

# Middle Atlantic River Forecast Center

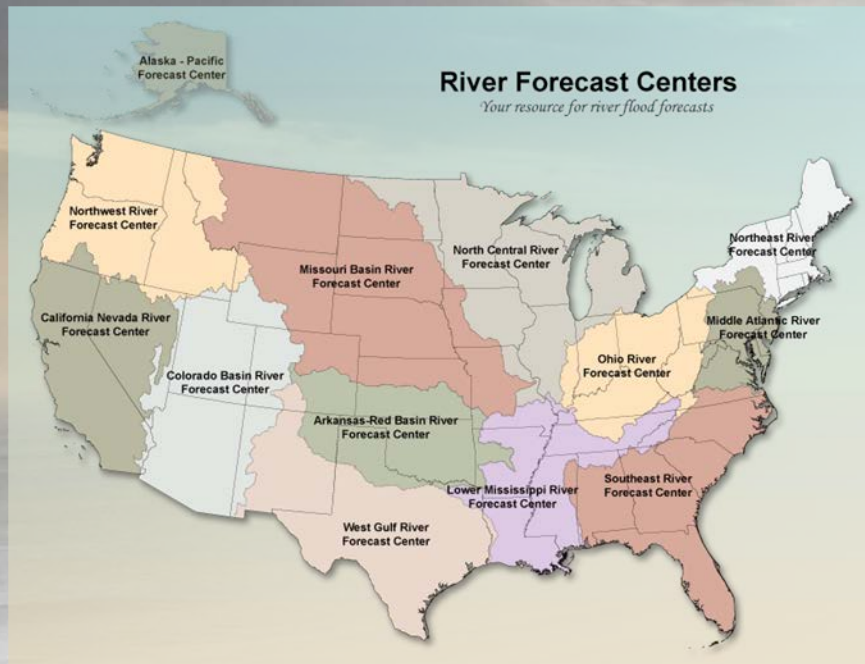
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Robert Shedd  
Hydrologist-in-Charge



Working together to  
save lives.

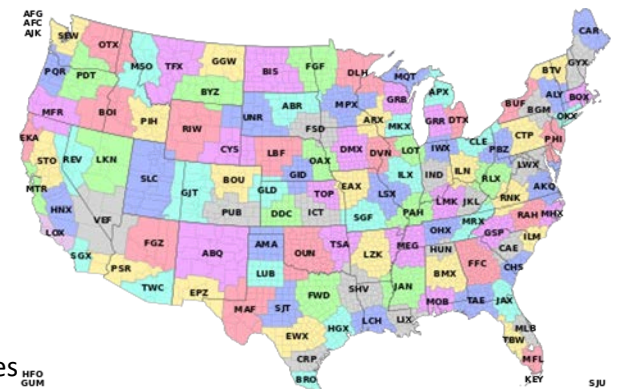
# NWS River Forecast Centers



NWS has 13 River Forecast Centers (RFCs)

MARFC's area of responsibility includes 7 states (NY, NJ, PA, MD, DE, WV, VA) & DC

Note: Western Pennsylvania is covered by the Ohio River Forecast Center in Wilmington, OH.

