



Mid-Atlantic Spring Flood Outlook

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Middle Atlantic River Forecast Center

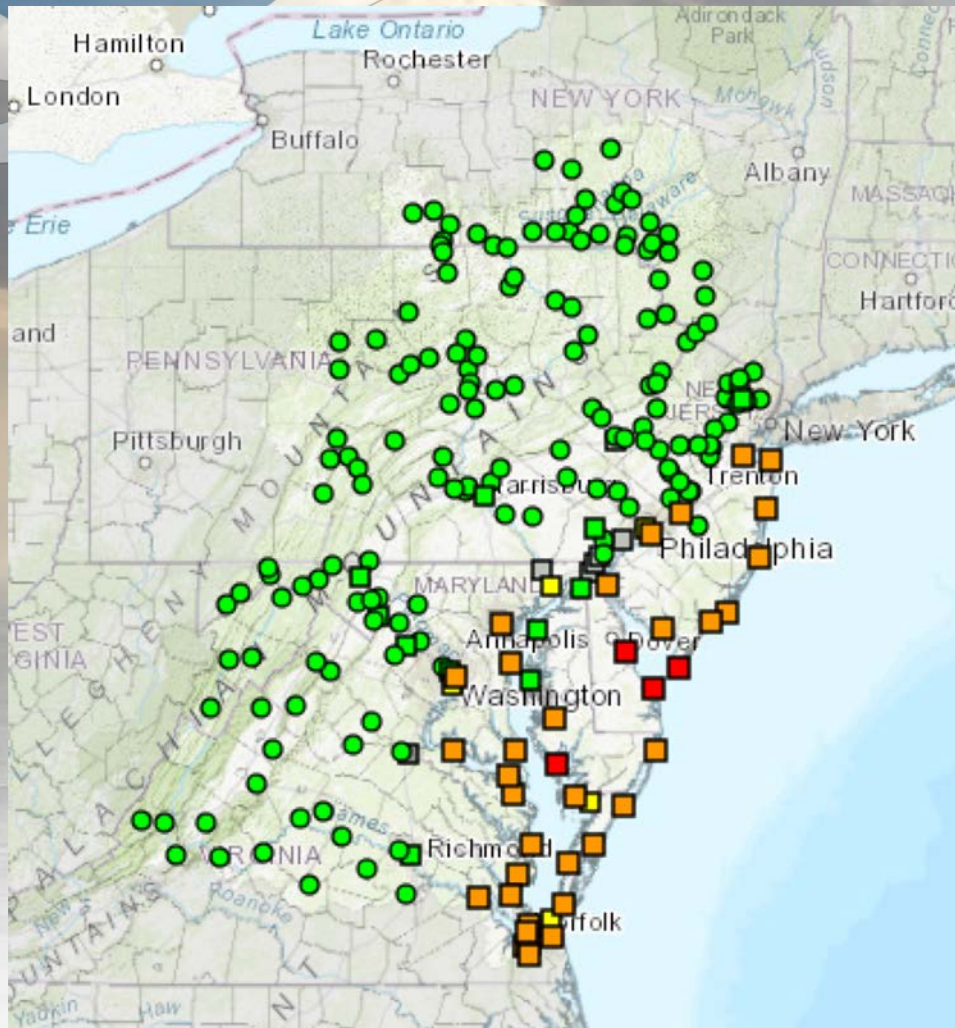
Approximately 175 forecast locations

87,000 square miles

River Systems include

- Susquehanna
- Delaware
- Potomac
- James
- Passaic/Raritan





- **176 River Forecast Points**
 - All 72-hour forecasts
 - **All Issued Daily**
 - **5 Tidal (Estuary) Forecast Points**
 - Hourly forecast time-step



