Delaware River Basin Commission

Hydrologic Conditions

Anthony Preucil
Water Resource Scientist

Water Management Advisory Committee
February 20, 2020





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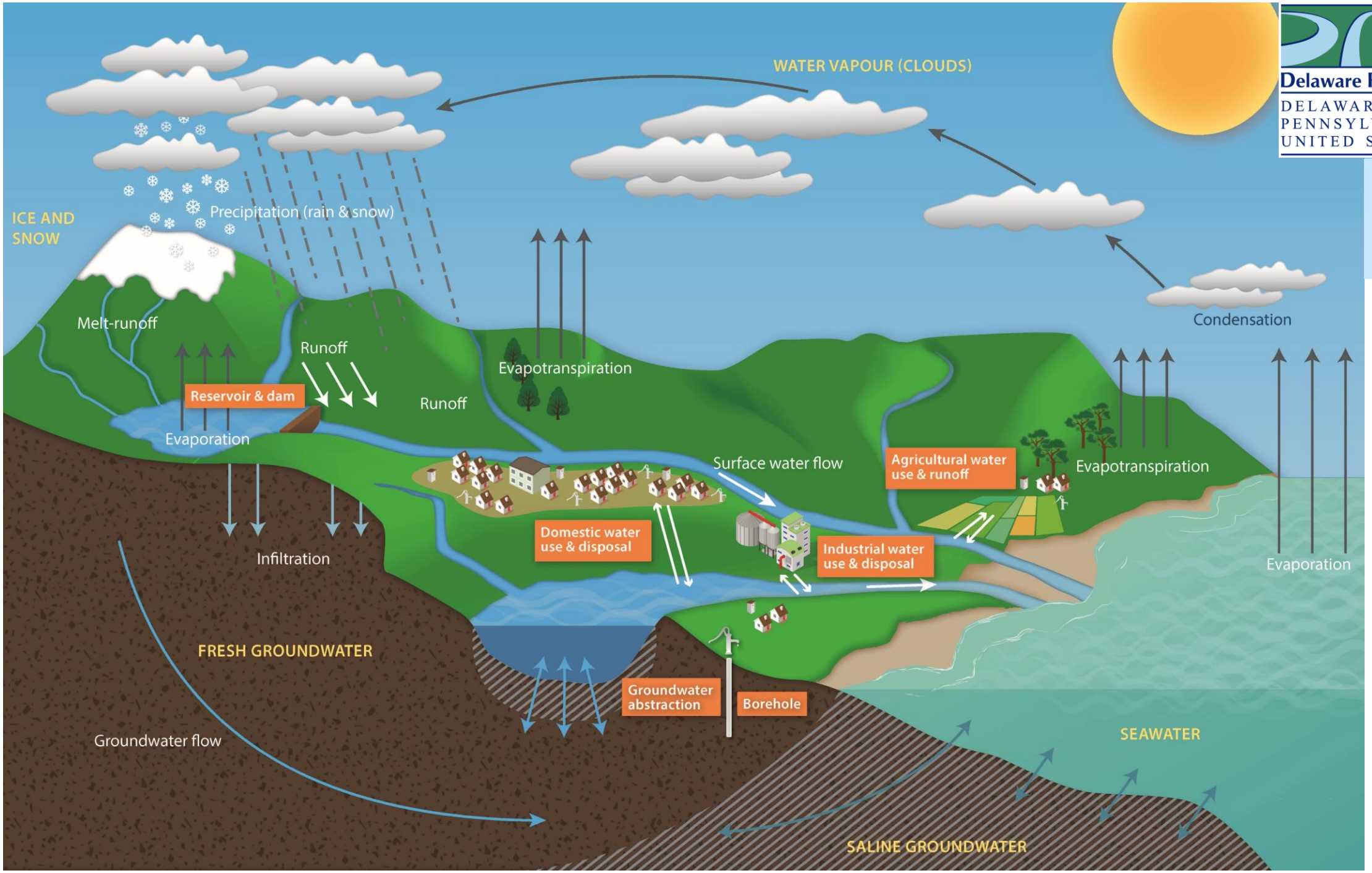

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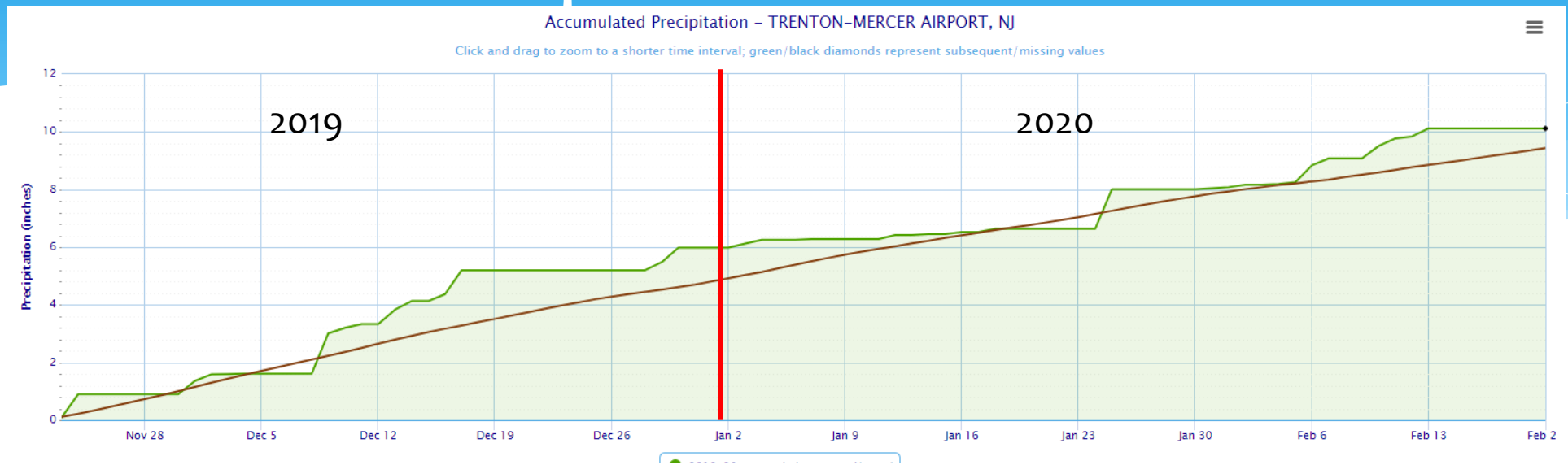
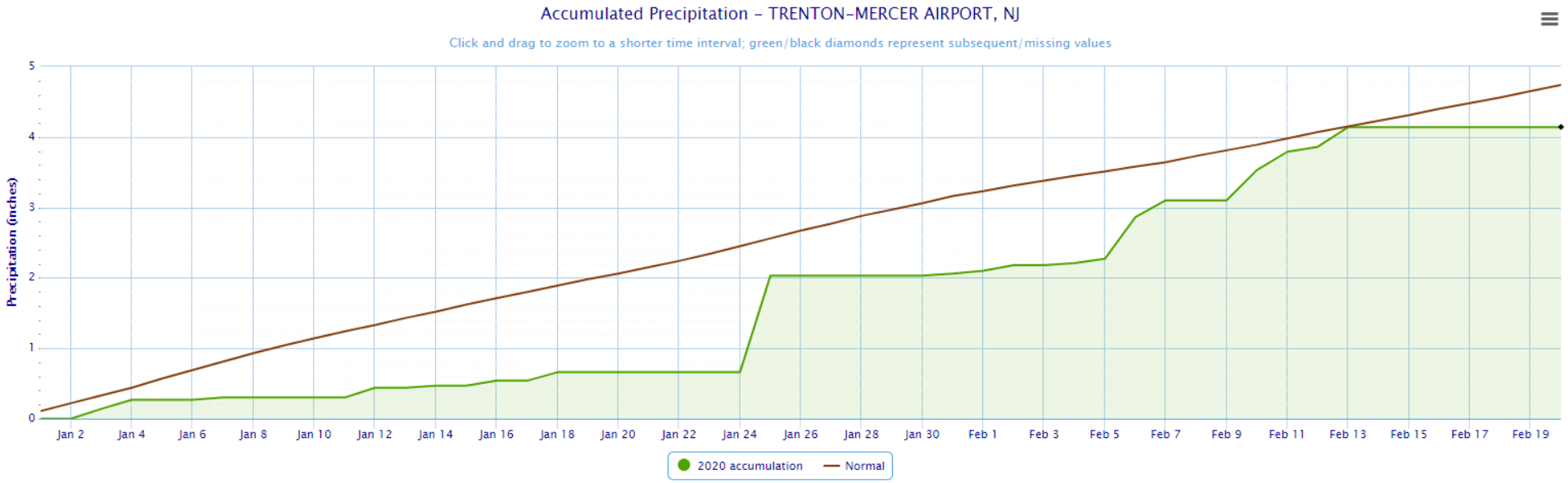
Water Cycle - Wikimedia Commons

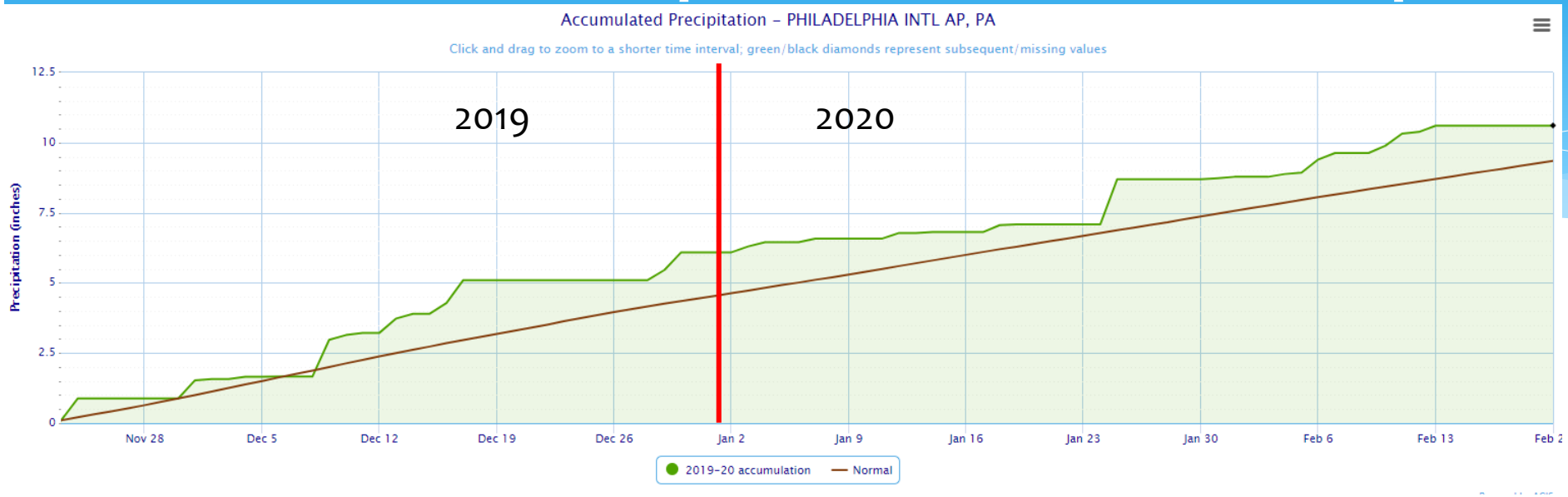
Precipitation – Trenton

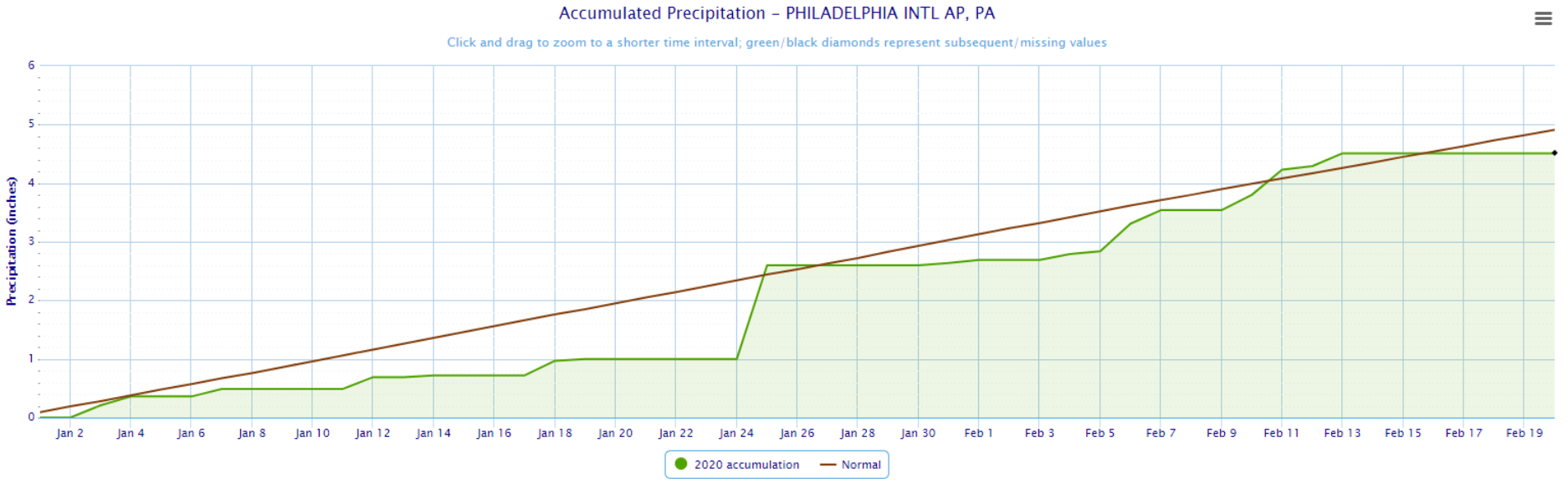




* Source: Applied Climate Info. System (ACIS)