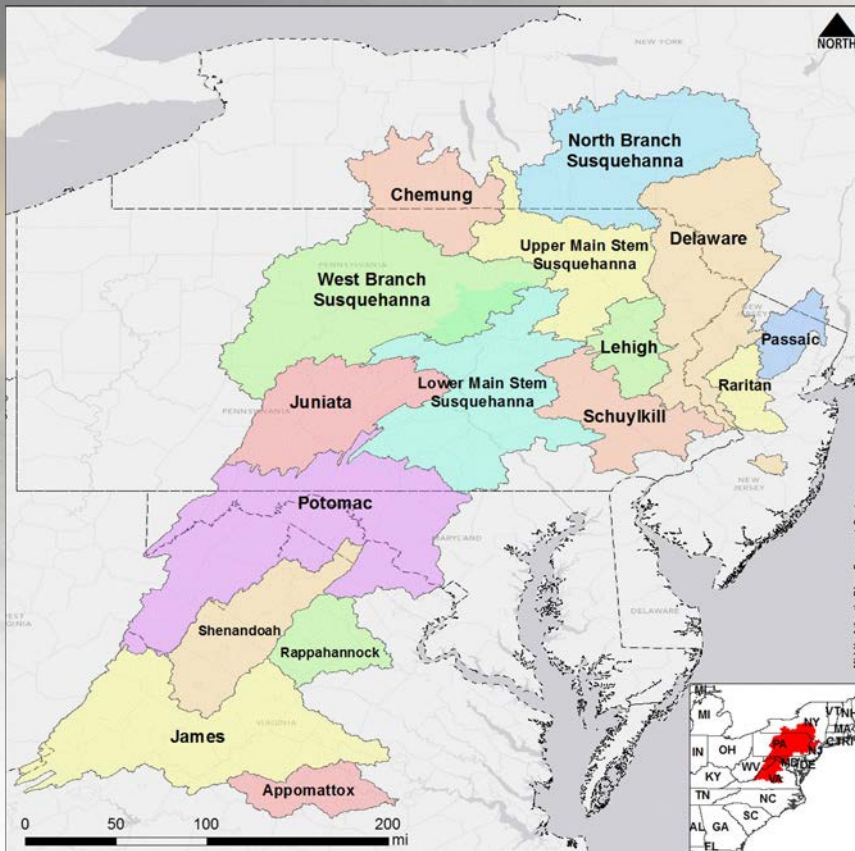




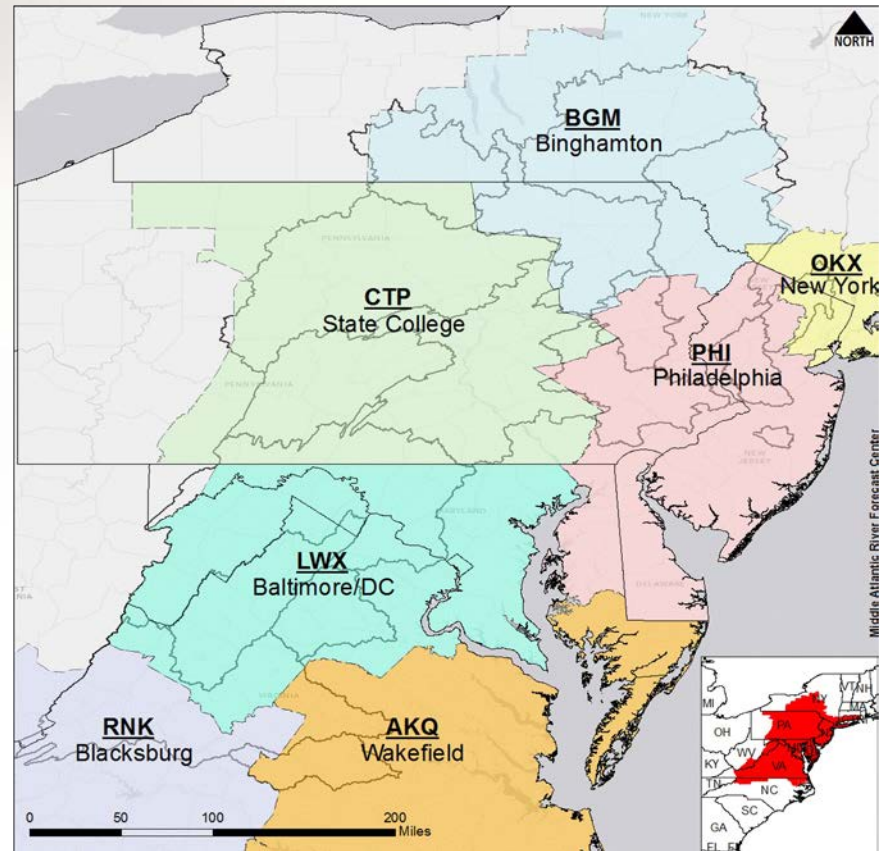
# MARFC Basins and WFOs

Provide service to 7 different Weather Forecast Office

Mid-Atlantic River Basins



Mid-Atlantic WFOs



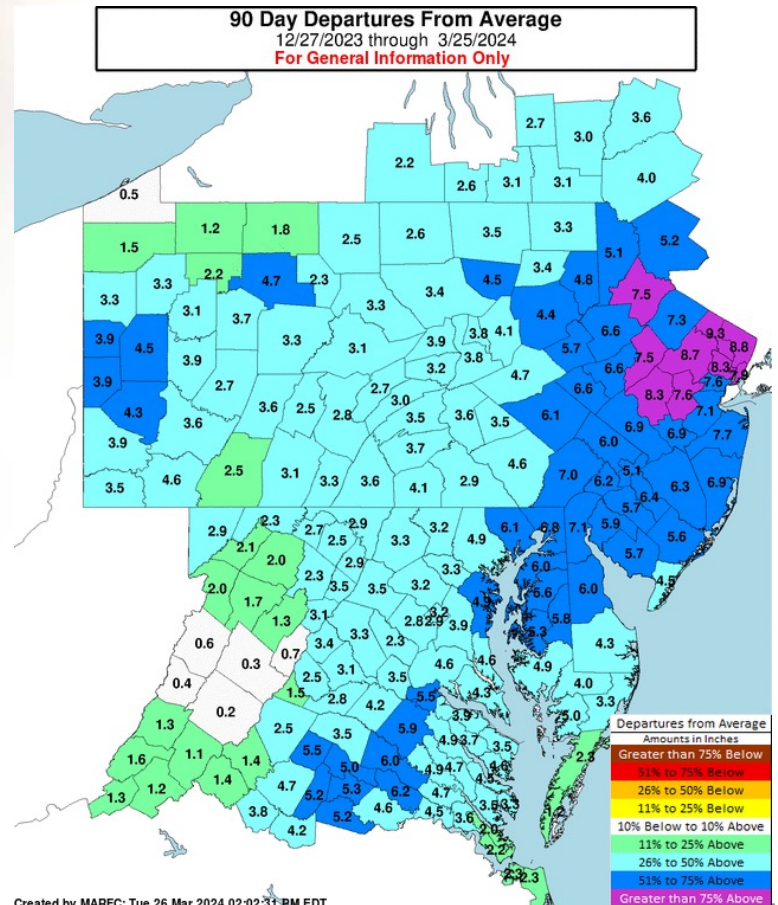
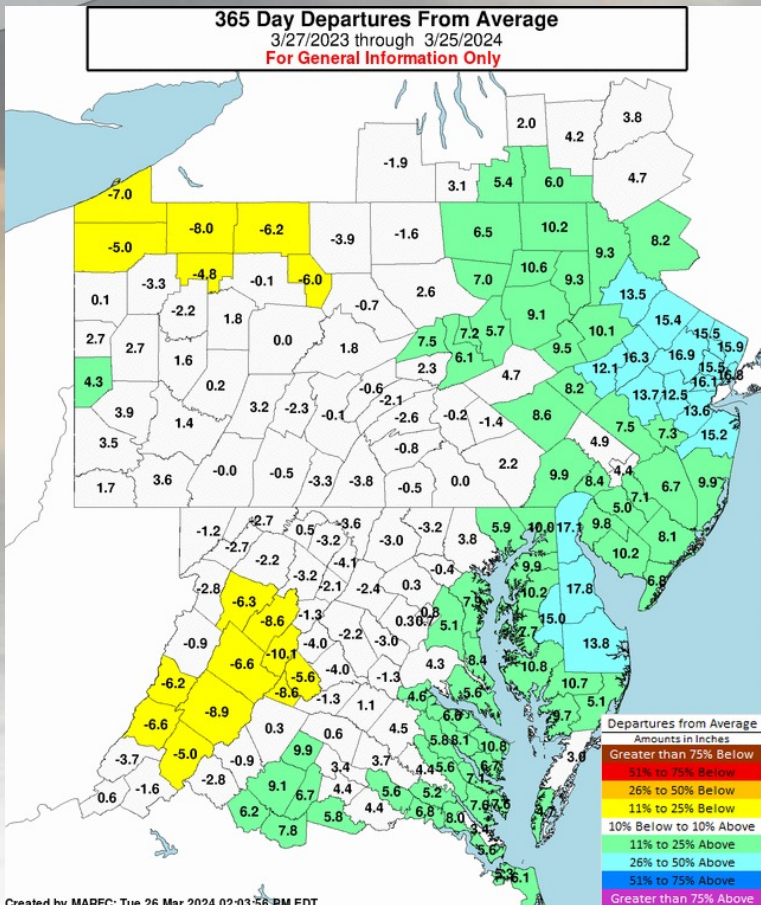
# Why do we care about hydrology and flooding?

- Worldwide, over 5000 lives lost each year from flooding.
- Over 100 in the U.S. alone.
- Flooding causes \$40 billion in damages per year worldwide.
- Timely flood warnings and accurate river forecasts are critical to saving lives and property.



