Heat and Severe Weather
July 28-29, 2023

Decision Support Briefing #3
As of: 1 PM, Friday, July 28, 2023

What Has Changed?
✔ Increased Chance for Severe Weather Late Friday Afternoon – Friday Evening for southeast PA, southwest NJ, and the Delmarva
✔ Excessive Heat Headlines Remain in Effect
Convective Weather Outlook

Late Friday Afternoon into Friday Evening:
Marginal Risk for severe thunderstorms has been added across southeast PA, southwest NJ, and the Delmarva

Primary threat: Locally damaging wind gusts 60-70 mph from the strongest thunderstorms
Convective Weather Outlook

Saturday late afternoon through Saturday evening:

Primary threat: Damaging wind gusts of 60 to 70 mph. There is a lesser threat for hail.

Localized flash flooding.
## Convective Weather Outlook

### Understanding Severe Thunderstorm Risk Categories

<table>
<thead>
<tr>
<th>THUNDERSTORMS (no label)</th>
<th>1 - MARGINAL (MRGL)</th>
<th>2 - SLIGHT (SLGT)</th>
<th>3 - ENHANCED (ENH)</th>
<th>4 - MODERATE (MDT)</th>
<th>5 - HIGH (HIGH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No severe thunderstorms expected</td>
<td>Isolated severe thunderstorms possible</td>
<td>Scattered severe storms possible</td>
<td>Numerous severe storms possible</td>
<td>Widespread severe storms likely</td>
<td>Widespread severe storms expected</td>
</tr>
<tr>
<td>Lightning/flooding threats exist with all thunderstorms</td>
<td>Limited in duration and/or coverage and/or intensity</td>
<td>Short-lived and/or not widespread, isolated intense storms possible</td>
<td>More persistent and/or widespread, a few intense</td>
<td>Long-lived, widespread and intense</td>
<td>Long-lived, very widespread and particularly intense</td>
</tr>
</tbody>
</table>

- Winds to 40 mph
- Small hail
- Winds 40-60 mph
- Hail up to 1”
- Low tornado risk
- One or two tornadoes
- Reports of strong winds/wind damage
- Hail ~1”, isolated 2”
- A few tornadoes
- Several reports of wind damage
- Damaging hail, 1 - 2”
- Strong tornadoes
- Widespread wind damage
- Destructive hail, 2”+
- Tornado outbreak
- Derecho

* NWS defines a severe thunderstorm as measured wind gusts to at least 58 mph, and/or hail to at least one inch in diameter, and/or a tornado. All thunderstorm categories imply lightning and the potential for flooding. Categories are also tied to the probability of a severe weather event within 25 miles of your location.
Heat Index and Hazards for Today

Maximum Apparent Temperatures on Friday
Valid Thu 8:00PM through Fri 8:00PM EDT

Excessive Heat
Issued Jul 28, 2023 6:05 AM EDT
A Heat Advisory may be needed for the Urban Corridor and portions of southern New Jersey on Saturday.
Excessive Rainfall Outlook

Saturday afternoon through Saturday night:

Localized flash flooding.

Understanding WPC Excessive Rainfall Risk Categories

No Area/Label

Flash floods are generally not expected.

Marginal (MRGL)

Isolated flash floods possible.

Maiden and primarily affecting places that can experience rapid runoff with heavy rainfall.

Slight (SLGT)

Scattered flash floods possible.

Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.

Moderate (MDT)

Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.

High (HIGH)

Widespread flash floods expected.

Severe, widespread flash flooding. Areas that don’t normally experience flash flooding, could. Lives and property in greater danger.
Event Summary

✔ High heat and humidity will be in place through Saturday.

✔ Heat Advisories and Excessive Heat Warnings are in effect for today (Friday July 27) as Heat Index values will range from 100° to 110°.

✔ Scattered thunderstorms possible today, mainly across the southern half. Widespread thunderstorms are expected Saturday.

✔ Excessive Heat Warnings are in effect for the urban corridor, including Philadelphia, and parts of NJ for Heat Index Values 105° to 109° today, July 28. Heat Advisories in effect most elsewhere, including Delmarva and southern NJ, though criteria for Excessive Heat Warnings are higher there.

✔ Heat Advisories may be needed Saturday for the urban corridor and parts of New Jersey. Late day and evening showers and thunderstorms are likely with damaging winds and localized flash flooding possible.
Contact and Next Briefing Information

Next Briefing
When: 7 am Saturday, July 29, 2023
UNLESS there are changes to the forecast.

Briefing Webpage:
www.weather.gov/media/phi/current_briefing.pdf

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