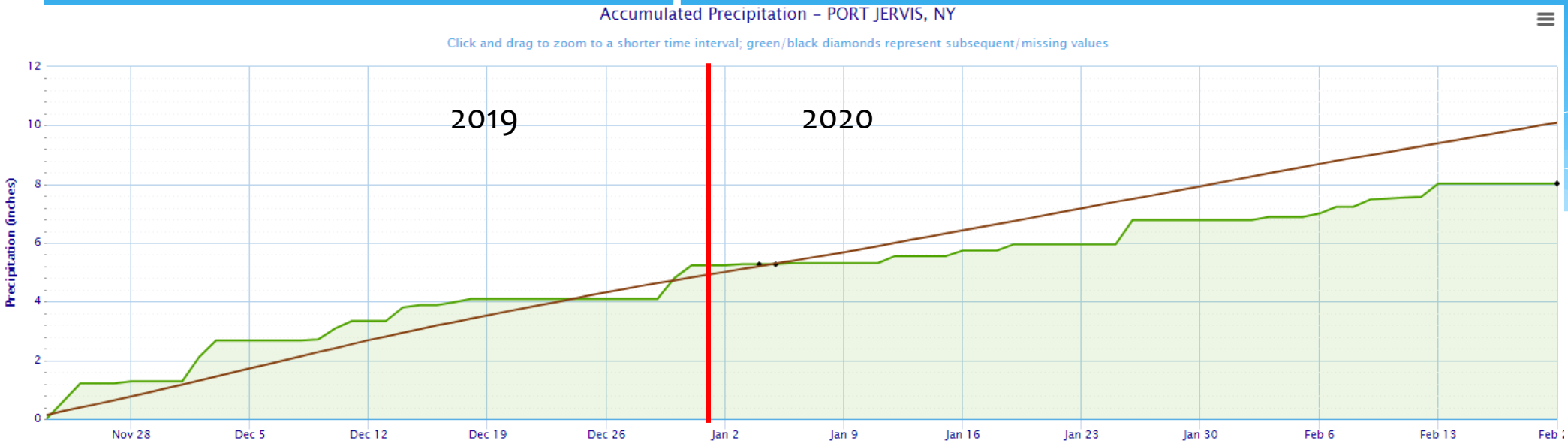
Precipitation - Philadelphia

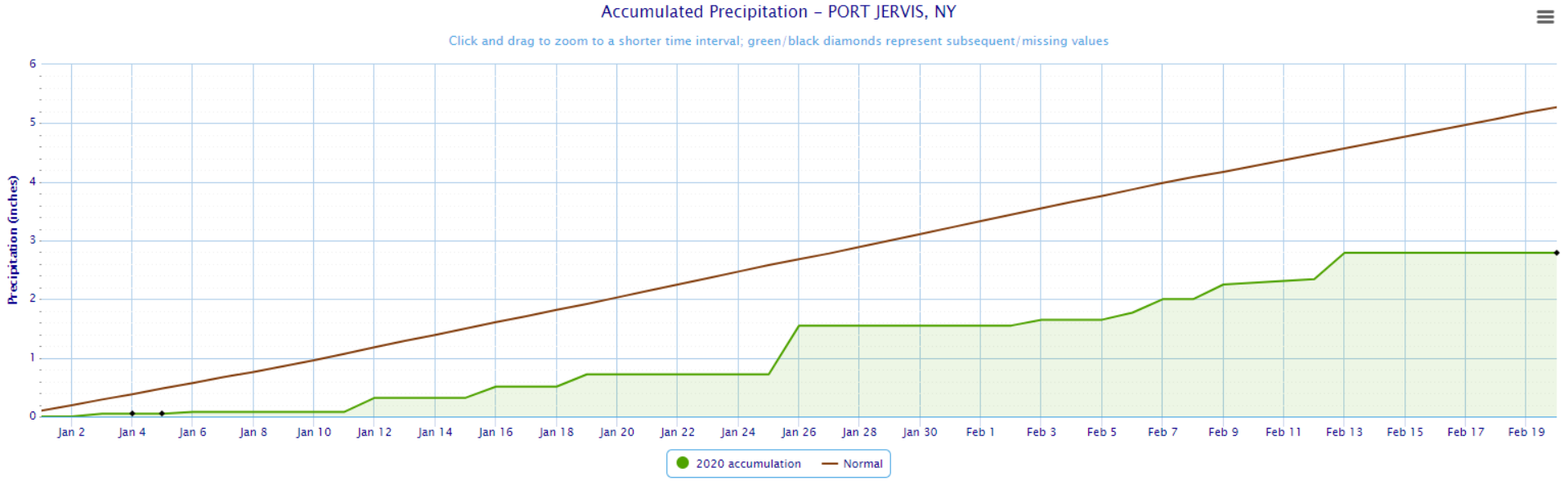




* Source: ACIS

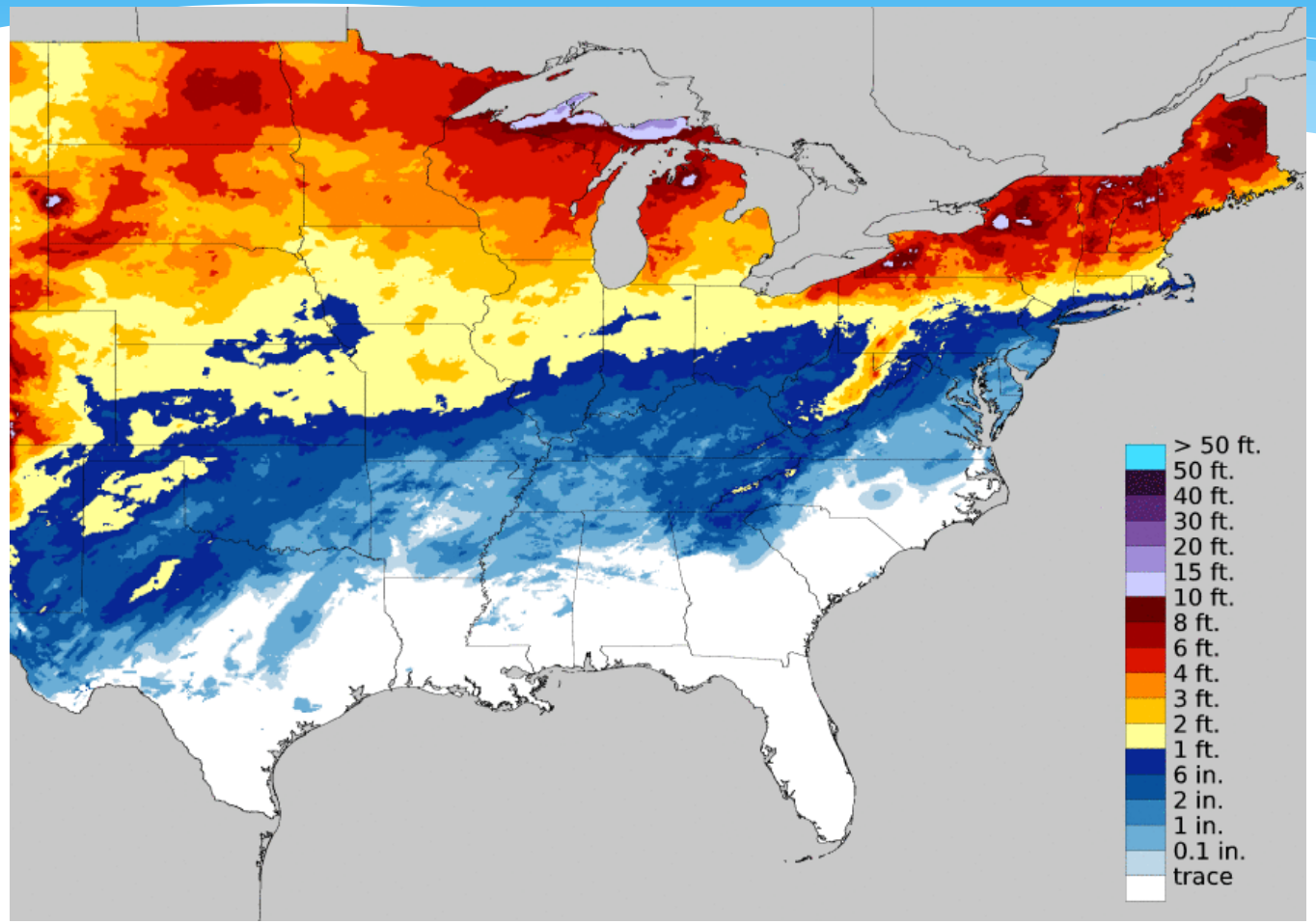
Precipitation – Port Jervis



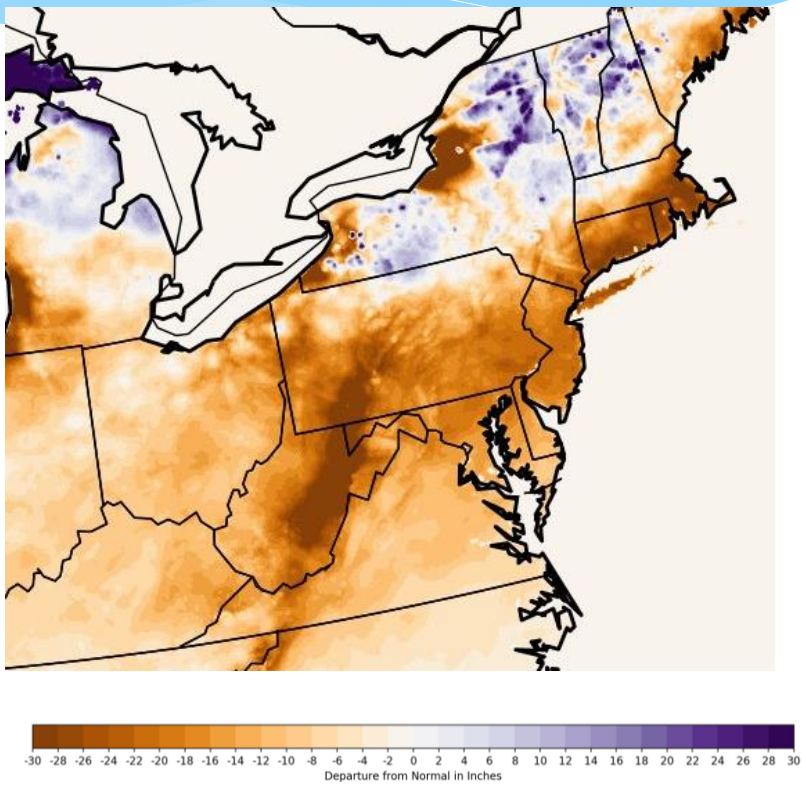


* Source: ACIS

Snow (Where is it?)



Seasonal Departure from average



Sources: NOHRSC, Eric Snodgrass

Snow (Where is it?)