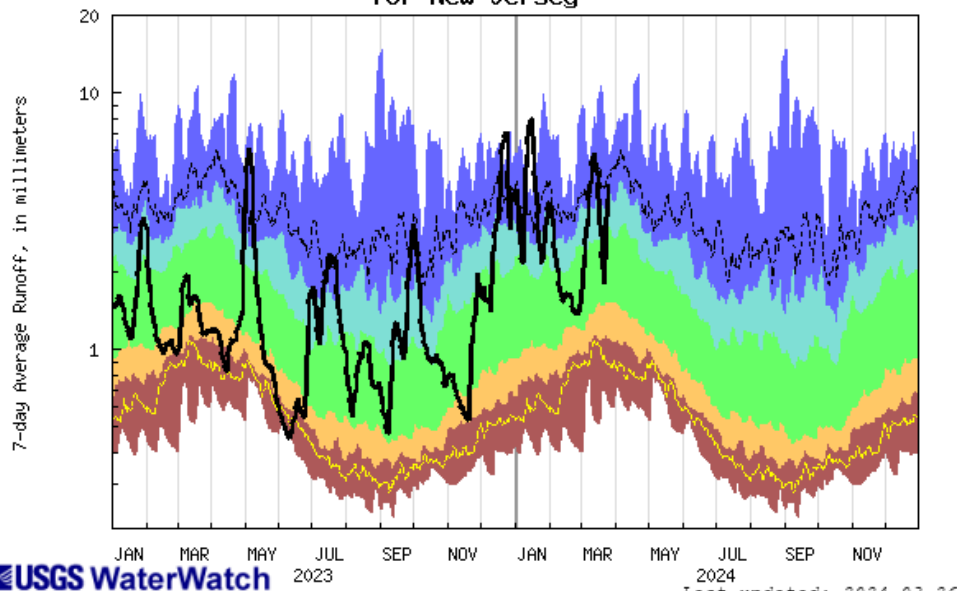


# Precipitation Departures

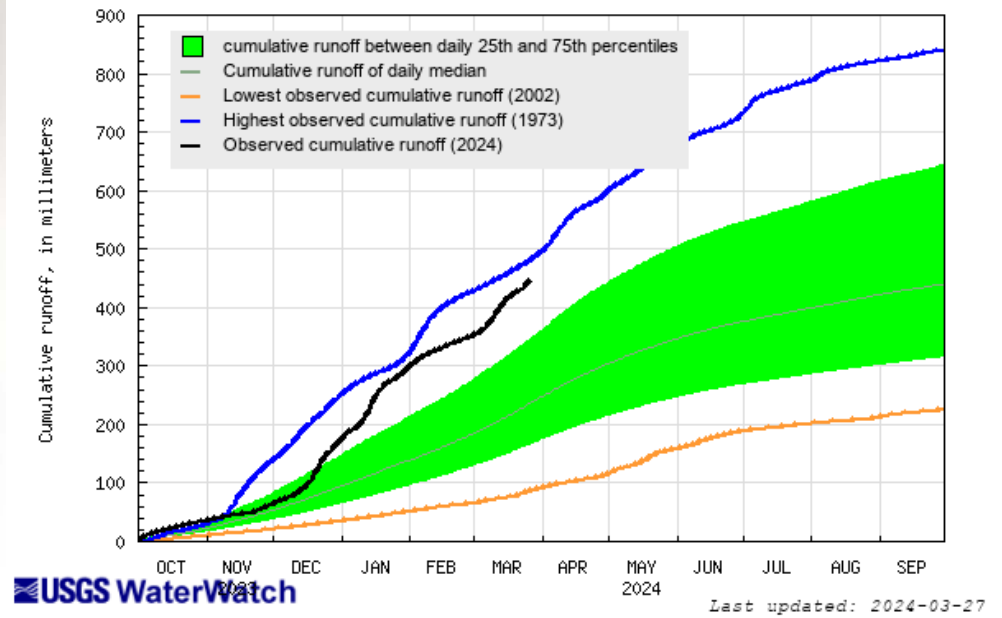


# New Jersey Runoff

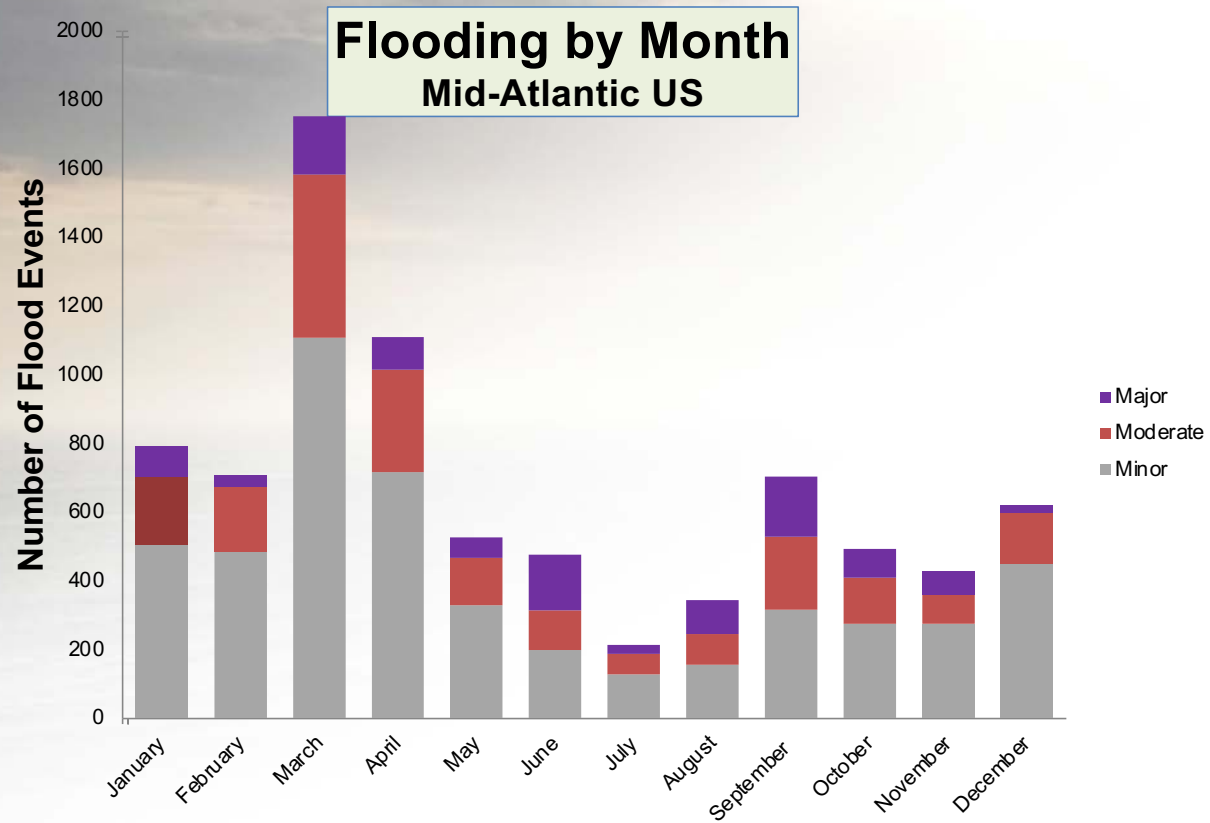
Duration hydrograph of 7-day average runoff for New Jersey



