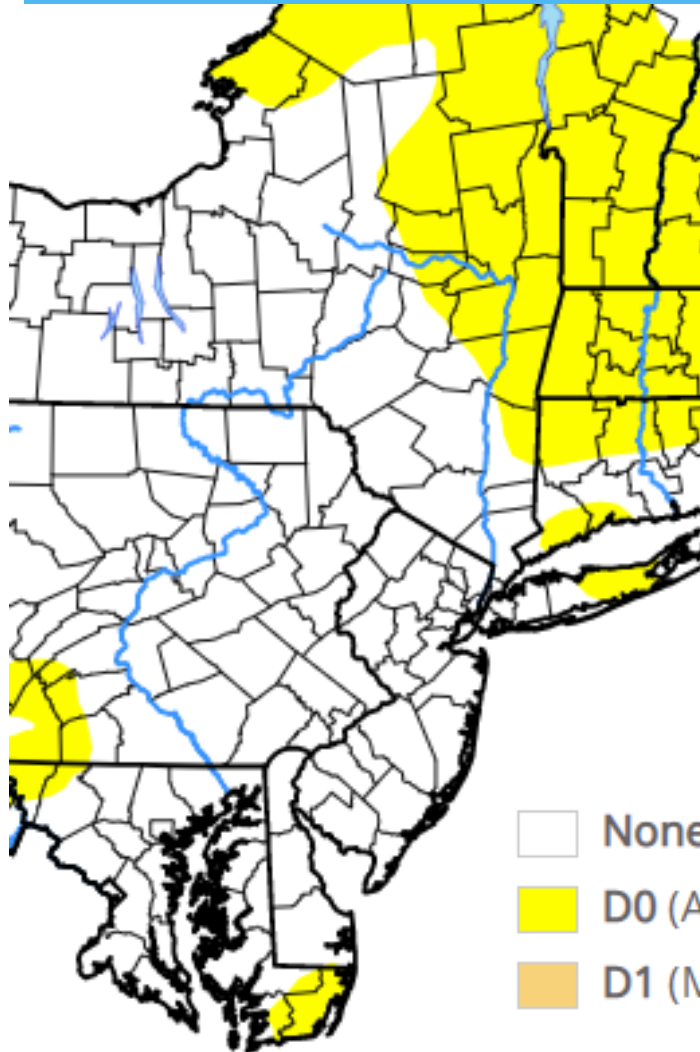
## Lower Basin



\* Source: USGS

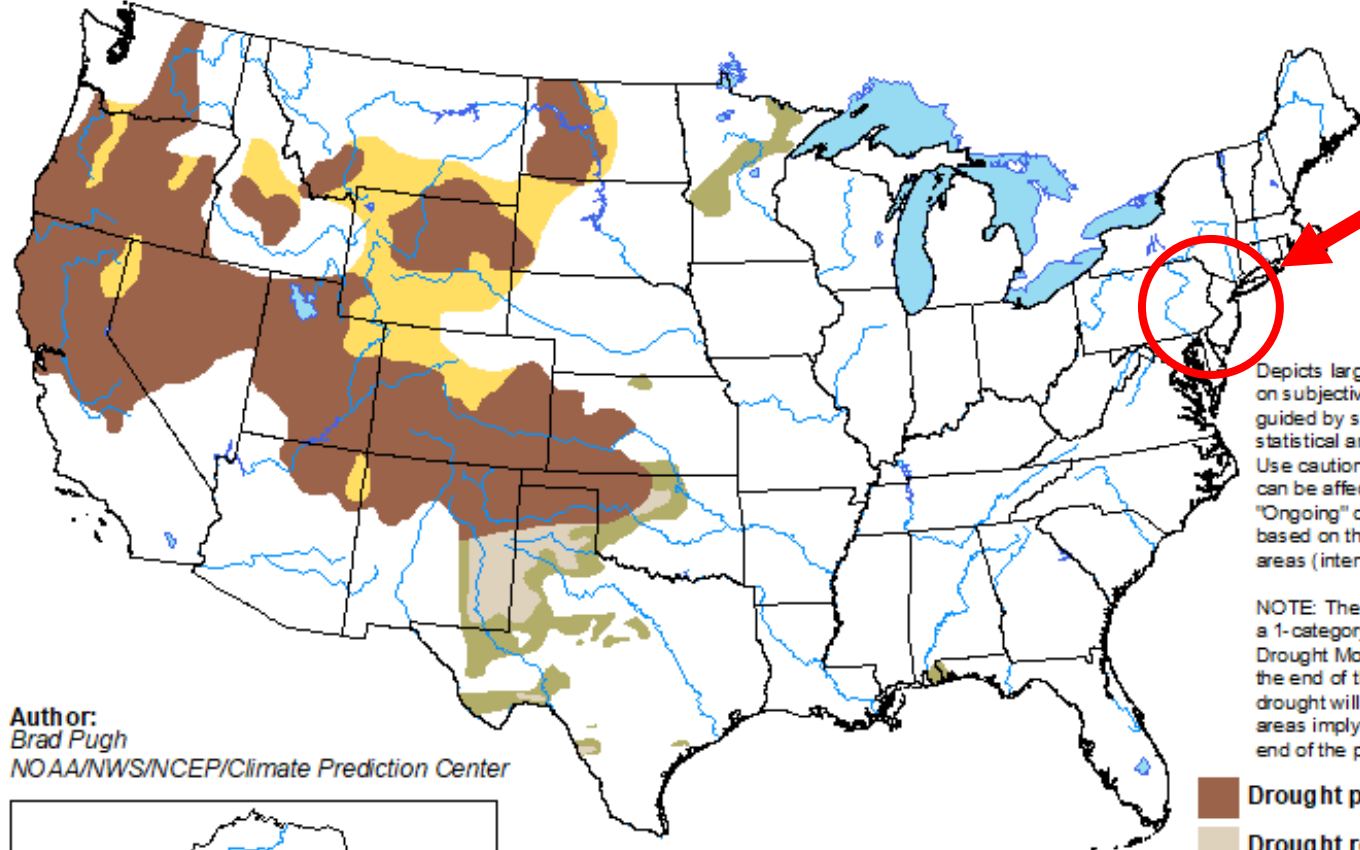
# Drought Monitor

June 18, 2020



## U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for June 18 - September 30, 2020  
Released June 18