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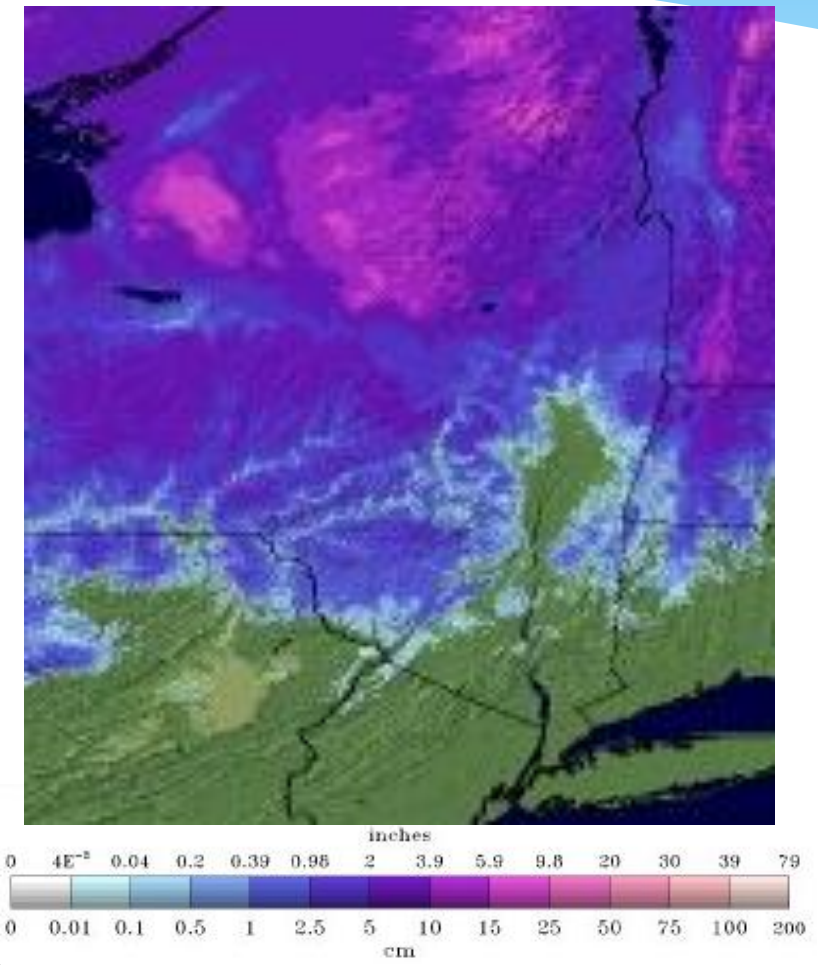
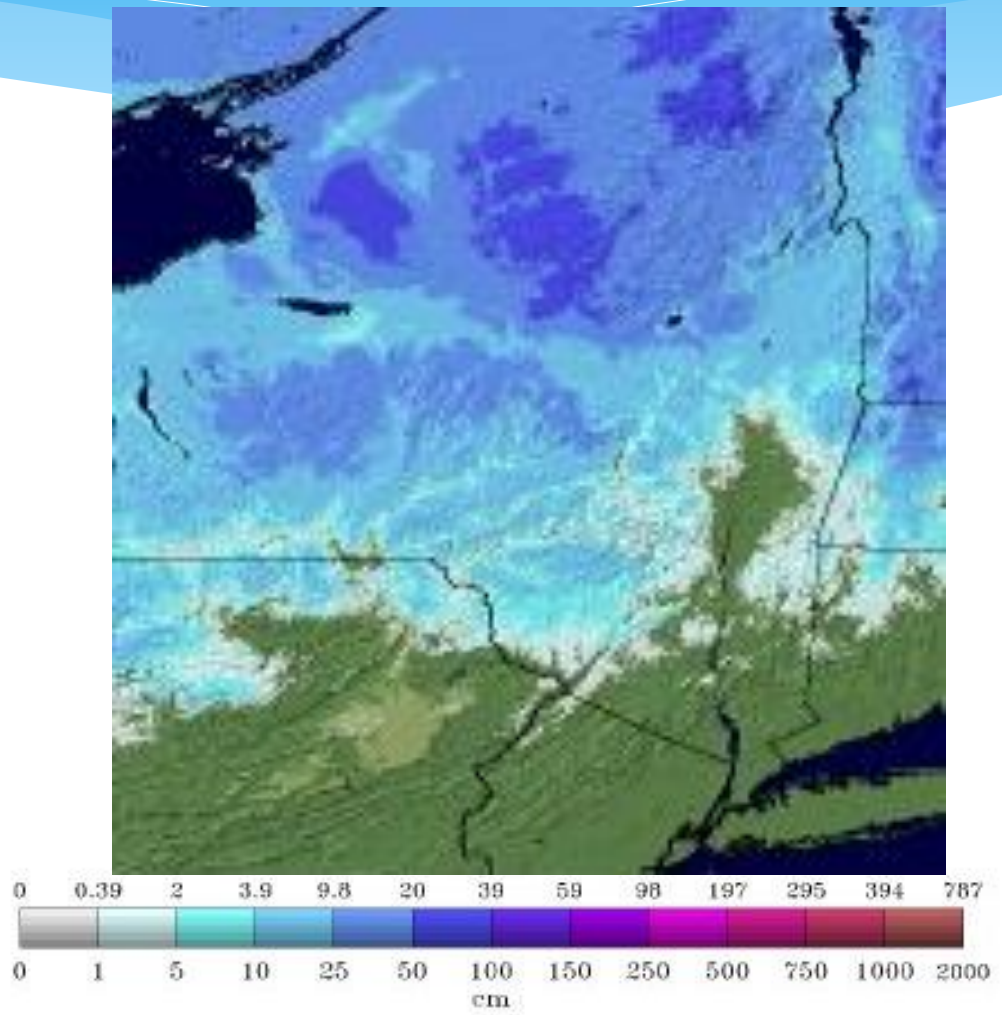
Snow Water Equivalent

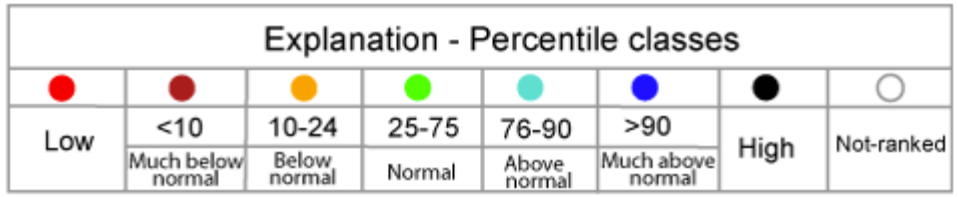


Snow Depth



Sources: NOHRSC

Streamflow



Source: USGS

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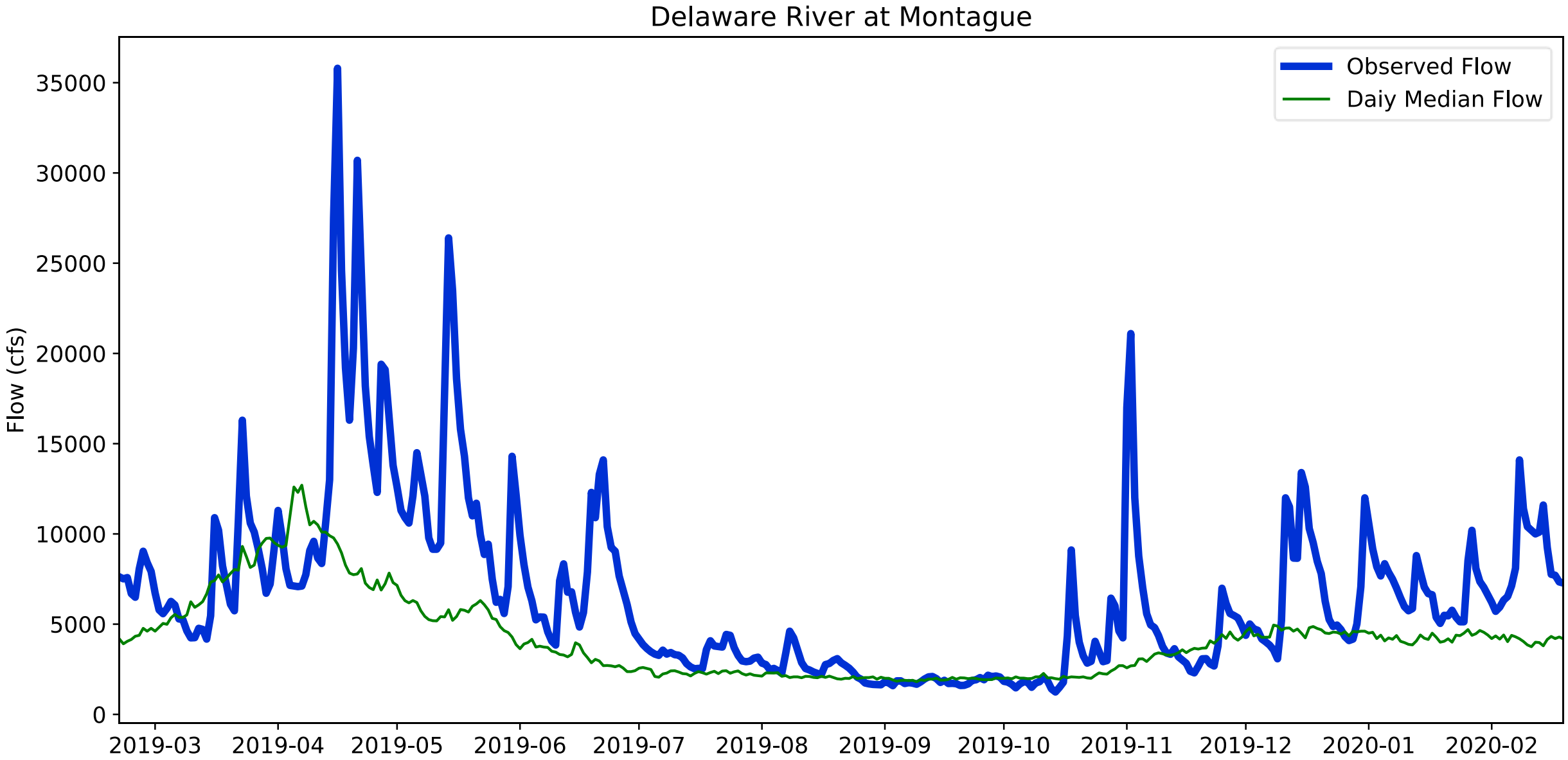

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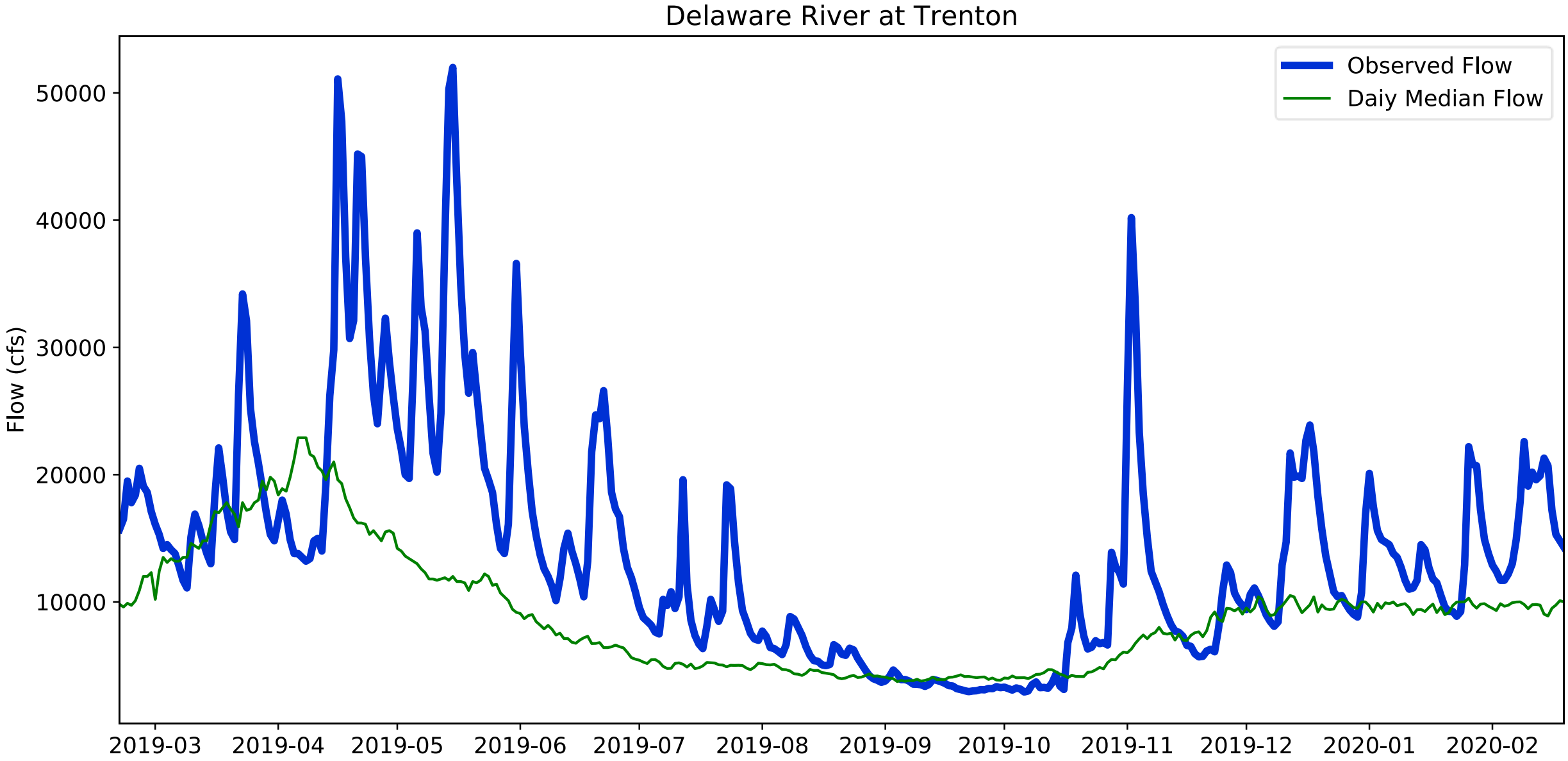