It's been an unusual couple of months

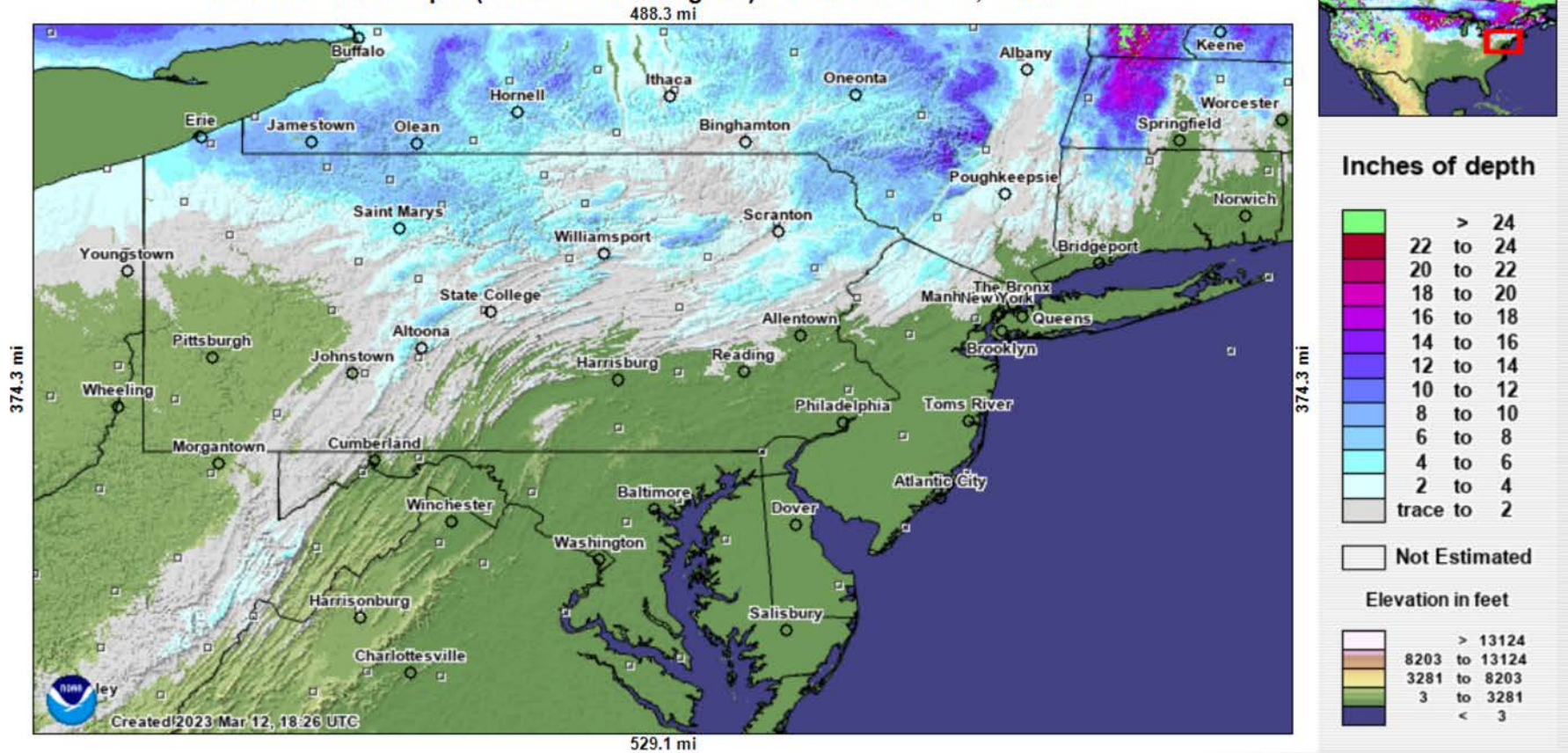


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Modeled Snow Depth (Shallow-snow Legend) for 2023 March 12, 12:00 UTC