Author:  
Brad Pugh  
NOAA/NWS/NCEP/Climate Prediction Center



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

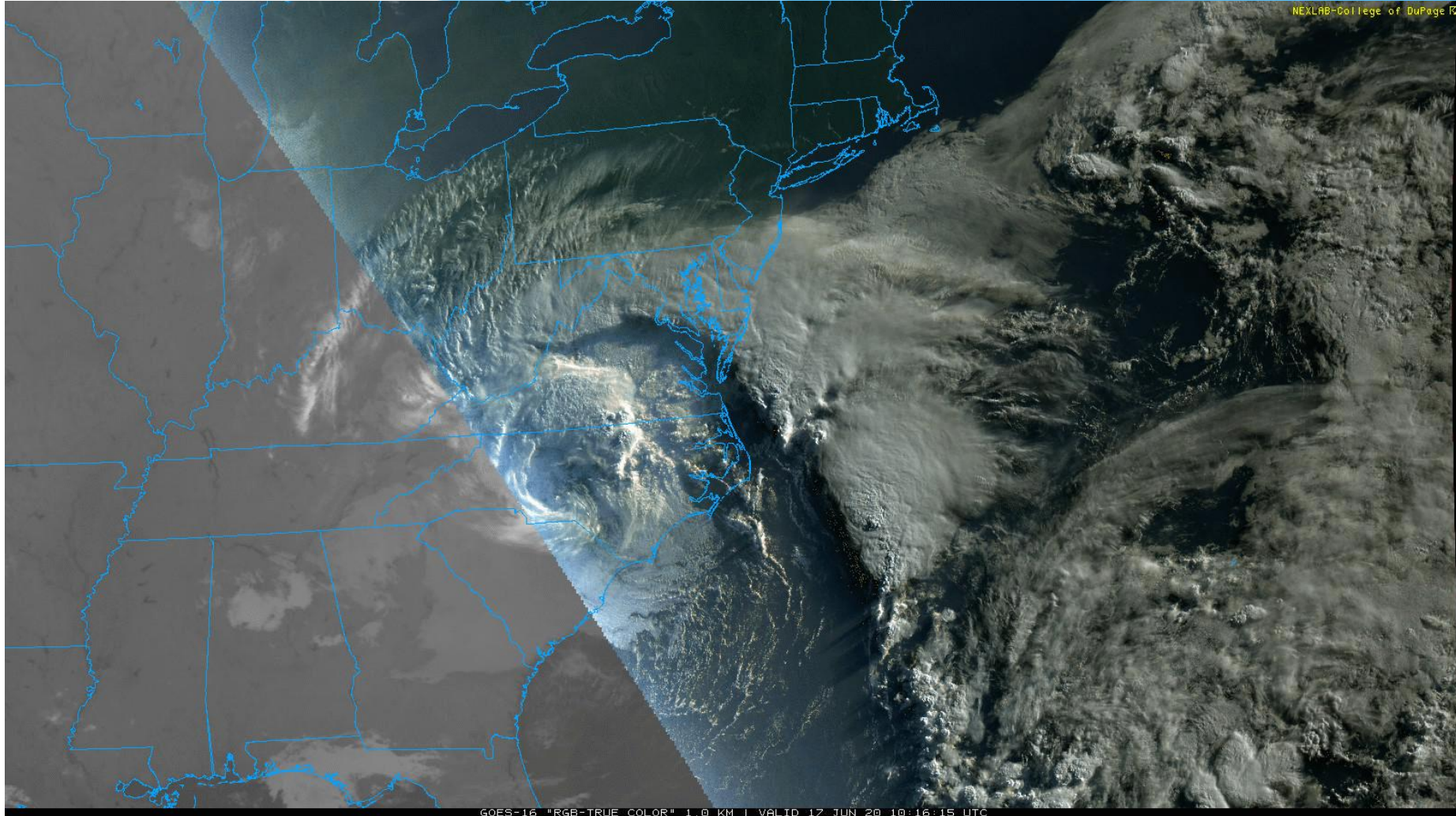
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely



<http://go.usa.gov/3eZ73>

# What's coming our way...



\*Source:  
GOES-16



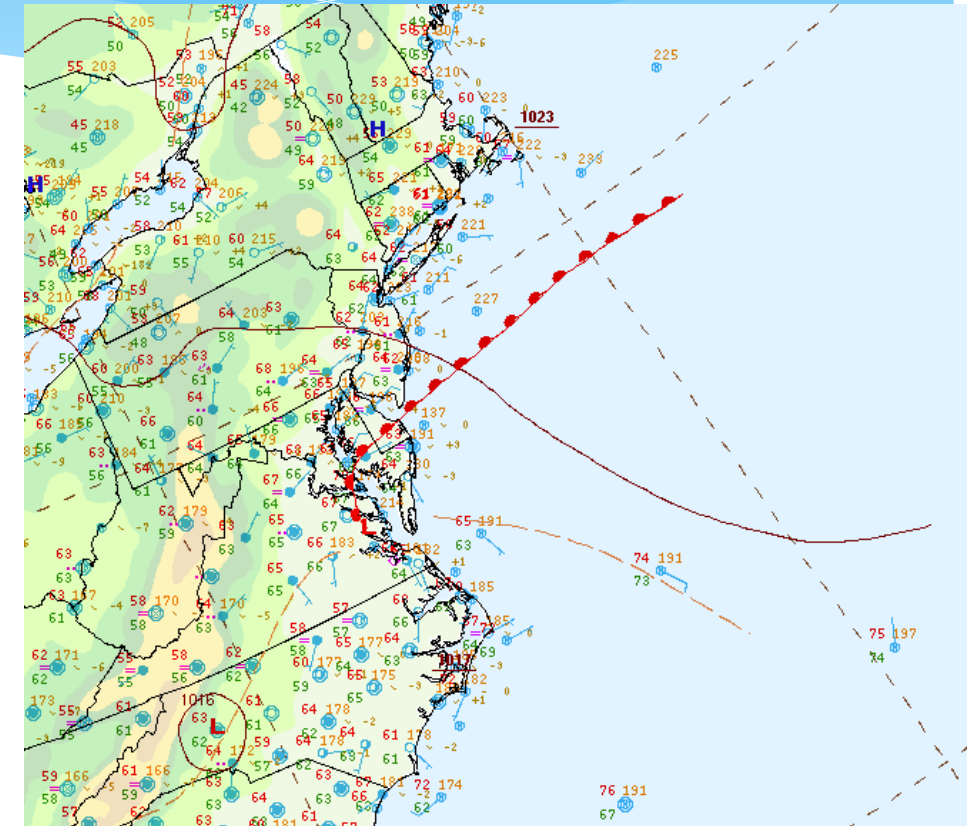
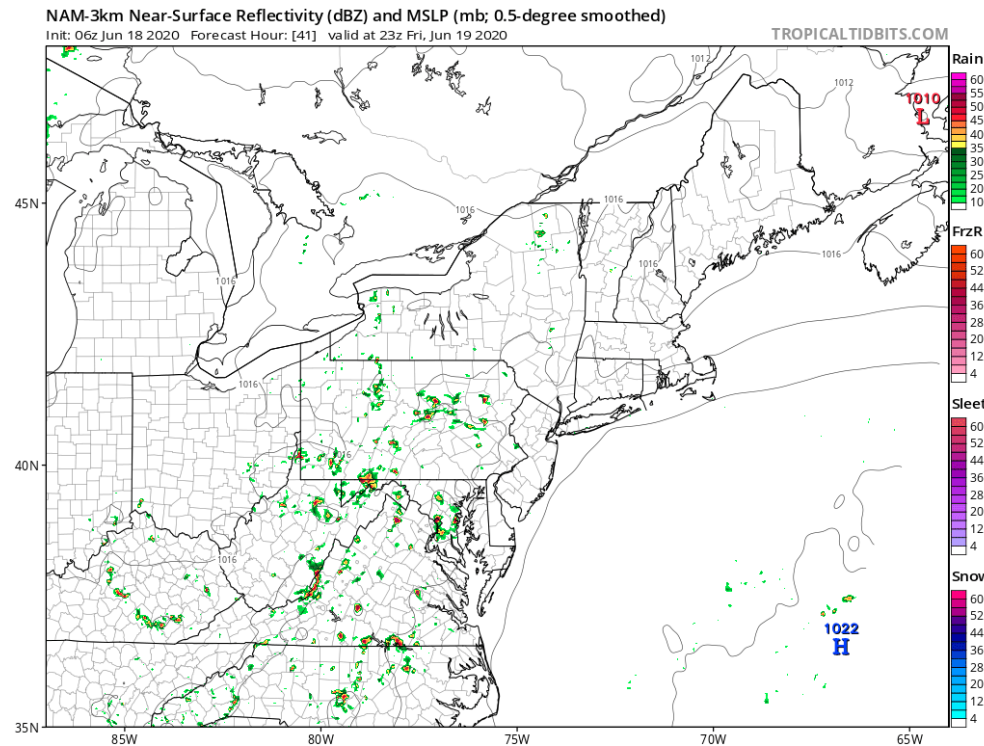
\*Sources: Tropical Tidbits,  
Weather Prediction Center

# Precipitation Forecast



Low Pressure hanging out to our southwest, warm front passing through the region today