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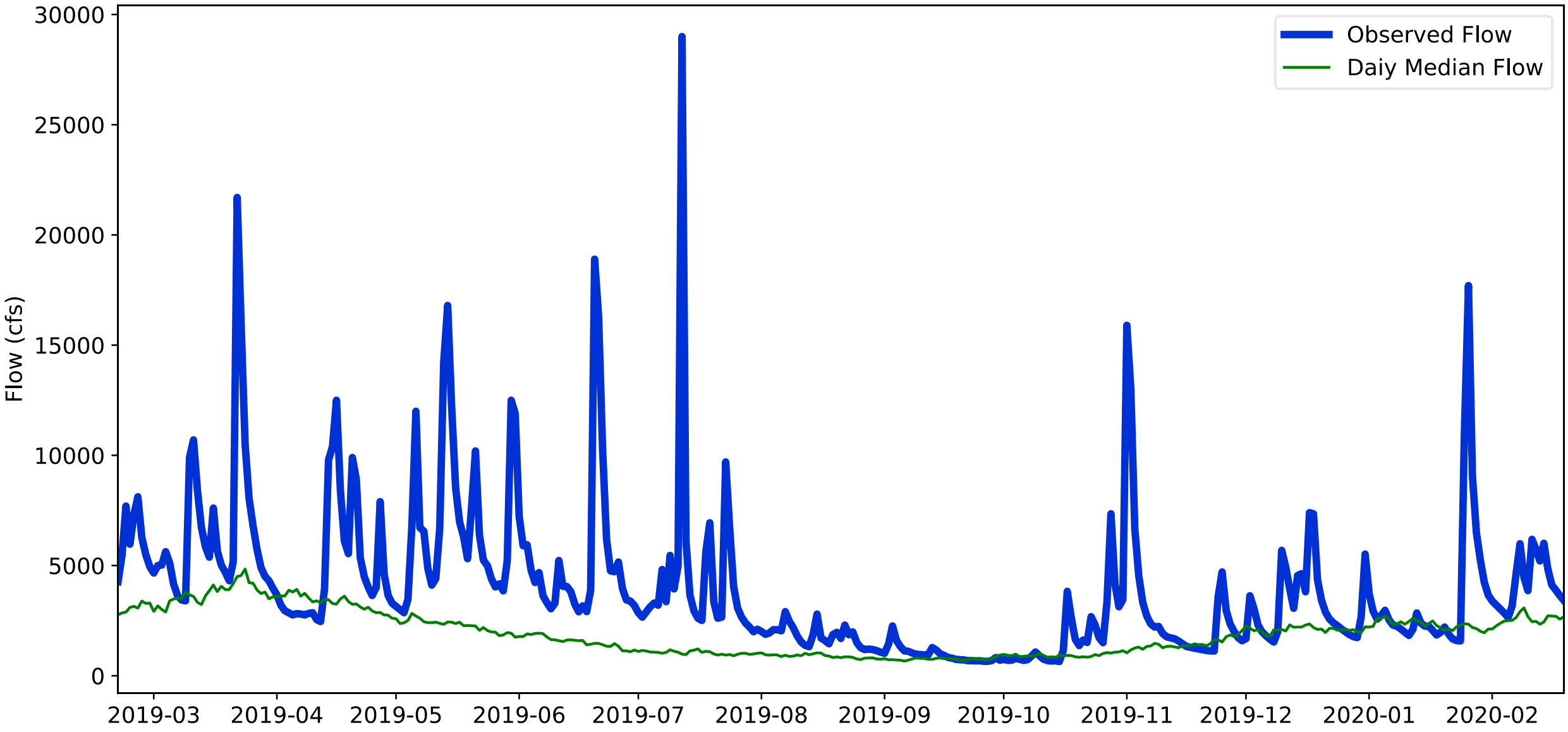

* Source: USGS

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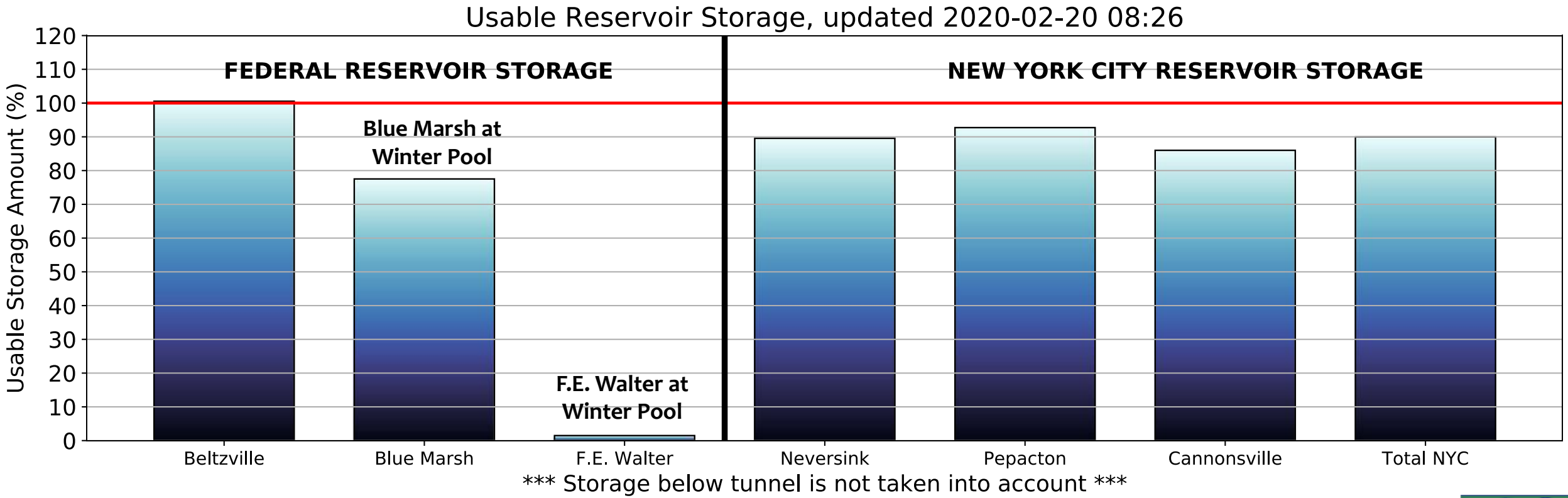
Basin Storage



* Sources: USGS, AHPS

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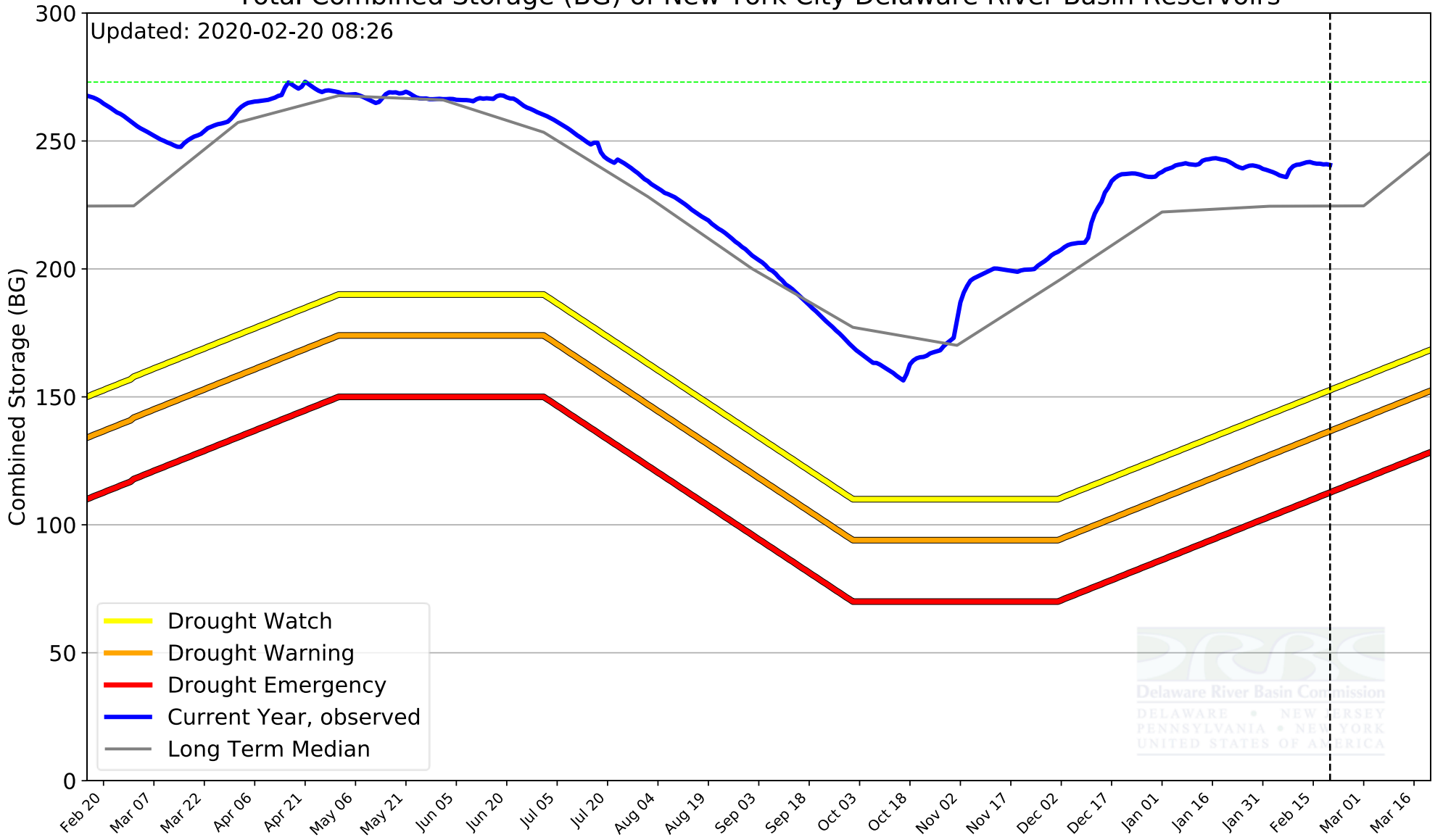
Total Combined Storage (BG) of New York City Delaware River Basin Reservoirs



Usable Storage	Cannonsville	Pepacton	Neversink	Total		
BG	80.4	129.2	31.1	240.6	BG above drought watch = 88.0	BG above median = 16.0
%	86.0	92.7	89.6	90.0	BG above drought warning = 104.0	BG below one year ago = 23.2
					BG above drought = 128.0	