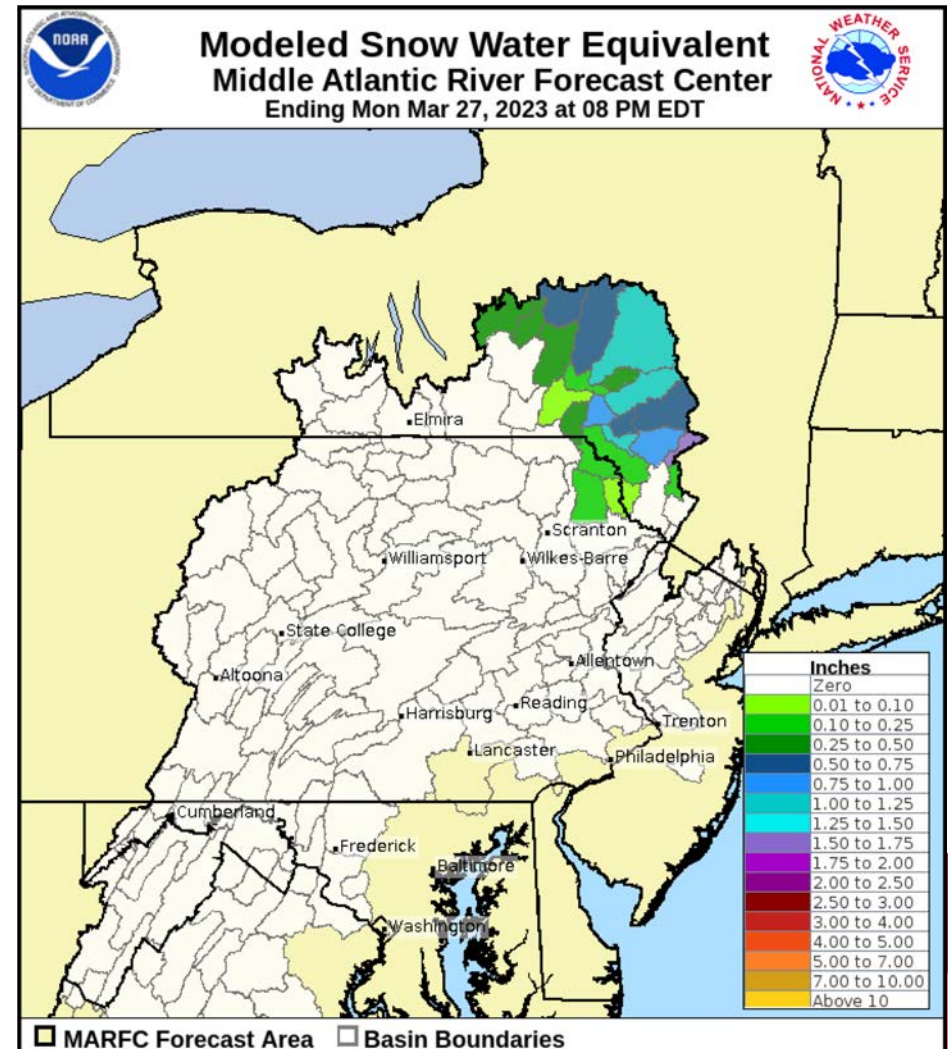


It's been an unusual couple of months



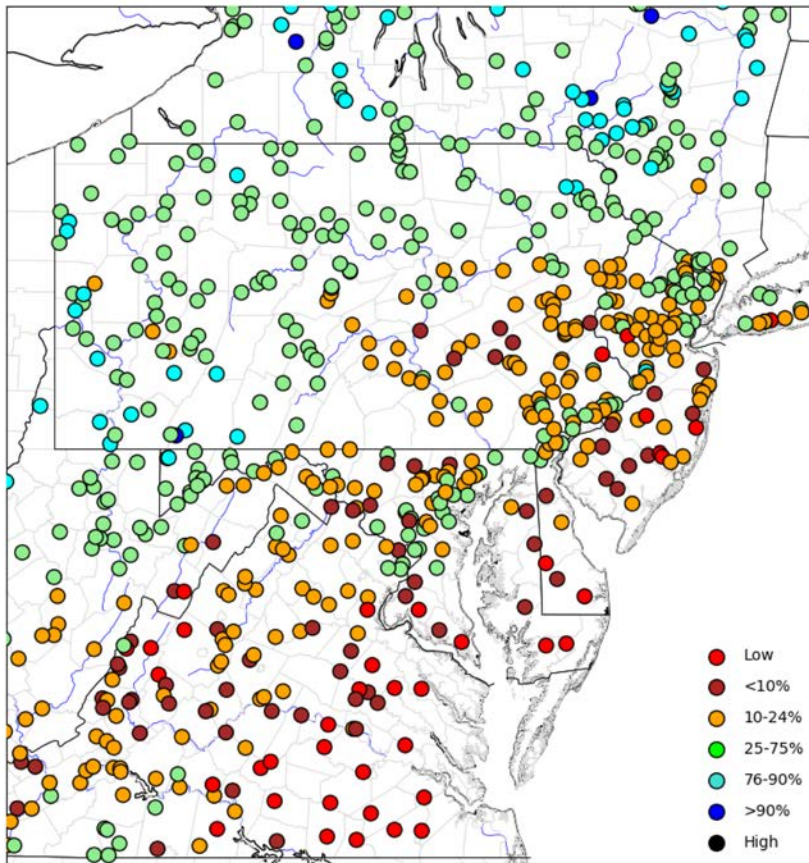
Current Snow State

1-2 inches of water in the snowpack in the highest elevations of the upper Susquehanna and Delaware