Hydrograph of cumulative 7-day average runoff for New Jersey

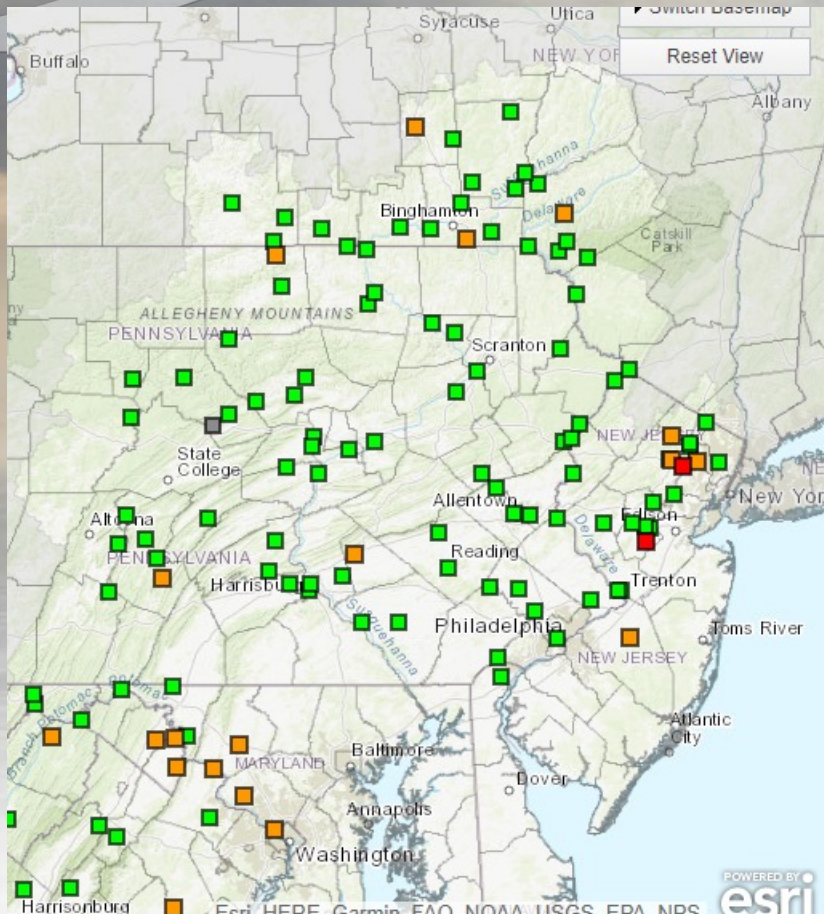


# Flooding Can Happen Any Time





# HEFS Long Range Outlook



Click on the map or select one of the data views below:

- United States
- NWS Weather Forecast Offices
- Middle Atlantic River Forecast Center
- Water Resources Regions