* Source: USGS

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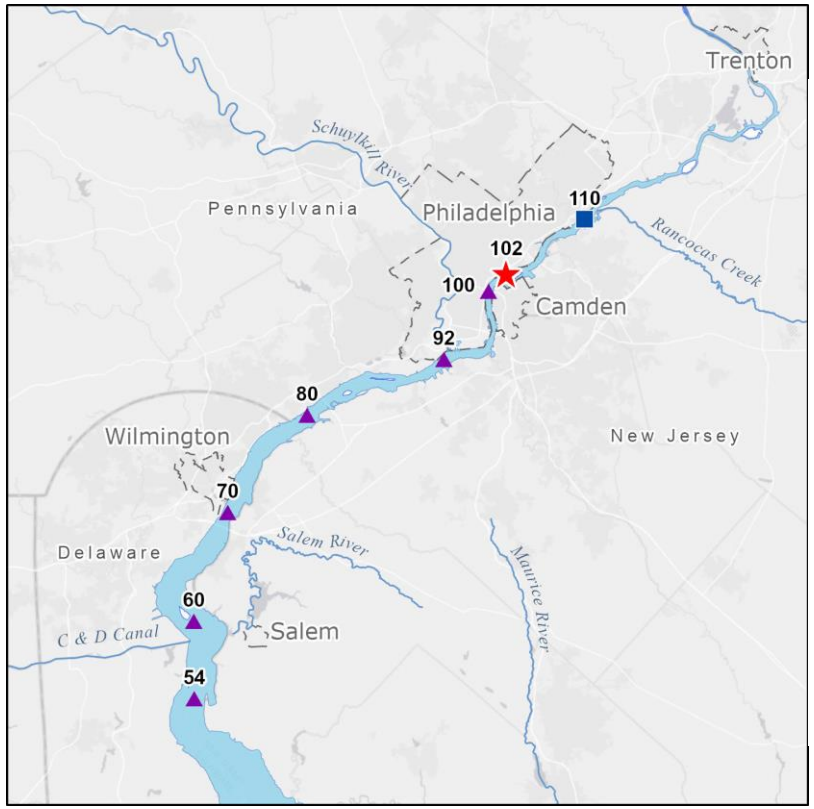
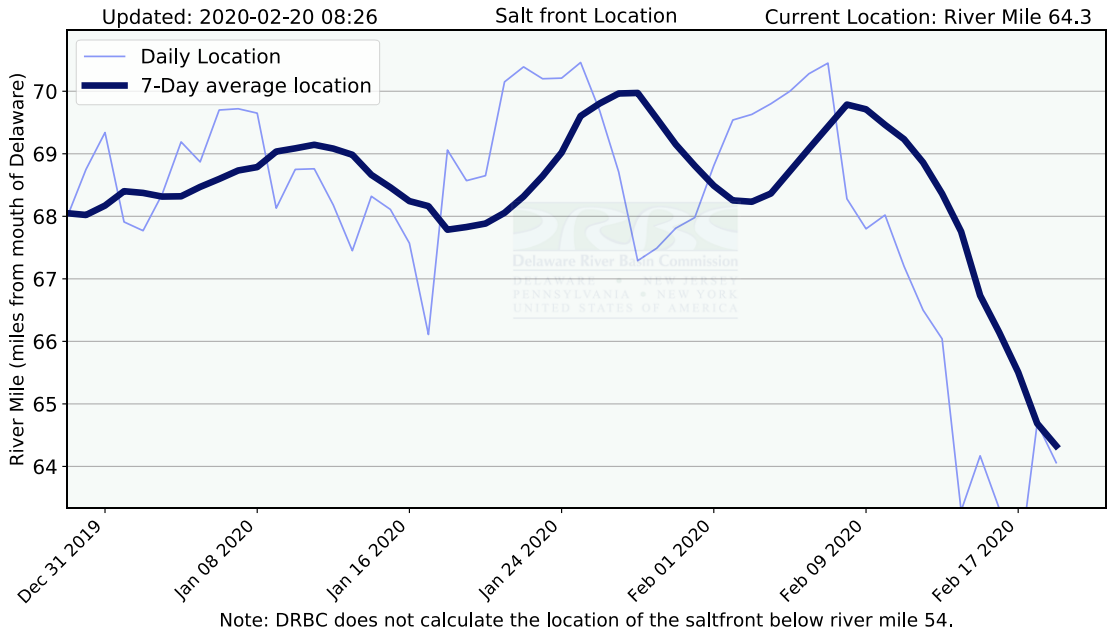
Salt Front





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

Current: 64.3
February Normal: 71

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

* Source: USGS

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Groundwater

COUNTY	STATE	DATA SOURCE	WELL ID	INDICATOR AS OF 2020-02-19
Wayne	PA	USGS	WN 64	Normal
Monroe	PA	USGS	MO 190	Normal
Carbon	PA	USGS	CB 104	Normal
Schuylkill	PA	USGS	SC 296	Normal
Lehigh	PA	USGS	LE 372	Above 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

* Source: USGS

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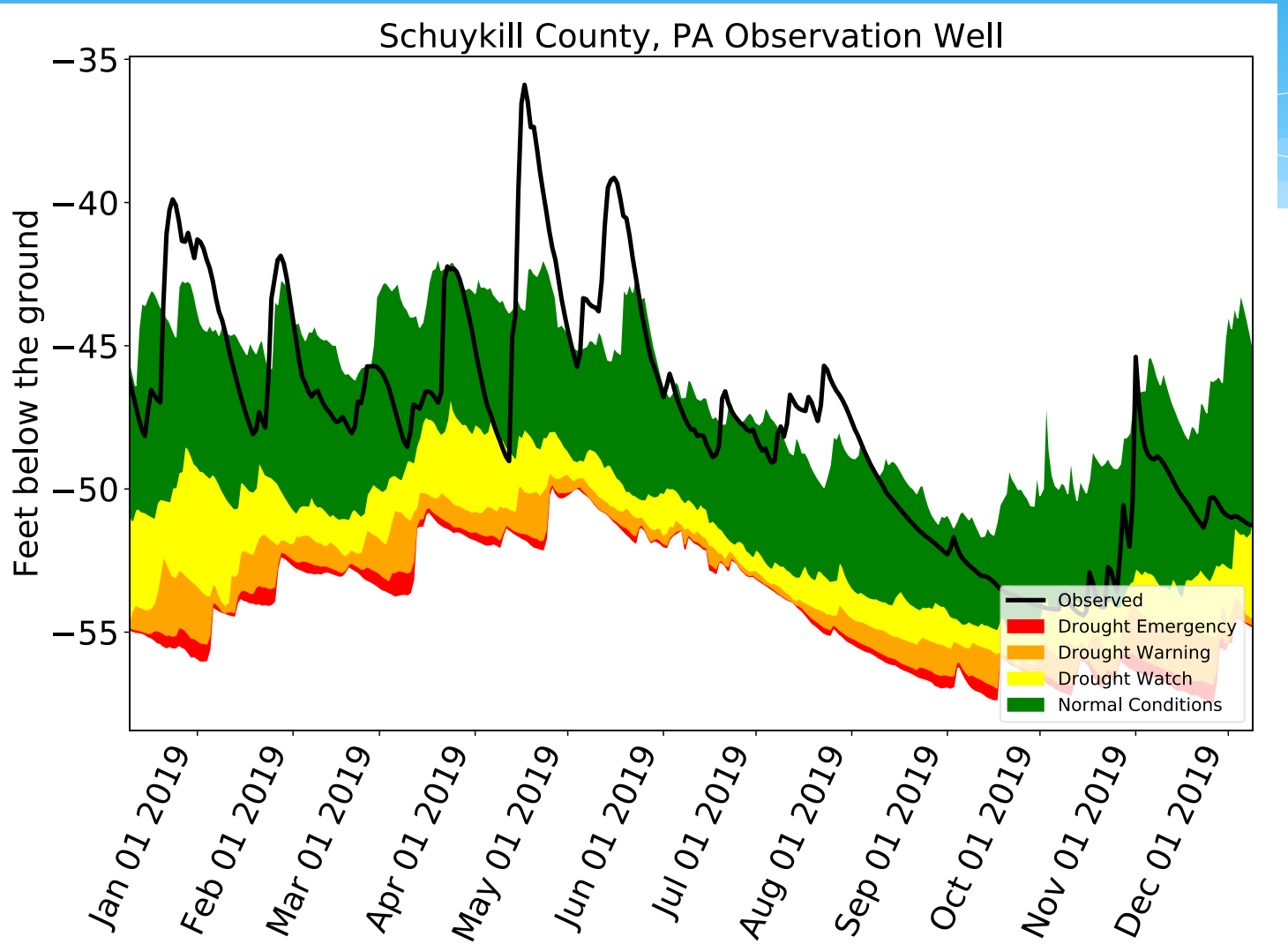
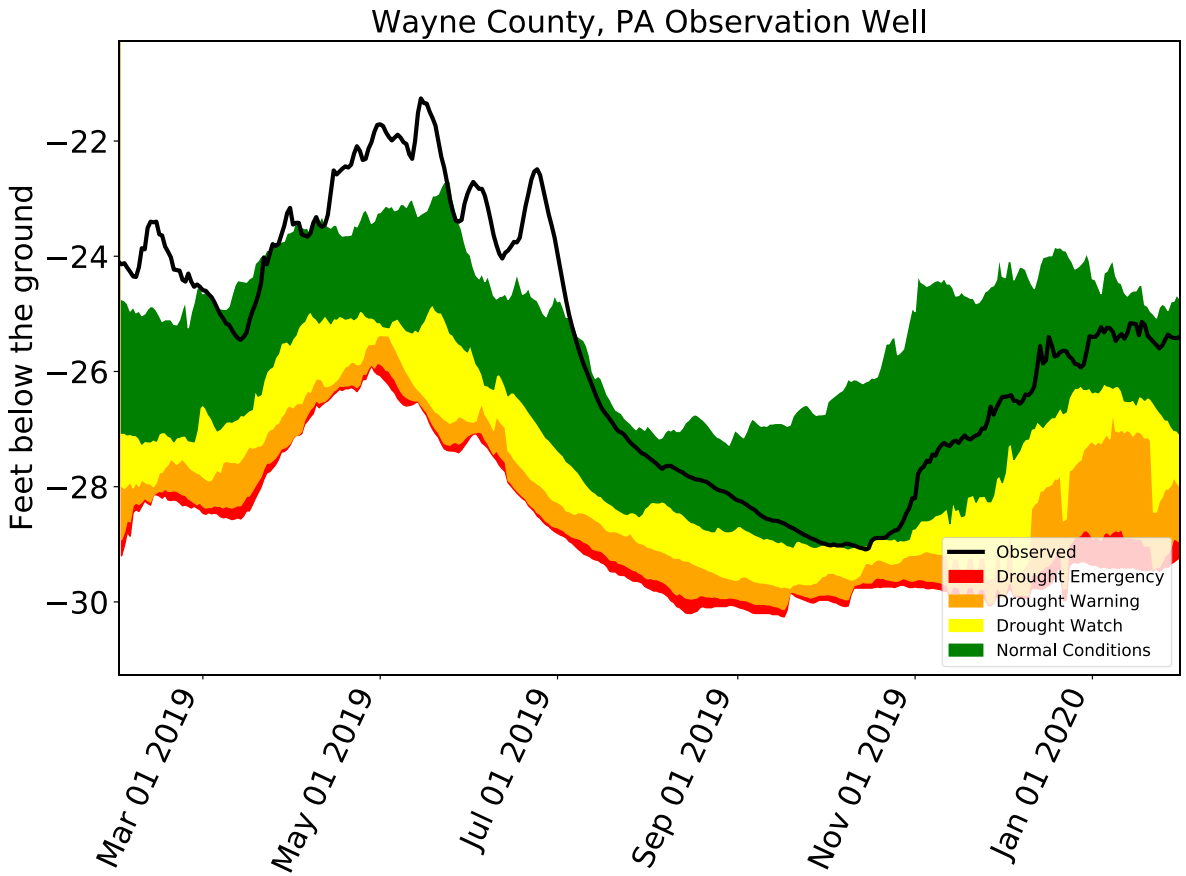
Schuylkill County Well