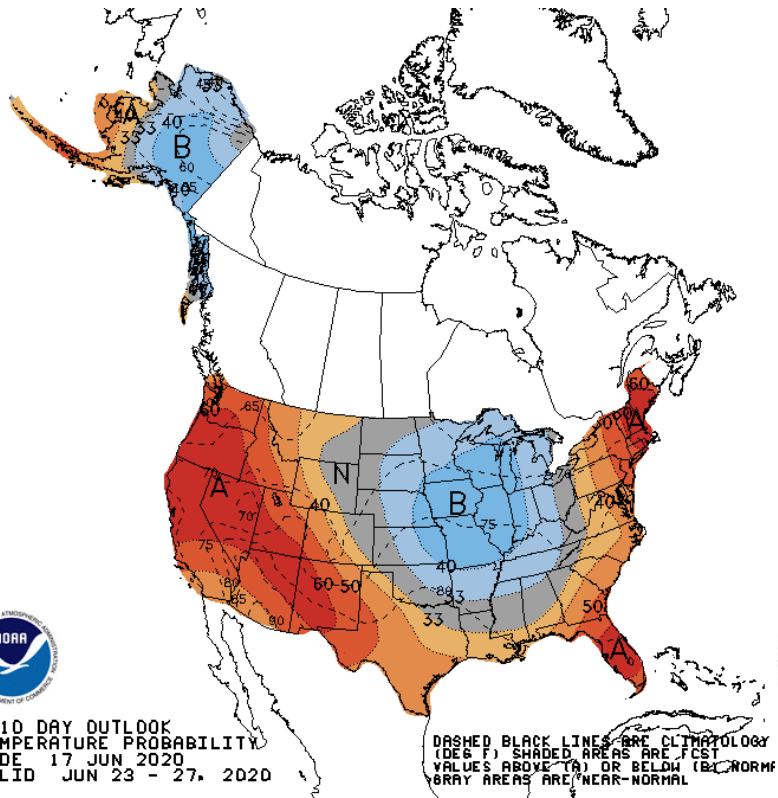
Scattered showers and thunderstorms are possible through Saturday evening.