USGS 7-Day Average Streamflows

Mar 28, 2023 7:33 am



Data Courtesy US Geological Survey

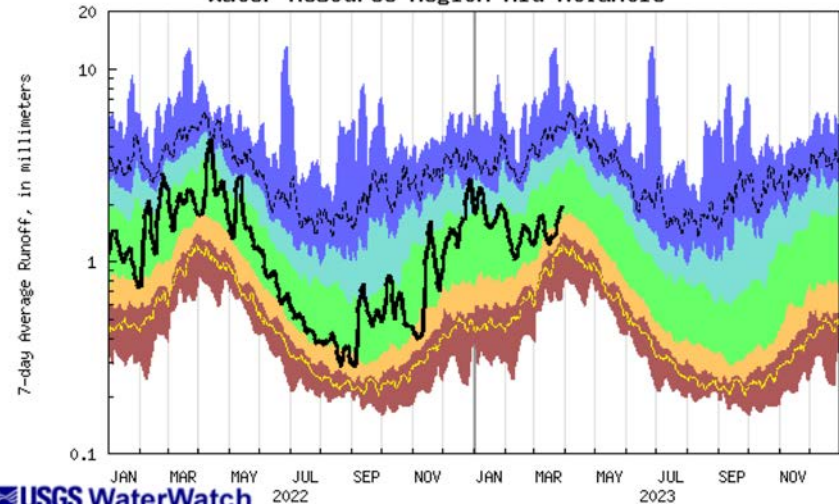
NWS Mid-Atlantic River Forecast Center @NWSMARFC

River Status

Flows are below normal across Virginia, SE PA and Srn NJ

Flows are near or above normal across most of PA and NY

Duration hydrograph of 7-day average runoff for Water Resource Region Mid Atlantic