**145 total gauges**  
 Show locations with 25% or greater chance of flooding during Mar-Apr-May (24)

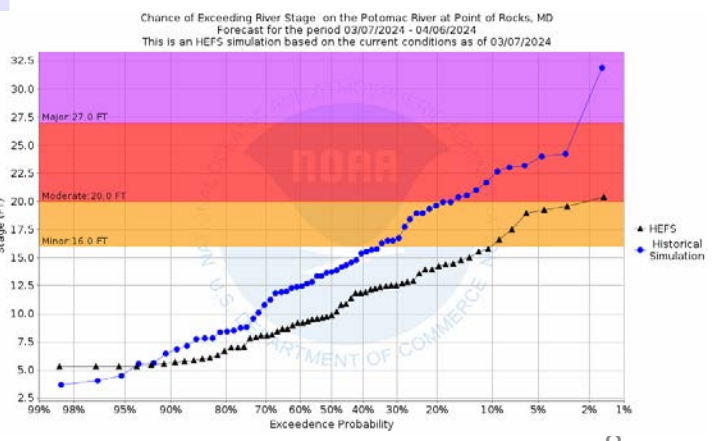
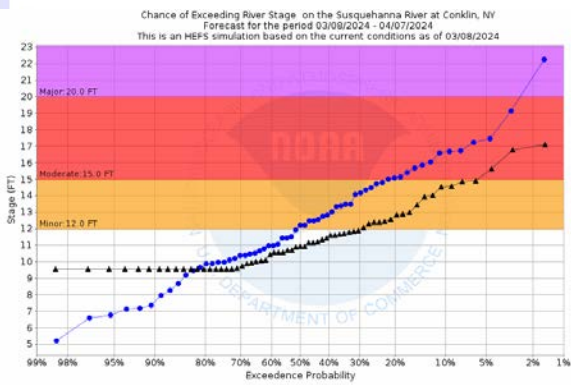
- 0 Gauges: > 25% Major Long-Range Flood Risk
- 2 Gauges: > 25% Moderate Long-Range Flood Risk
- 22 Gauges: > 25% Minor Long-Range Flood Risk
- 120 Gauges: < 25% Long-Range Flood Risk
- 1 Gauges: No forecast within selected timeframe

Show all locations

Last map update:  
 03/27/2024 at 07:48:32 am EDT  
 03/27/2024 at 11:48:32 UTC

[What is UTC time?](#)  
[Map Help](#)  
[Product Description](#)  
[Feedback](#)  
[Disclaimer](#)