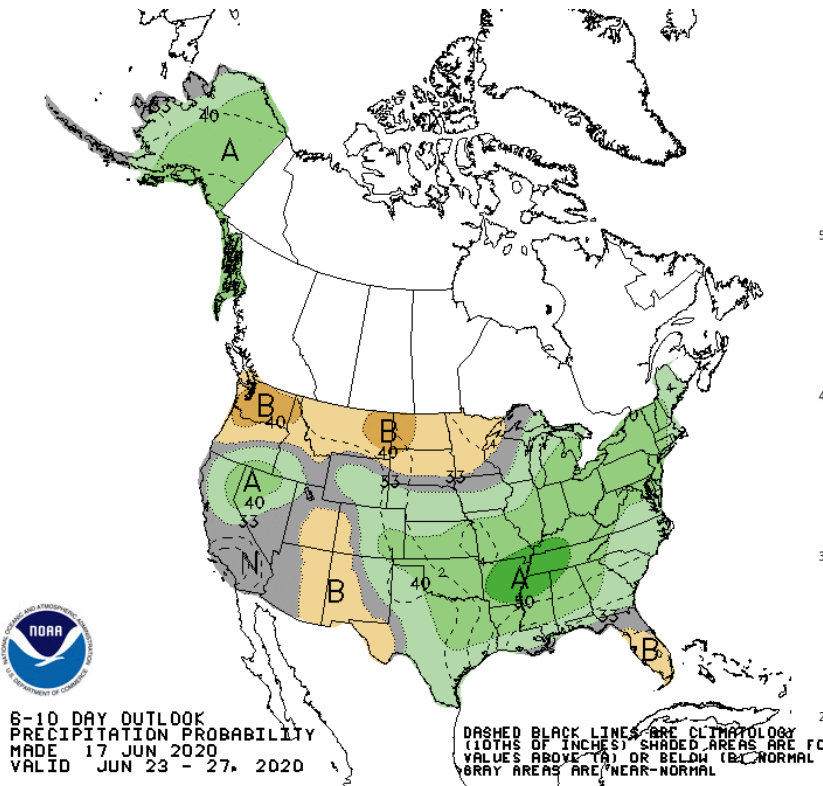


# 6-10 day Outlook

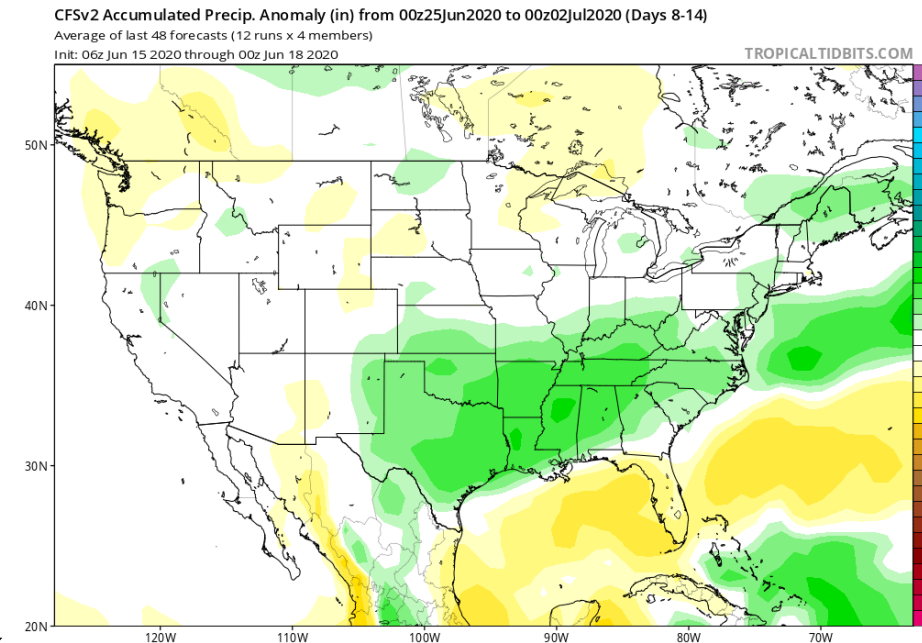
## Temperature



## Precipitation



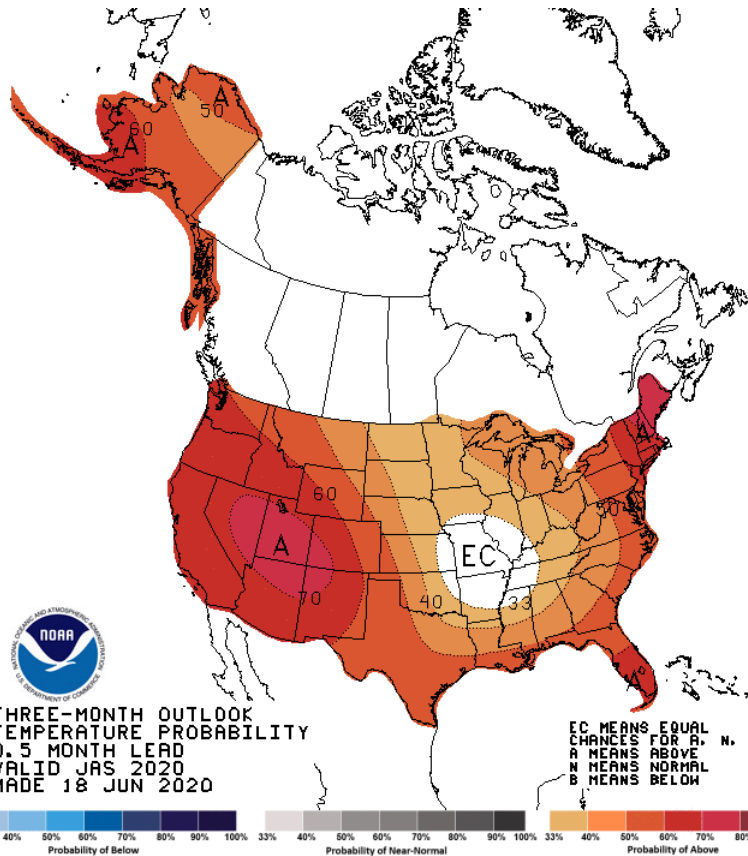