USGS WaterWatch

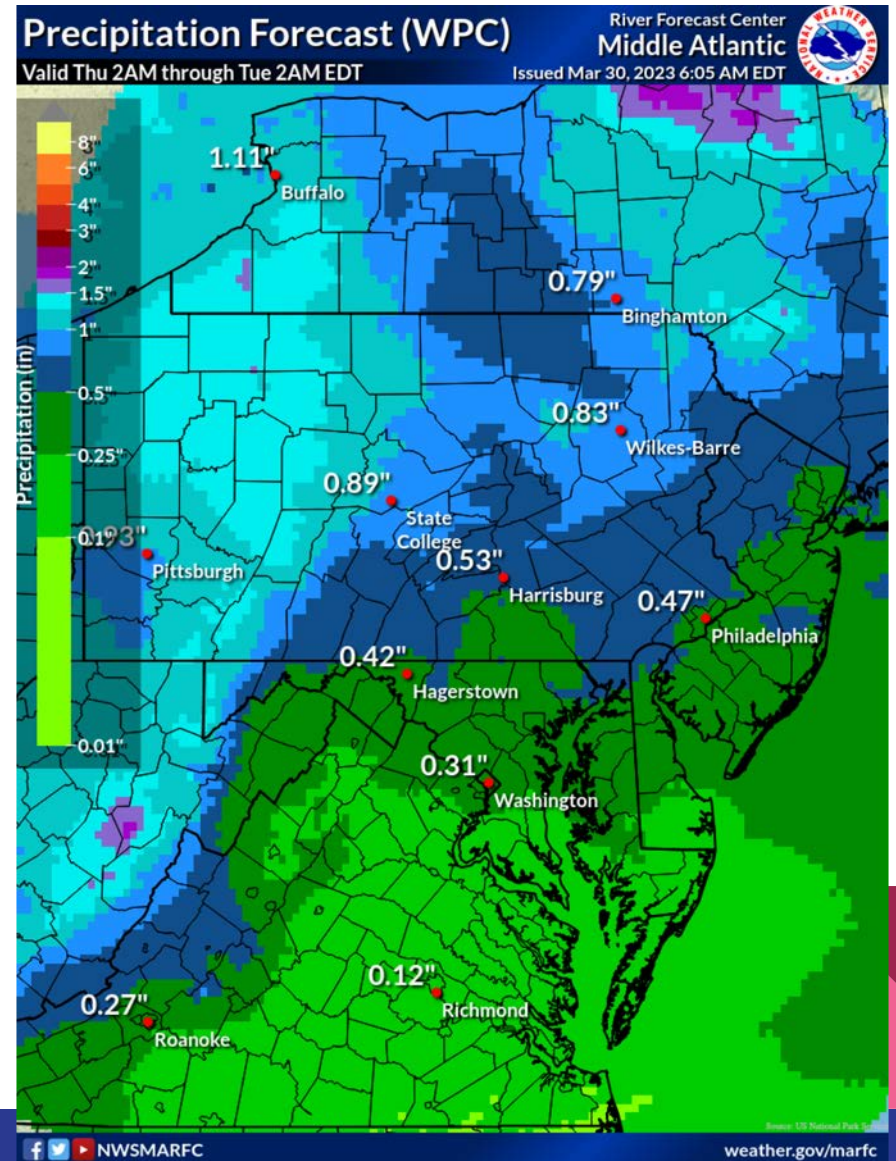
Last updated: 2023-03-30

Precipitation Forecast

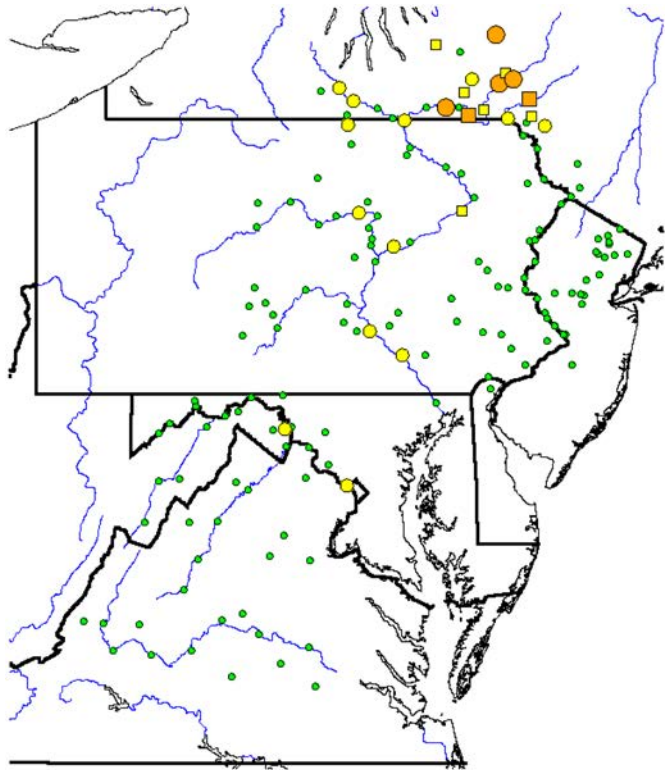
5-day forecast (Thu AM -> Tues AM)

Up to 1 inch of precipitation with heaviest amounts in Susquehanna

Mostly rain, but some light snow amounts



River Outlook



MMMEFS Summary NAEFS 2023-03-30 - 2023-04-09

30% Exceedance 70%

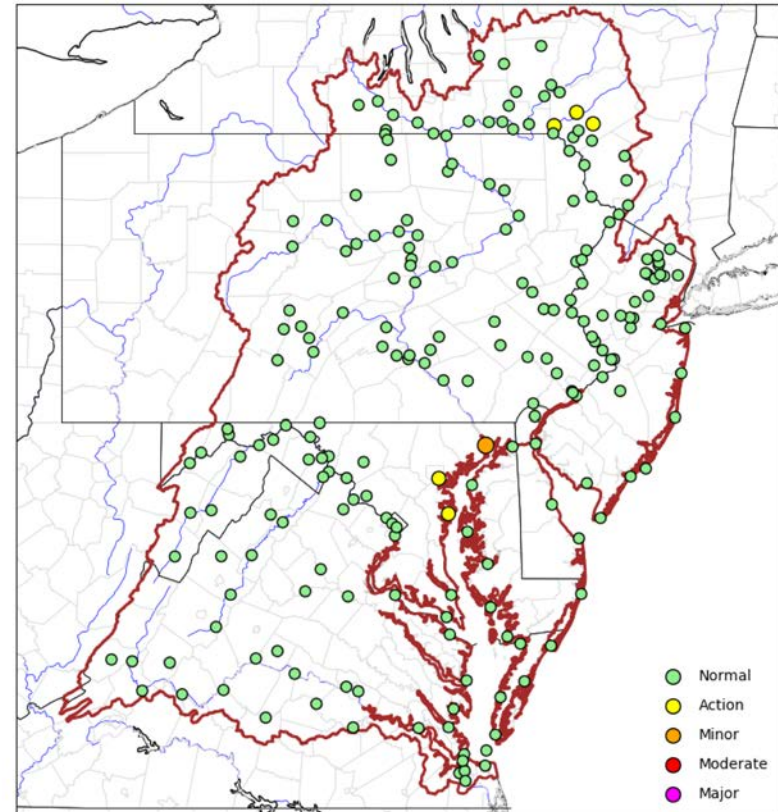
- Normal Flow
- Action Stage
- Minor Flood
- Moderate Flood
- Major Flood