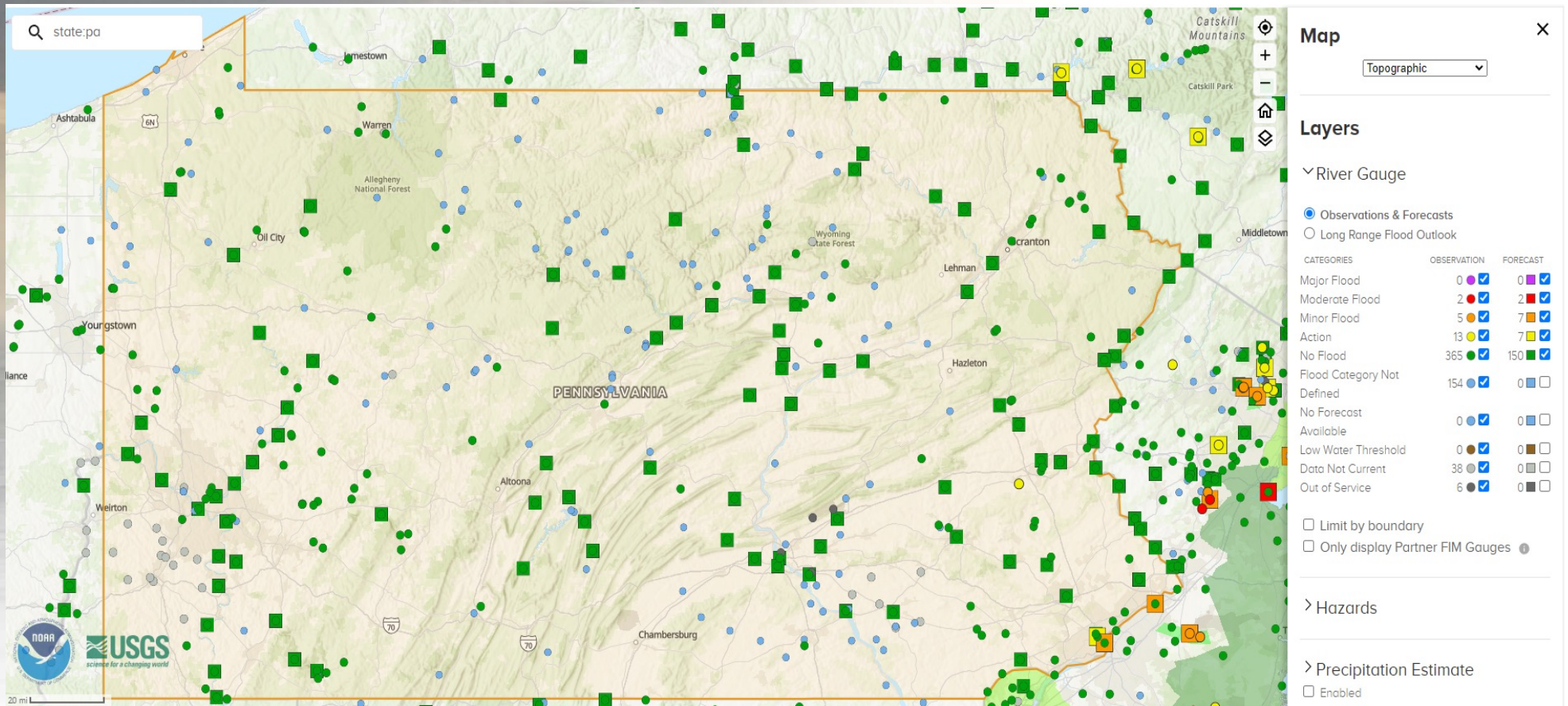
POWERED BY esri





# National Water Prediction Service – water.noaa.gov

A new and improved service to replace the aging AHPS



# National Water Prediction Service

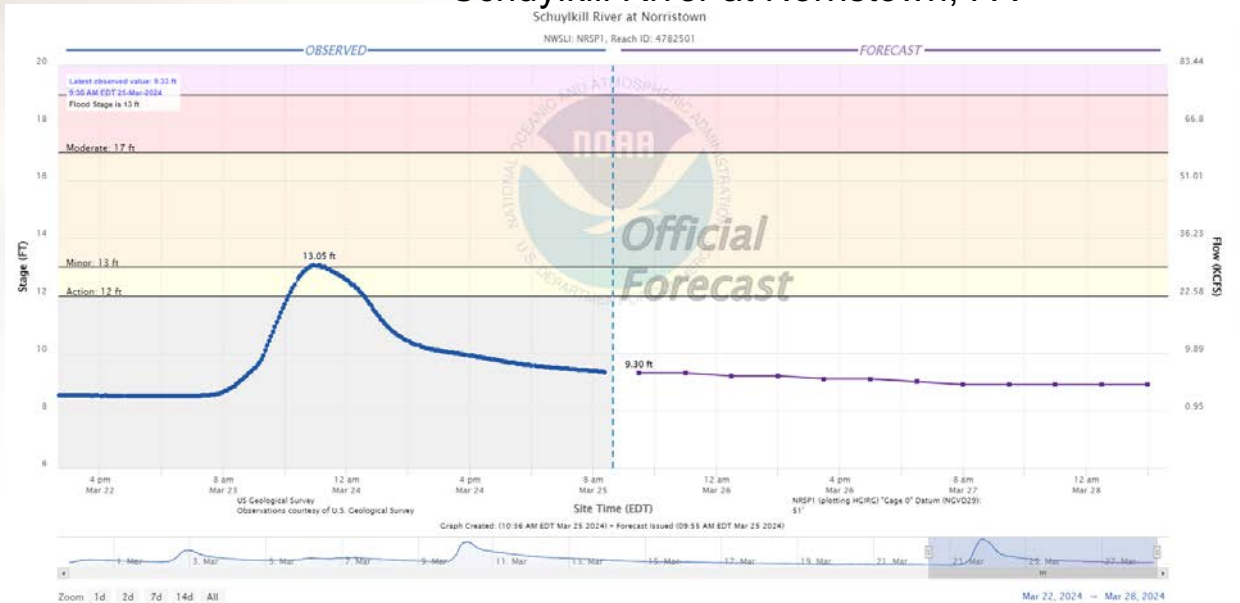
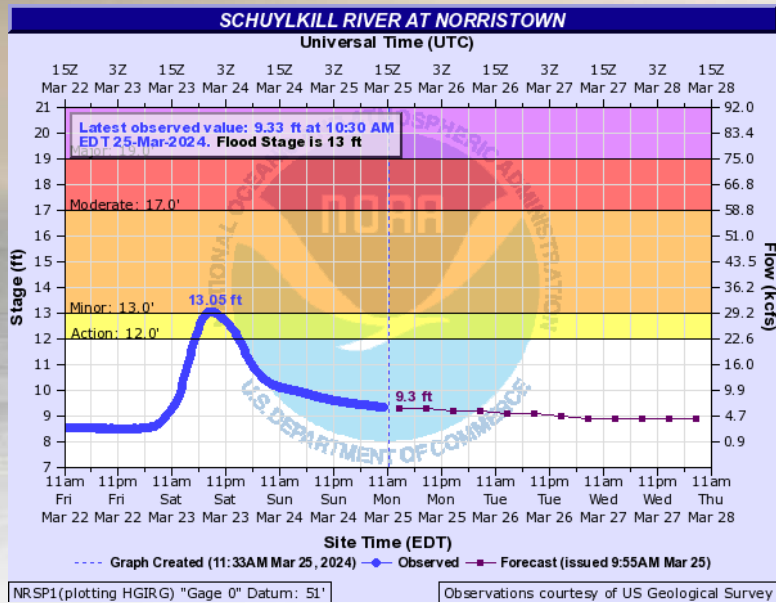
## AHPS (Old)