## Model Prediction



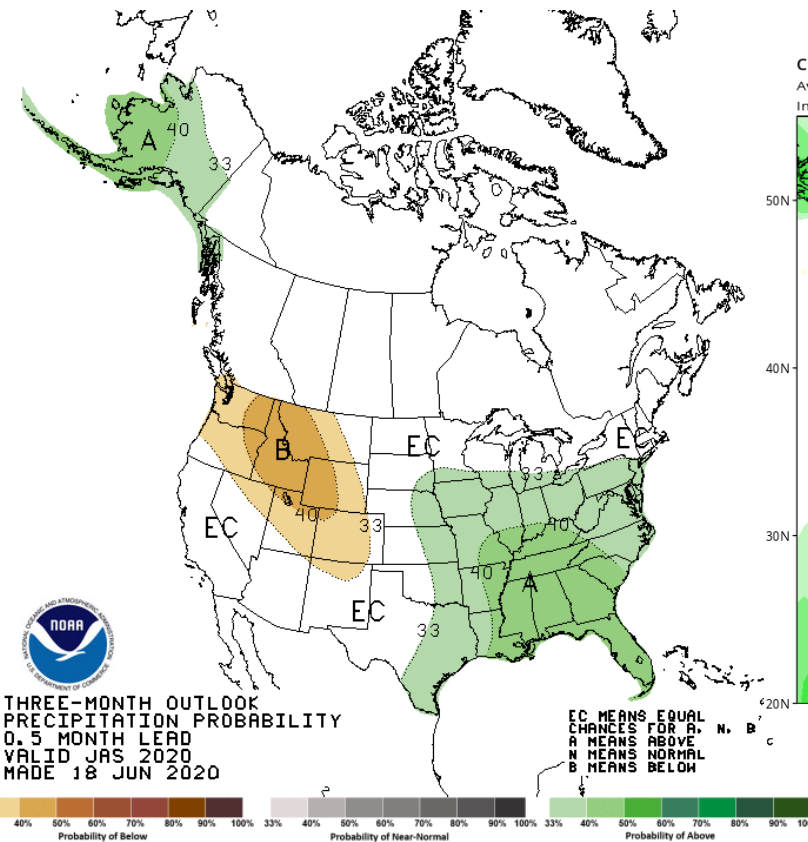
\*Forecast from Climate Prediction Center, Updated June 18, 2020. Valid for Next Week.

# 3 Month Outlook