Model Cycle:
2023033000Z

Mar 30 10:31 GMT



MARFC River Forecasts Mar 30, 2023 7:01 am

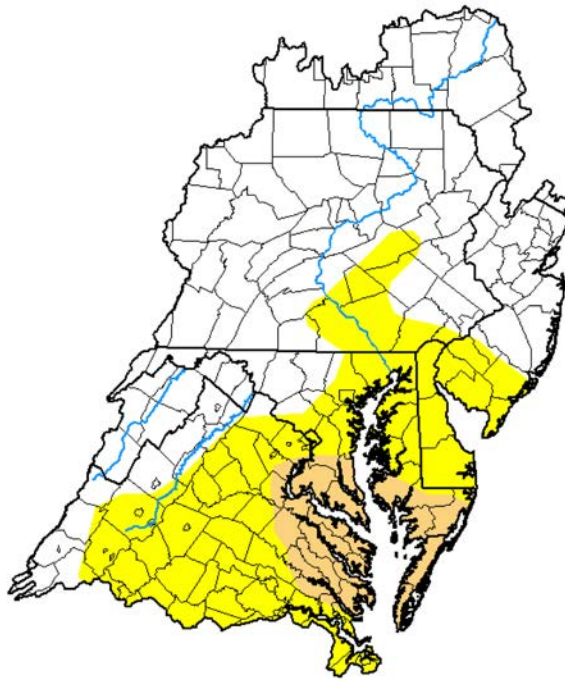


Latest Information: <https://water.weather.gov>

NWS Mid-Atlantic River Forecast Center @NWSMARFC

Drought Status

U.S. Drought Monitor Middle Atlantic RFC



March 28, 2023
(Released Thursday, Mar. 30, 2023)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	61.07	38.93	7.96	0.00	0.00	0.00
Last Week 03-21-2023	84.93	15.07	0.39	0.00	0.00	0.00
3 Months Ago 12-27-2022	95.95	4.05	0.60	0.00	0.00	0.00
Start of Calendar Year 01-03-2023	95.95	4.05	0.39	0.00	0.00	0.00
Start of Water Year 09-27-2022	59.67	40.33	12.36	2.04	0.00	0.00
One Year Ago 03-29-2022	41.10	58.90	4.78	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

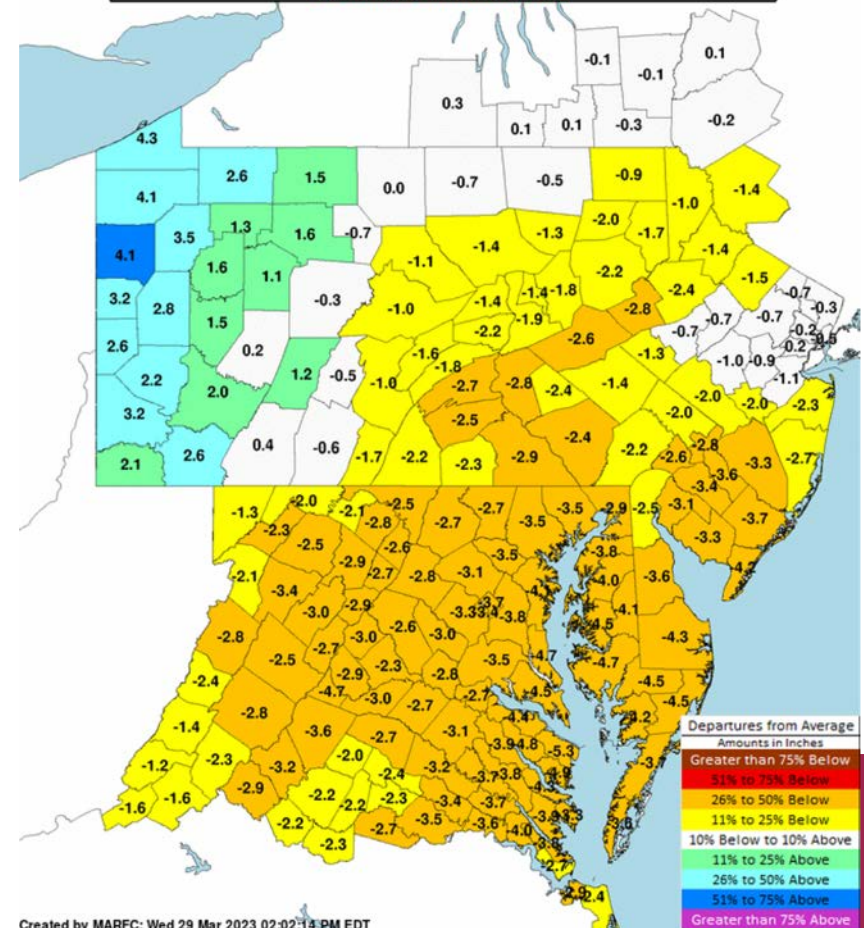
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:
Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