Schuylkill River at Norristown, PA



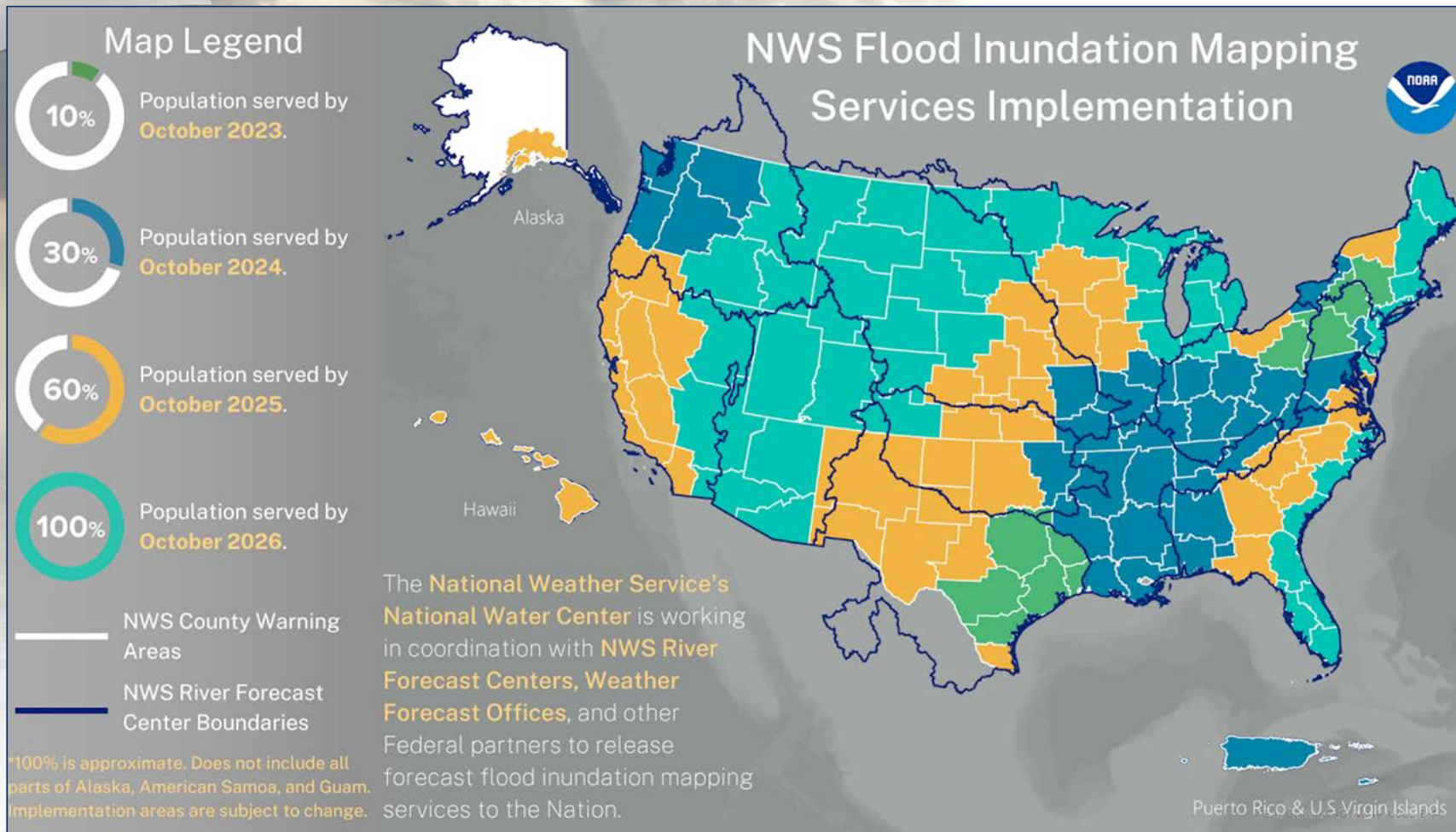
## NWPS (New)

Schuylkill River at Norristown, PA





# NWS Flood Inundation Map (FIM) Rollout Phases







# Flood Inundation Map

## Reasonable Worst Case Scenario - Wilkes-Barre, PA

### Susquehanna River at Wilkes-Barre, PA

Inundation Level Shown: **39.0 Feet (Major Flood)**  
Forecast Crest Height: **30.9 Feet (Major Flood)**  
FIM Source: NWS - AHPS FIM  
FIM Creation Time: 8:15 AM Sep 7, 2011

➤ View [NWS Flood Maps Online](#)

- Flood inundation of up to **5-10 feet** deep in West Pittston
- **Water Street Bridge** possibly affected by flood waters
- Confidence in this reasonable worst case scenario is **low** - depends on rainfall upstream



**WABC-TV**

Dec 20, 2023

# NWS Flood Inundation Map

Flooding in Dec, 2023 along the Passaic River in northern New Jersey

## NWS FIM

