Mid-Atlantic Spring Flood Outlook

Rob Shedd
NWS Mid-Atlantic River Forecast Center
State College, PA
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
Flooding by Month
Mid-Atlantic US

Number of Flood Events

January February March April May June July August September October November December

Major
Moderate
Minor
It’s been an unusual couple of months
It’s been an unusual couple of months
It’s been an unusual couple of months
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
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
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
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)

<table>
<thead>
<tr>
<th>Intensity</th>
<th>None</th>
<th>D0-D4</th>
<th>D1-D4</th>
<th>D2-D4</th>
<th>D3-D4</th>
<th>D4</th>
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</thead>
<tbody>
<tr>
<td>Current</td>
<td>61.07</td>
<td>18.53</td>
<td>7.96</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>Last Week</td>
<td>64.93</td>
<td>15.57</td>
<td>0.39</td>
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<tr>
<td>1 Month Ago</td>
<td>95.95</td>
<td>4.96</td>
<td>0.96</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>3 Months Ago</td>
<td>95.95</td>
<td>4.96</td>
<td>0.39</td>
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<tr>
<td>Start of Calendar Year 09-19-2022</td>
<td>59.67</td>
<td>40.33</td>
<td>12.36</td>
<td>2.04</td>
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<td>One Year Ago</td>
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<td>58.90</td>
<td>4.78</td>
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</tbody>
</table>

Intensity:
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe 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 Niganti
National Drought Mitigation Center

droughtmonitor.unl.edu

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90 Day Departures From Average
12/29/2022 through 3/28/2023
For General Information Only
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
Continental Scale Flood Inundation Mapping (FIM)
NWS FIM Capabilities

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

**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.

**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.

**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.

- **Static**
  - < 1,000 miles
  - ~ 30,000 miles
  - ~ 100k miles
  - ~ 3.4M miles
Interpreting a FIM

What is flooded?
How deep will the water be?

Water begins to fill median along old Tampa Highway
Travel lanes could be impacted around 63.5 ft
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