90 Day Departures From Average
12/29/2022 through 3/28/2023
For General Information Only



Created by MARFC: Wed 29 Mar 2023 02:02:14 PM EDT

Winter/Spring Outlooks

https://www.weather.gov/marfc/WinterSpring_Flood_Outlook

Outlooks updated every 2 weeks

Next outlook will be updated TODAY

Remember - some minor flooding this time of year is a normal occurrence

Being able to project more than a week or 2 in advance is difficult in this part of country

Spring Flood Potential Outlook
Valid: 03/16/2023 08:00 AM - 03/30/2023 08:00 AM EDT



National Weather Service
Middle Atlantic RFC
03/16/2023 04:46 PM EDT

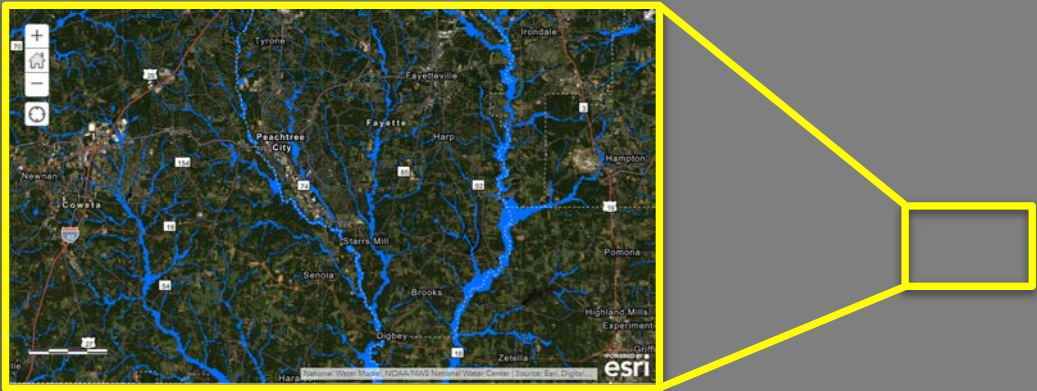
Follow Us:   
weather.gov/marfc

LEGEND - River Flood Risk

-  Much Above
-  Above
-  Below
-  Much Below
-  Normal

*Shaded areas are MARFC forecast region
Lines are interstate highways*

Continental Scale Flood Inundation Mapping (FIM)



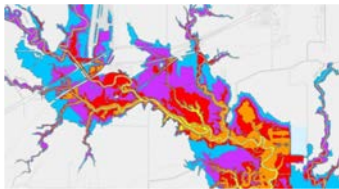
NWS FIM Capabilities

Static



AHPS FIM Libraries (AHPS FIM) - Static maps at ~ 200 RFC forecast locations. Maps derived from engineering scale hydraulic models.

< 1,000 miles



NWS Flood Categorical HAND FIM Libraries (CatFIM) - Static maps at ~3,000 RFC forecast locations. Maps derived from 10-m Height Above Nearest Drainage (HAND) solution.

~ 30,000 miles

Dynamic



Forecast River Forecast Center Flood Maps (RFC 5-Day Max Forecast) - Dynamic maps downstream of ~ 3,600 RFC forecast locations. Maps derived from RFC forecast and 10-m Height Above Nearest Drainage (HAND) solution.

~ 100k miles



Forecast National Water Model Flood Maps (NWM 5-Day Max Forecast) - Dynamic maps along NHDPlus reach locations. Maps derived from NWM forecast and 10-m Height Above Nearest Drainage (HAND) solution.