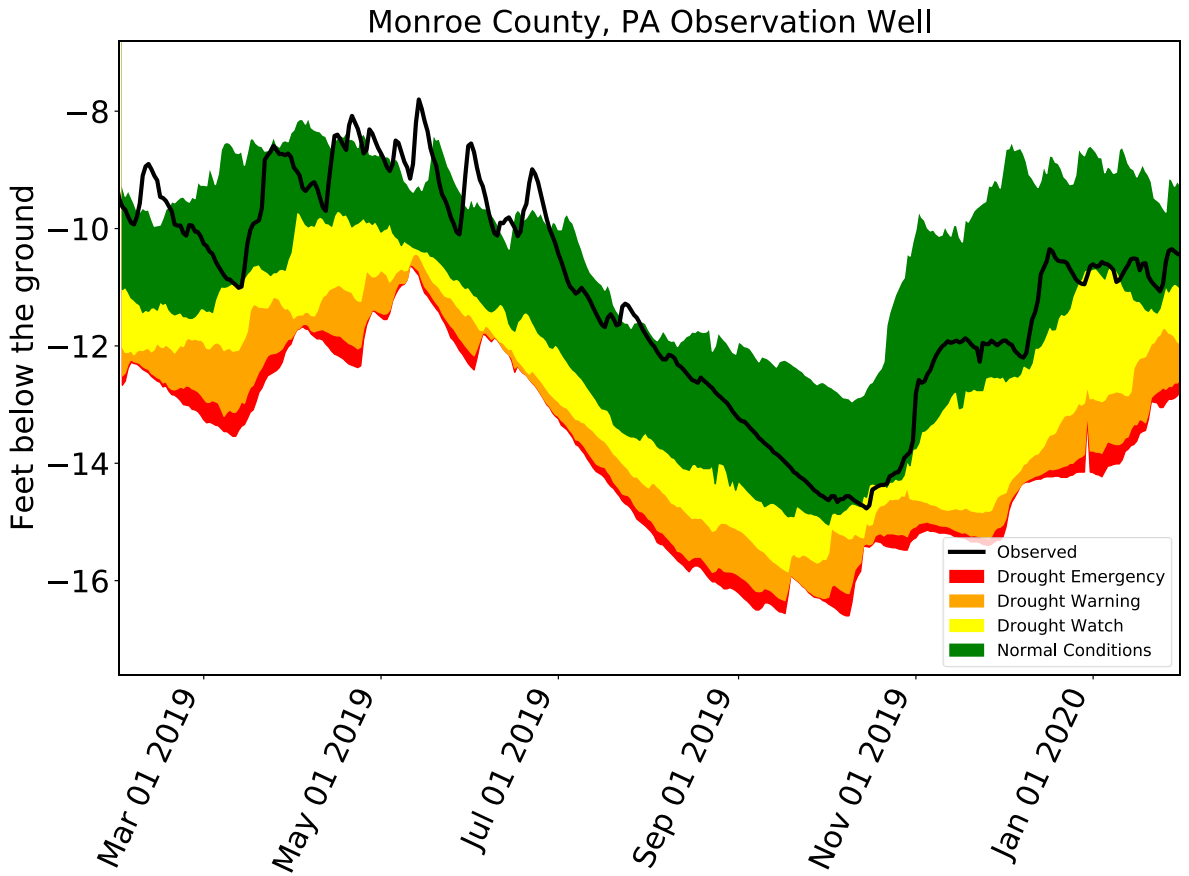


* Source: USGS

Upper Basin



Middle-Upper Basin



* Source: USGS

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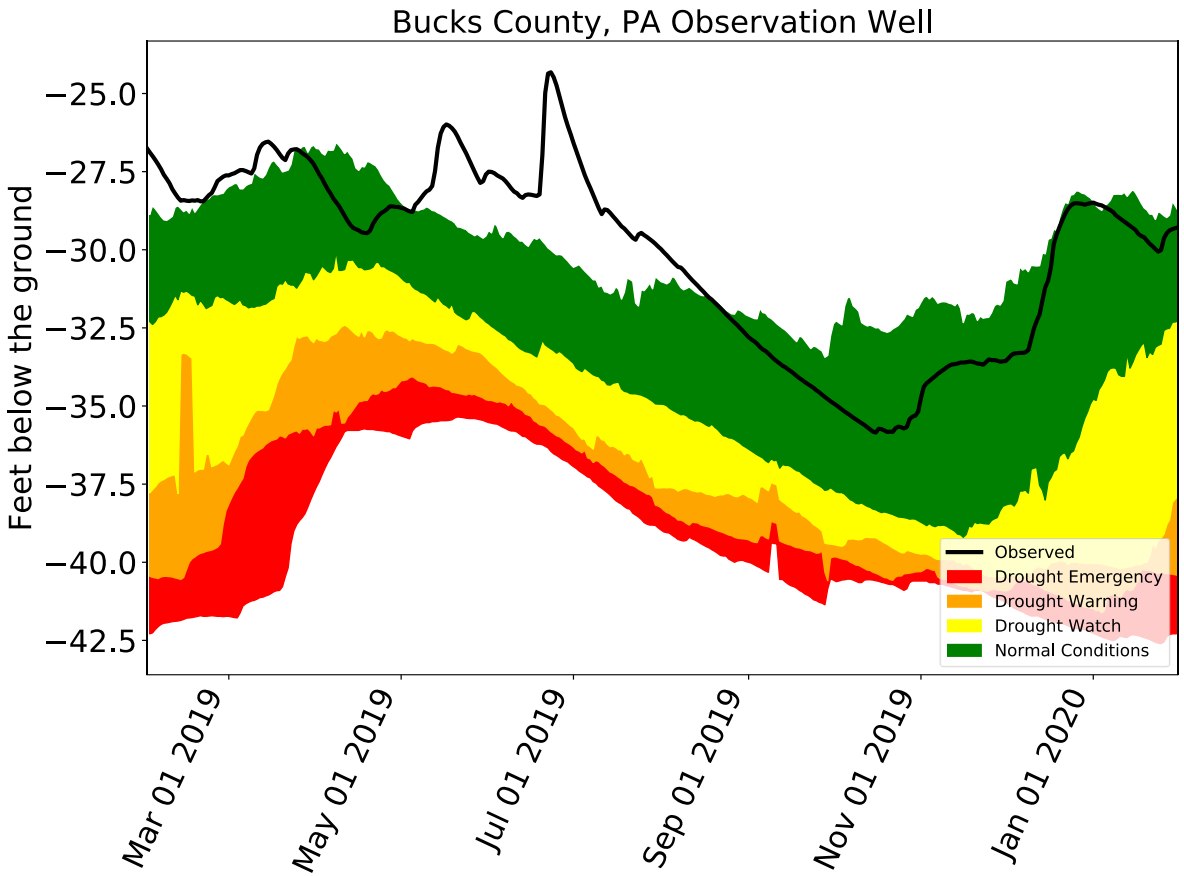
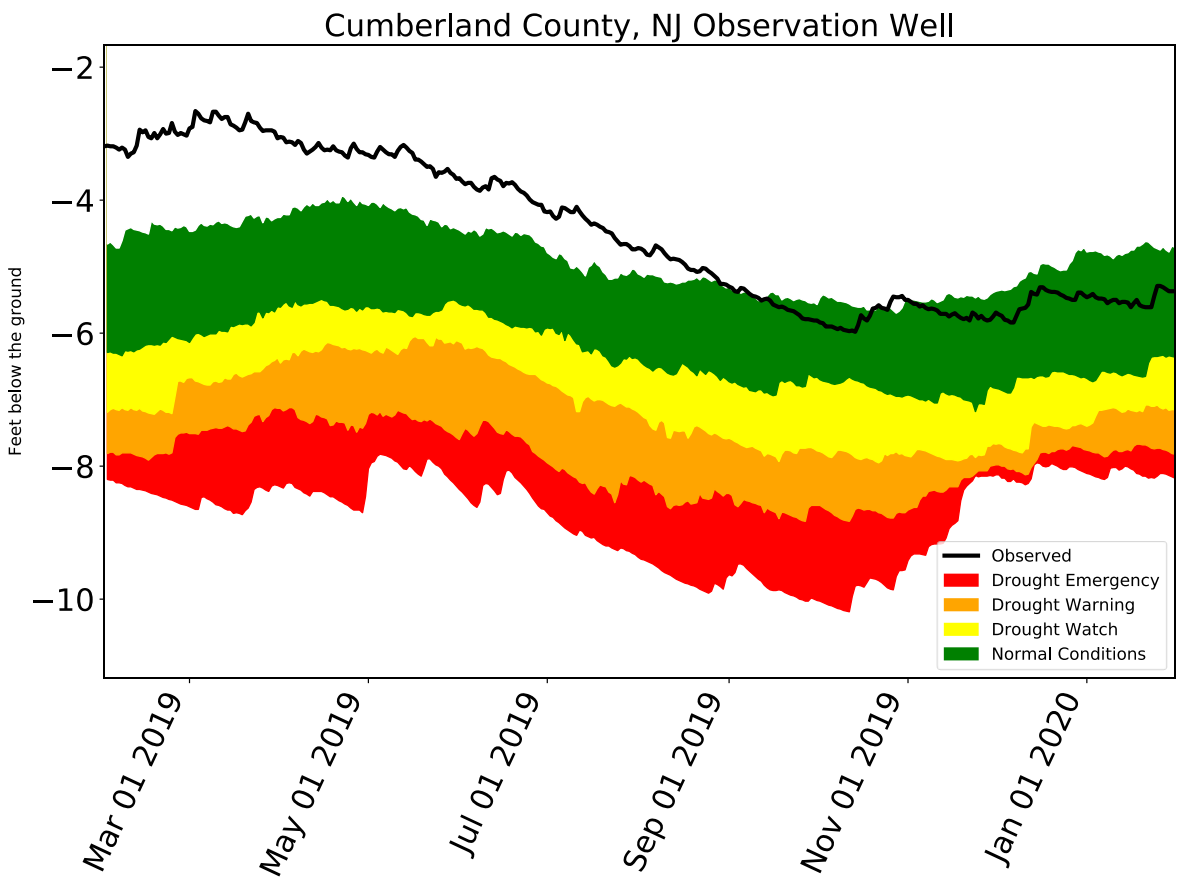
Middle-Lower Basin



Lower Basin



* Source: USGS

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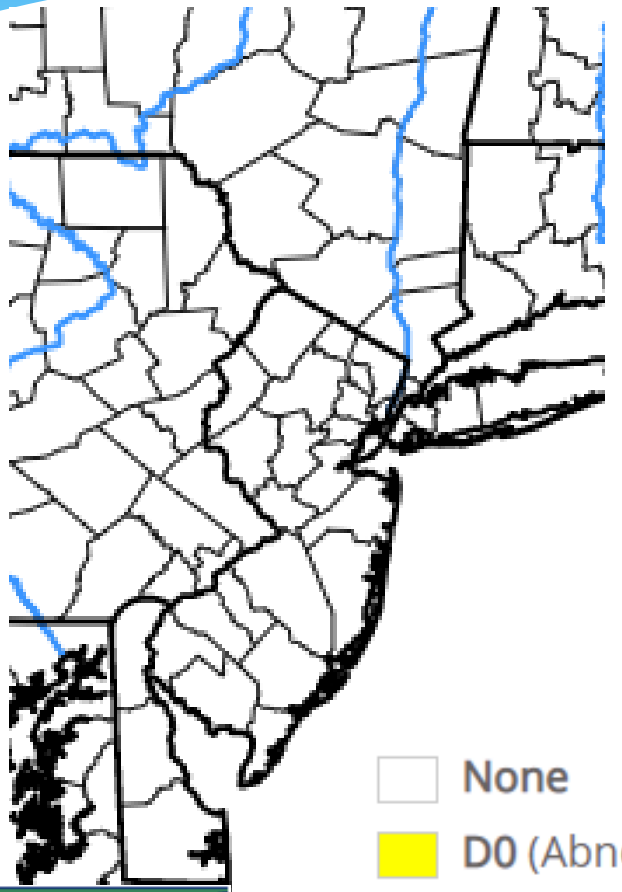
Drought Monitor

February 13, 2020



None

D0 (Abnormally Dry)

D1 (Moderate Drought)