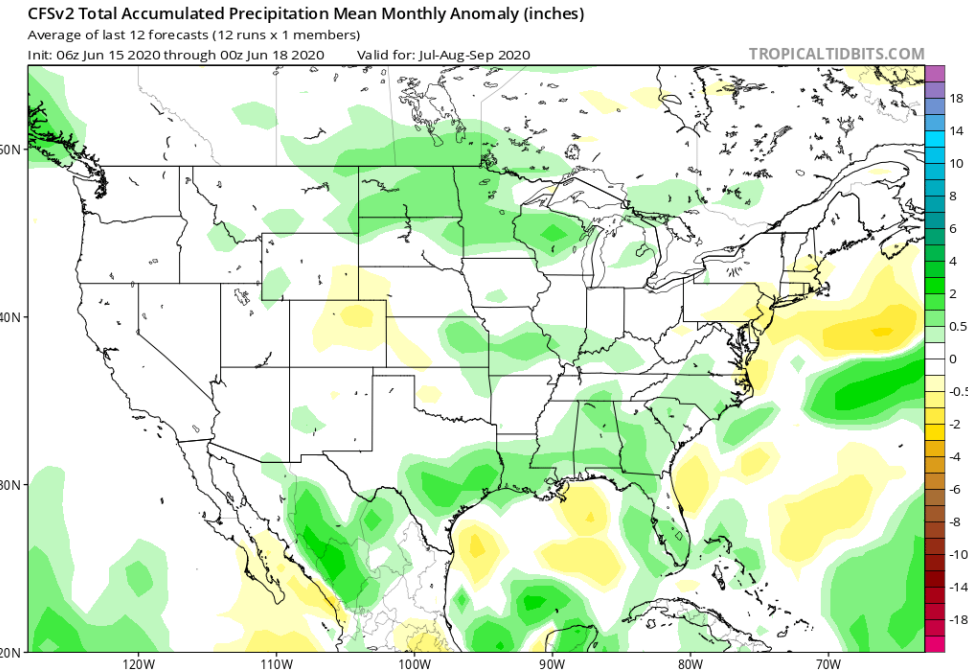
## Temperature



## Precipitation



## Model Prediction



\*Forecast from Climate Prediction Center, updated June 18, 2020.  
Valid for July - September