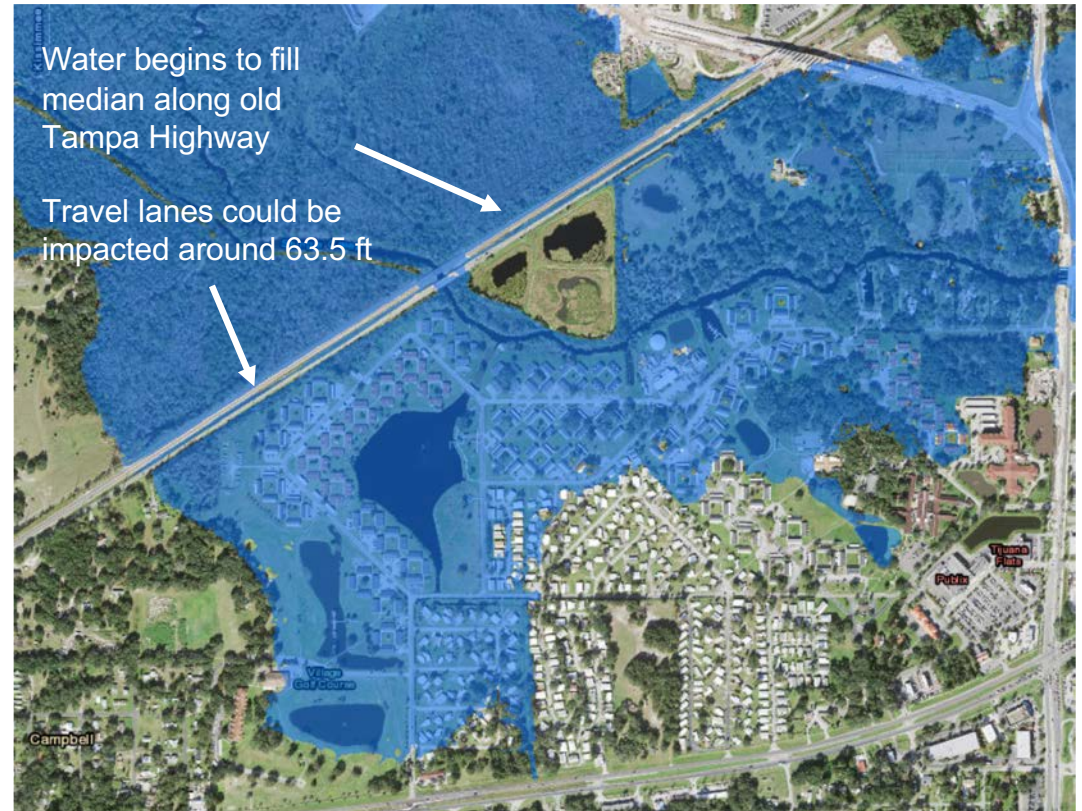
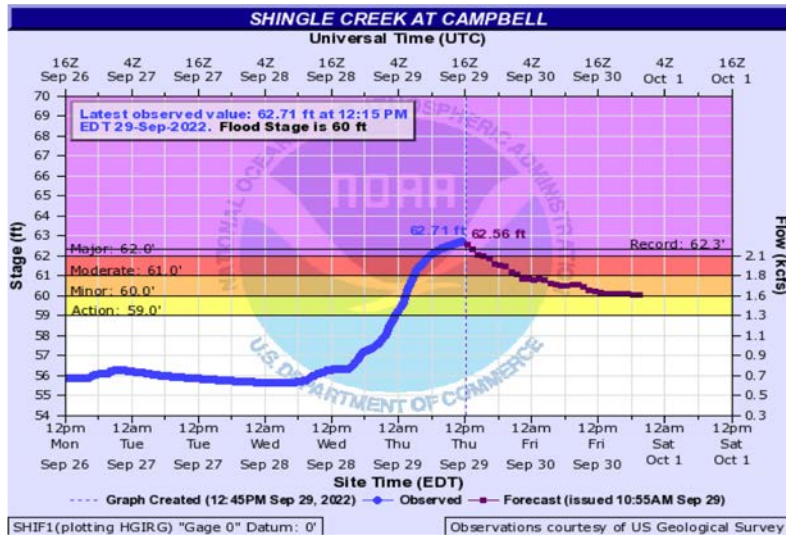
~ 3.4M miles



Interpreting a FIM

What is flooded?

How deep will the water be?



Phase 1 of NWS FIM Services Implementation

- NWS will deliver FIM Services to 10% of the nation (portions of Texas and the Northeast) beginning on October 1, 2023