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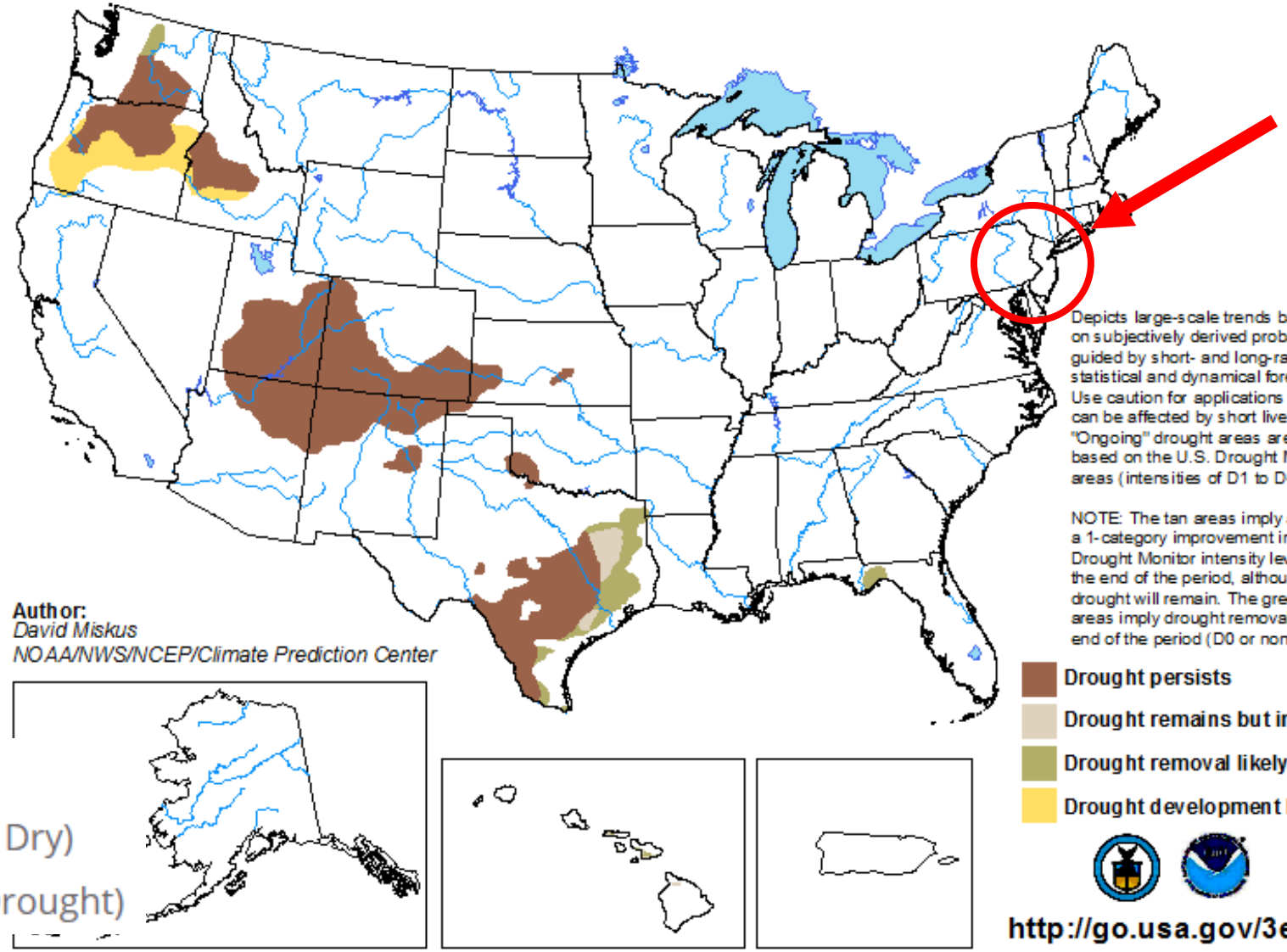
U.S. Monthly Drought Outlook

Drought Tendency During the Valid Period

Valid for February 2020
Released January 31, 2020



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

Author:
David Miskus
NOAA/NWS/NCEP/Climate Prediction Center

http://go.usa.gov/3eZGd

Source: Tropical Tidbits

7 Day Precipitation Forecast

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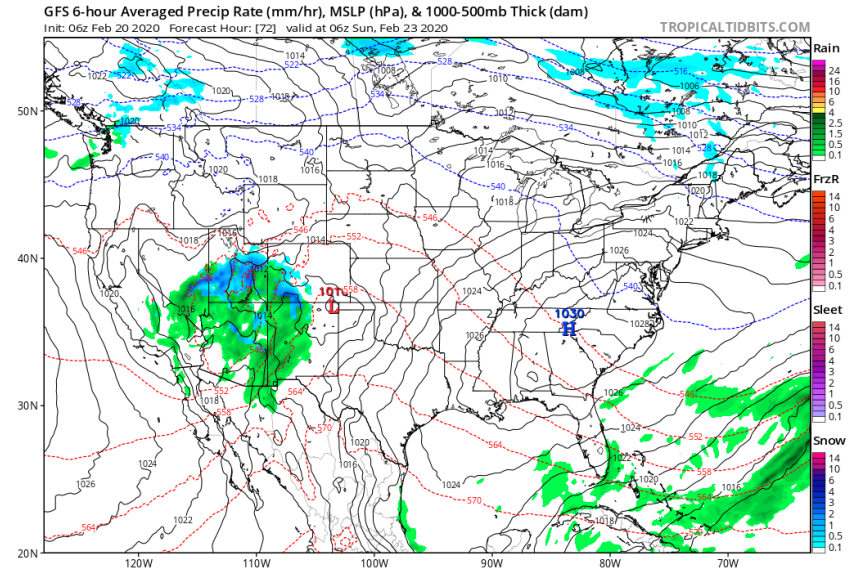
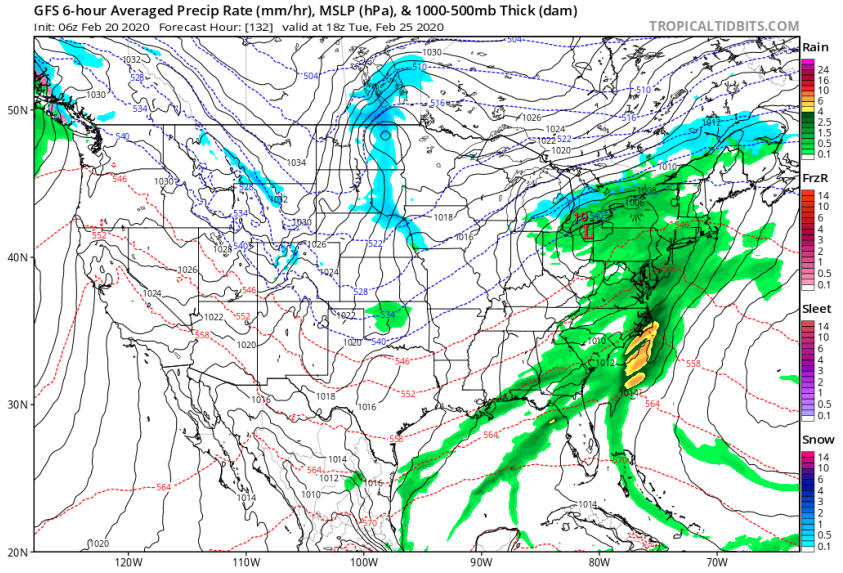
Today - Monday

- High pressure remains strong, with dry conditions.
- Temperatures cooler than normal, warm up on Saturday



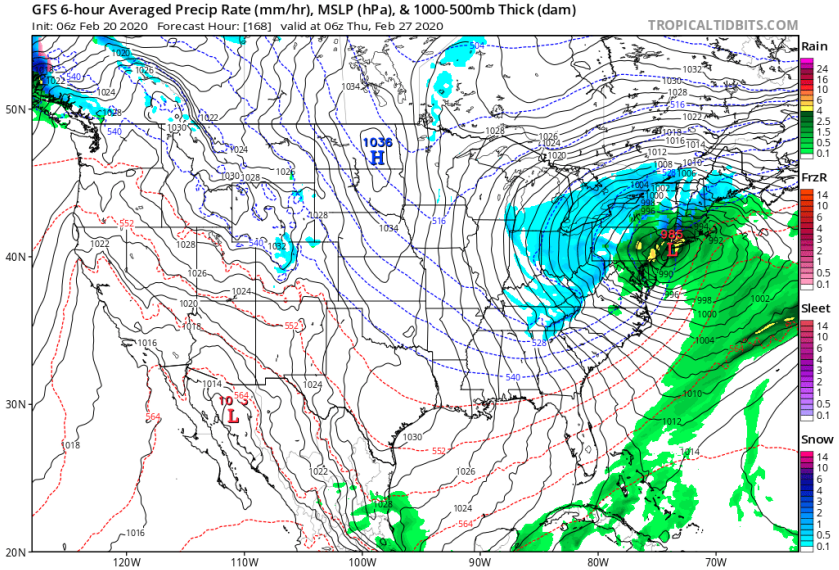
Tuesday - Wednesday

- Low Pressure system comes across from the Midwest
- Rainfall totals – 0.2 inches north, 0.6 inches south
- Moves out Wednesday morning



Wednesday evening - Thursday

- Stronger low possible for the northeast, dependent on track
- Chance for snow on the back side
- 1 – 1.75 additional inches of liquid equivalent possible



7 Day Precipitation Forecast

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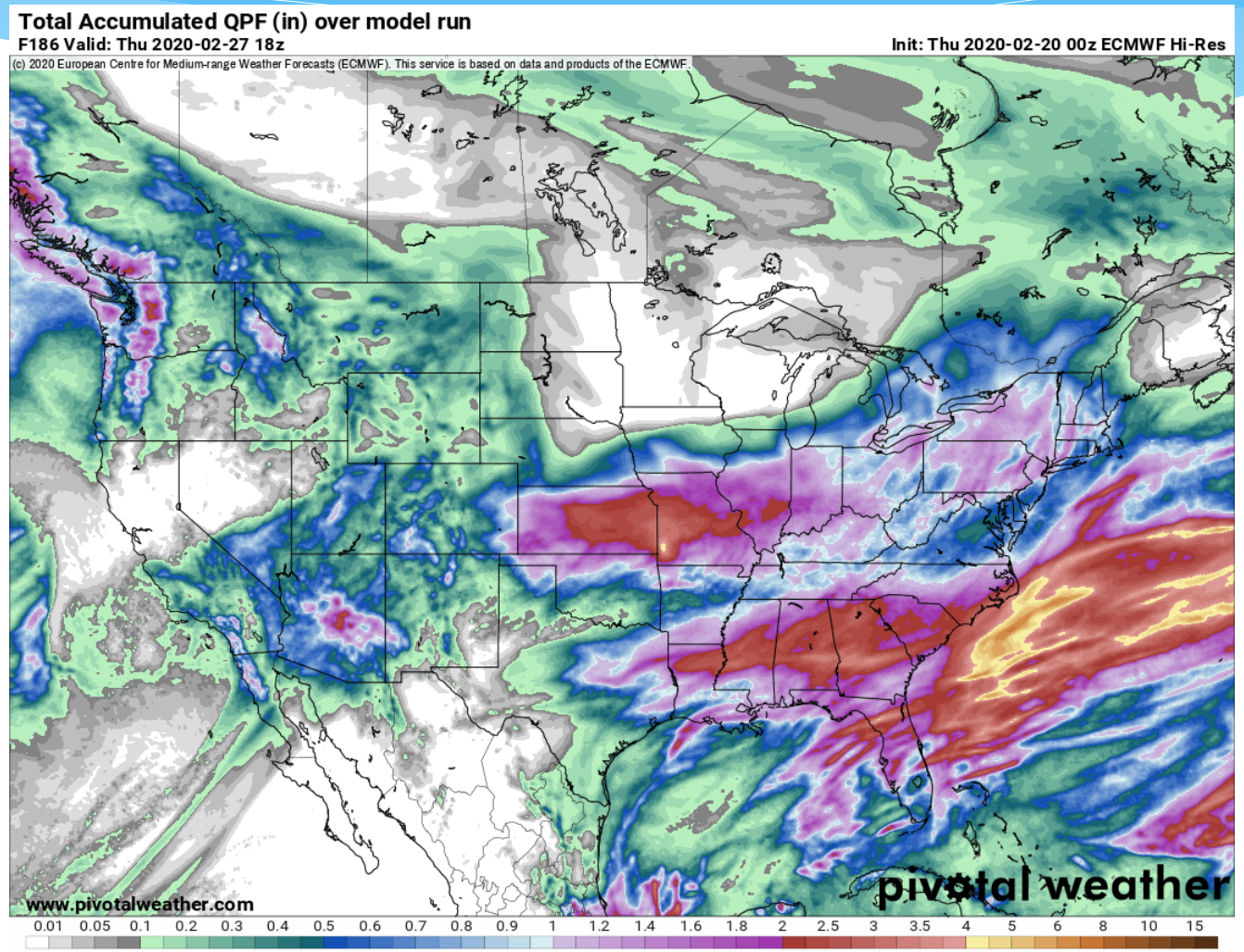
Summary:

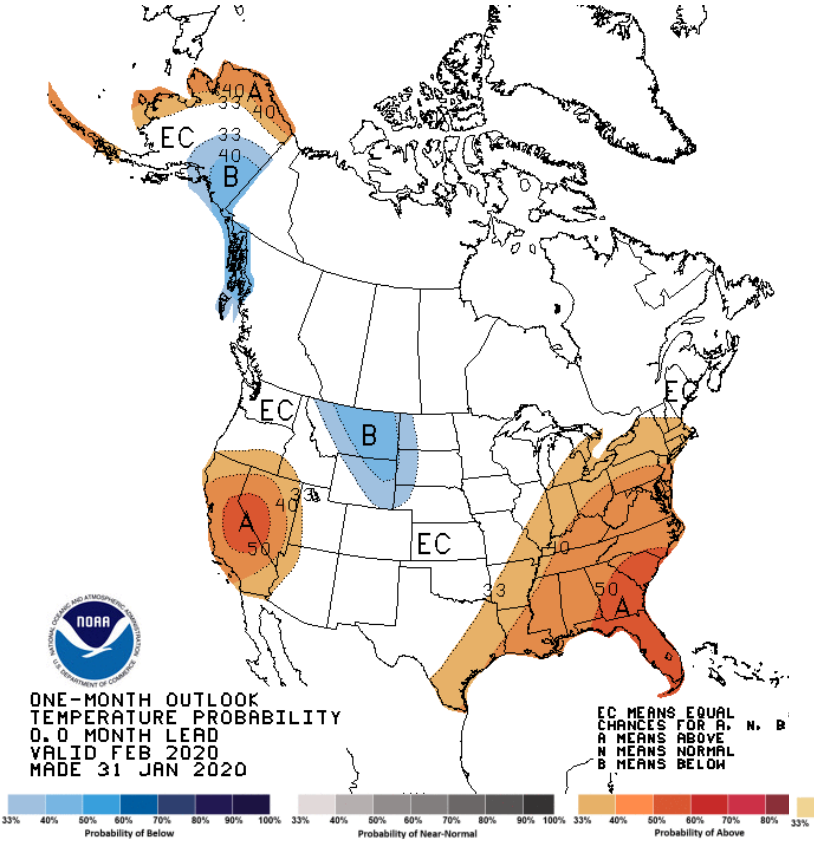
- **Drier than normal week across the basin**
- **Weak event Monday-Tuesday**
- **Possible coastal low late next week, potential for heavy rain**



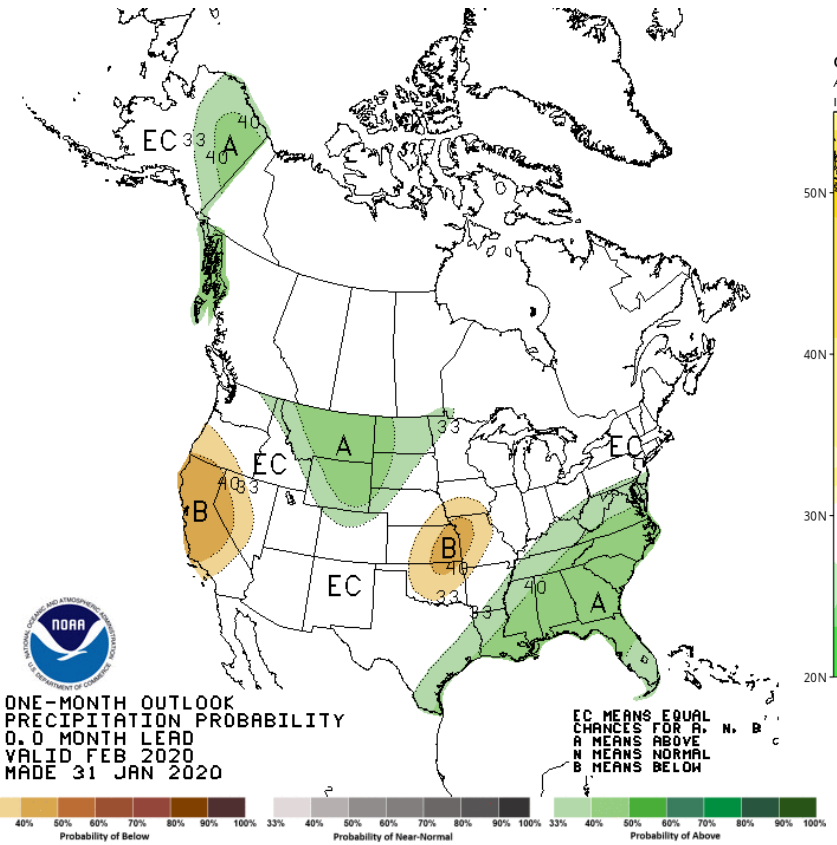
Source: Pivotal Weather

1 Month Outlook

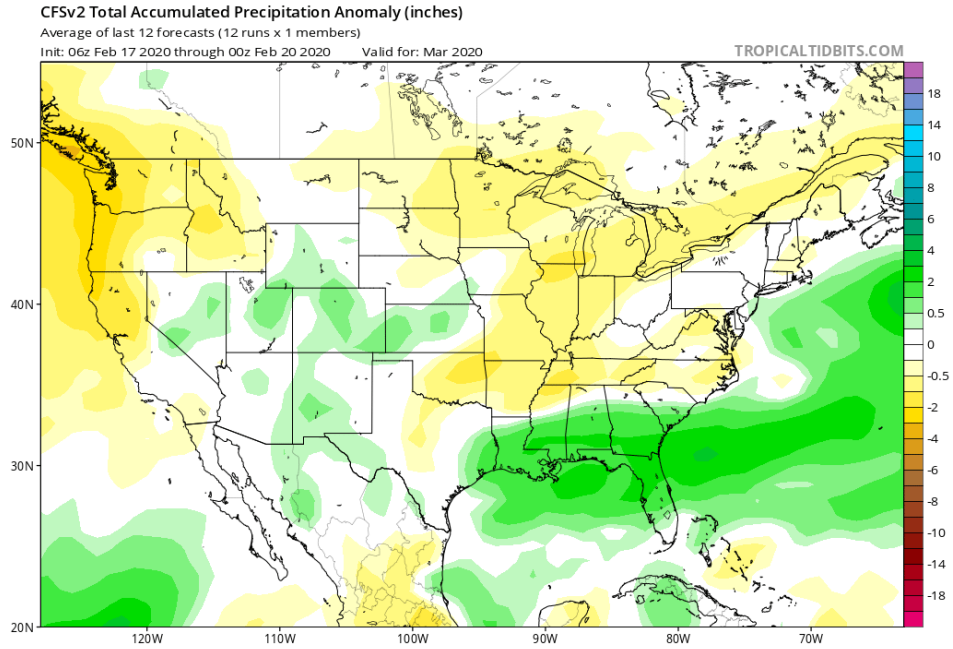
Temperature



Precipitation



Model Prediction



*Forecast from Climate Prediction Center, Updated Jan 31, 2020. Valid for February.

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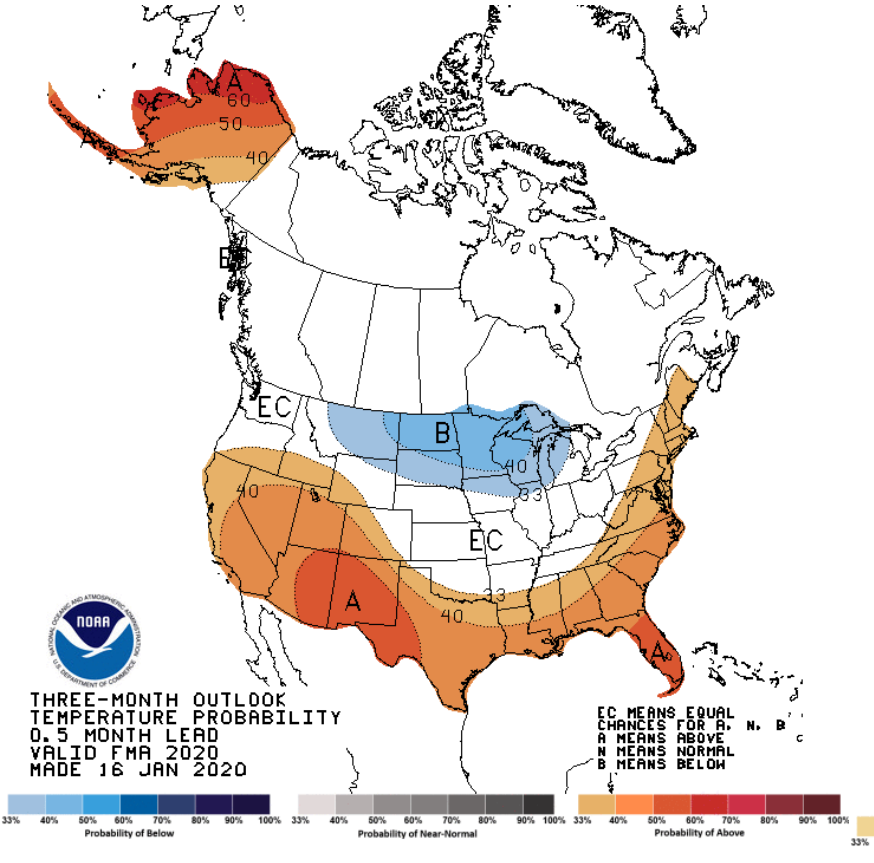
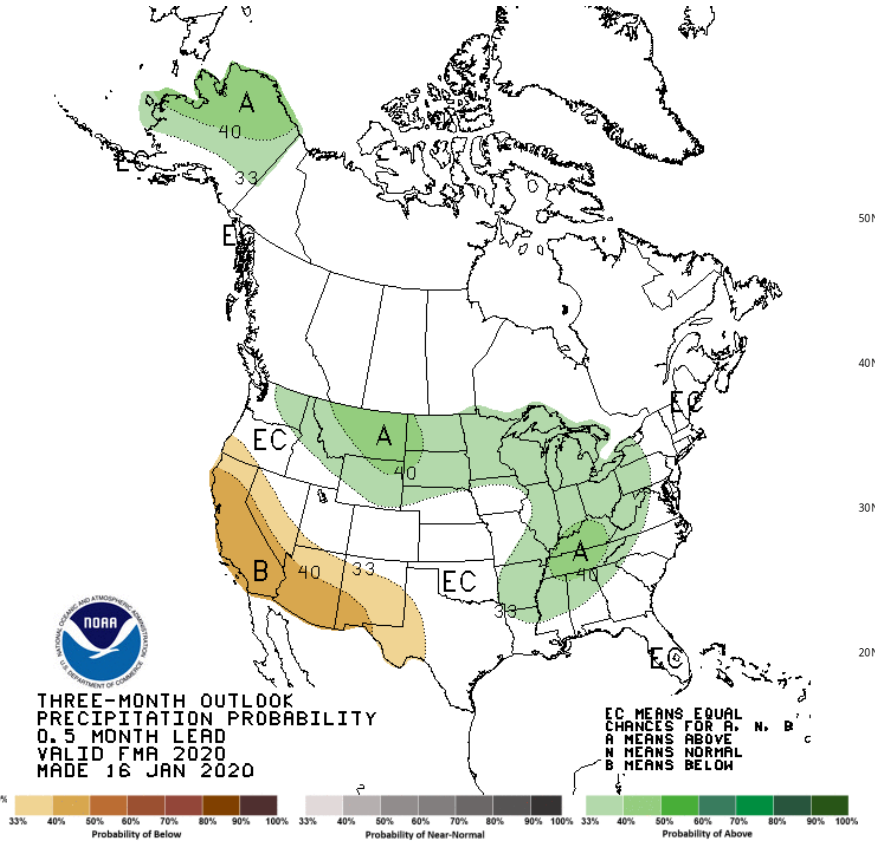
3 Month Outlook

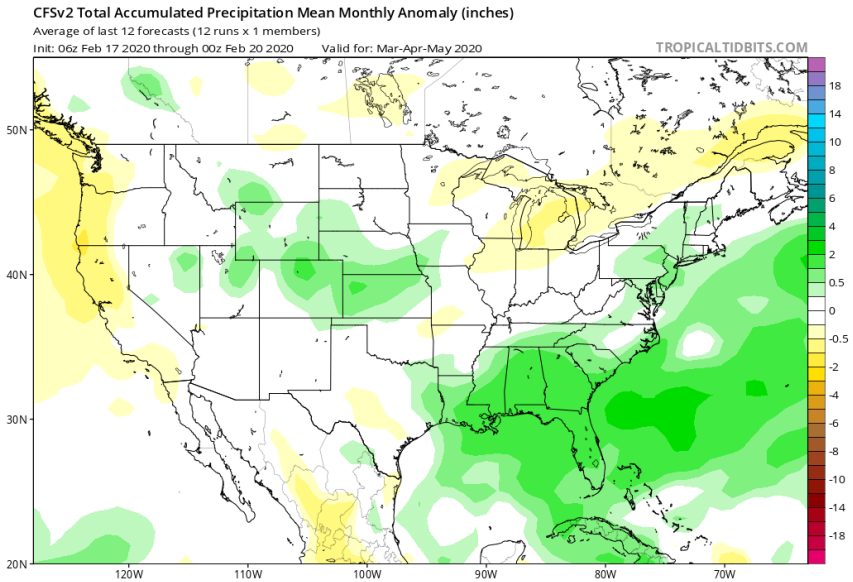
Temperature



Precipitation



Model Prediction



*Forecast from Climate Prediction Center, updated November 21, 2019. Valid for December - February

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