



GOVERNOR JOSH SHAPIRO

REQUEST FOR PRESIDENTIAL DISASTER DECLARATION COVER LETTER MAJOR DISASTER OR EMERGENCY

July 31, 2023

The Honorable Joseph R. Biden, Jr.
President of the United States
The White House
1600 Pennsylvania Avenue, NW
Washington, D. C. 20500

Through: Ms. MaryAnn Tierney
Regional Administrator
FEMA Region III
Philadelphia, PA 19106

Dear Mr. President:

Under Section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5170 (Stafford Act), as implemented by 44 CFR § 206.36, I request that you declare a major disaster for Berks County, Commonwealth of Pennsylvania due to severe storms and flooding that occurred on July 9, 2023. In addition, I request that you authorize Individual Assistance for the affected area pursuant to Section 408 of the Stafford Act, 42 U.S.C. § 5174.

On July 9, 2023, a storm system brought historic rainfall in an exceptionally short period of time, triggering unprecedented flash flooding in southeast Pennsylvania. In Berks County, the National Weather Service recorded 5.35" of rain on that date, most of which occurred within a 4 to 6-hour window. The storm produced the 7th highest amount of rain in 165 years and marks the wettest July day on record for Berks County.

Impacts of the Storm:

The storm required and continues to require extensive state and local resources to ensure the health, welfare, and safety of Commonwealth citizens and property. Pennsylvania had seven (7) counties impacted by the widespread rain and winds. The most severe impacts were

in Berks and Lawrence Counties. Five municipalities in Berks County issued Declarations of Disaster Emergencies as a result of this event: Maiden creek Township, Spring Township, West Reading Borough, Wyomissing Borough, and Sinking Springs Borough. Declaration of Disaster Emergencies were also issued for Shenango Township and Wayne Township in Lawrence County.

The storm caused significant damage to critical lifelines including power outages in excess of 12,000 customers. Five water and wastewater plants were affected by power outages. Flash flooding and debris created impassable roads and bridges which resulted in almost 300 reported road closures. The Pennsylvania Helicopter Aquatic Rescue Team (PA-HART) and swift water rescue teams engaged in rescue efforts.

Many small businesses were closed following the event and could not reopen until cleaned and inspected. Some remained closed for several days due to excess water runoff. Many reported small losses but some reported damages of over \$100,000. A mushroom company located in the area continues to deal with extensive crop destruction due to excessive rain and flooding, causing issues affecting the use of farming equipment.

Other businesses reporting losses include construction companies, retirement communities, campgrounds, recreational facilities. There is damage to roads and trails used for recreation.

The Commonwealth, affected municipalities and Berks County have worked to complete Preliminary Damage Assessments (PDAs) and Joint PDAs for the affected jurisdictions, with FEMA validation. Damages to uninsured homes, including personal property losses that were directly caused by widespread rain and flooding have been identified in Berks County. A total of 453 Pennsylvania residences have some degree of damage resulting from the June 9th Storm and Flooding. These damages range from affected to destroyed across Berks County:

	Initial PDA	Joint PDA
County/VOADs		
Major and Destroyed Residences: 73	87	52
Residences with Minor Damage: 166	182	87
Affected Residences: 111	176	43

Inaccessible Residences:	8	0
0		
Total	453	182
350		

During the initial PDA conducted by Berks County, eight homes were inaccessible due to infrastructure damage and continued flooding. At least 11 businesses experienced varying degrees of damage. An economically disadvantaged 3-story apartment complex was evacuated.

Recovery Efforts:

In response to this event, I have taken appropriate action under Commonwealth law and directed the execution of the State Emergency Operations Plan on July 8, 2023, in accordance with Section 401 of the Stafford Act.

To effectively coordinate resources for response, and mitigate loss of life and property, the Commonwealth Response Coordination Center (CRCC) was staffed by senior leaders and personnel from the Pennsylvania Emergency Management Agency (PEMA). The Department of Military and Veterans Affairs (DMVA) representatives were engaged from their headquarters at Fort Indiantown Gap, and the Pennsylvania Helicopter Aquatic Rescue Team (PA HART) was activated. Due to the Antietam Dam being classified as “close to failure,” state agencies worked with municipalities to evacuate the communities that could be affected by the dam failure and any resultant flooding. The Pennsylvania Department of Transportation and county public works departments have been fully engaged in making temporary repairs, performing bridge inspections, and developing traffic detours.

State, county, local and non-profit resources have been committed to meet the needs of disaster survivors as best as possible. VOAD provided resources and conducted activities in response to this event. For example, the American Red Cross (ARC) prepared a shelter and the Salvation Army and Trinity United Church of Christ provided mass-feeding to support evacuated residents. Other VOAD members such as the Berks County Community Organizations Assisting in Disasters, United Church of Christ, Lutheran Disaster Response, Baptist Resource Network, American Red Cross, Salvation Army, Team Rubicon, United Methodist Committee on Relief (UMCOR), Shared Food Program (Food Bank), Centrohispanso of Reading and Berks County, PA Voluntary Organizations Active in Disasters (VOAD), Berks Humane Society, Reform Congregation Oheb Sholom, and Mission Trip Birdsboro, all assisted the residents that were displaced and in immediate need of assistance resulting from the July

9th storm and flooding impacts. Damage to communities was significant enough to require shelter operations for seven days and temporary housing assistance that is on-going.

Federal Support Needed for Recovery:

Among the most impacted from the storm are individuals and homeowners within Berks County. The impact of the storm can be especially devastating for those vulnerable communities. The Social Vulnerability score for Berks County is “Relatively High,” which creates a need for additional support for recovery efforts. Many of the communities impacted by this storm have an older population with a higher-than-average number of households with low or fixed incomes. To provide just a few examples to illustrate the impacted populations from the storm:

- Berks County’s 65-and over population grew by 30% since 2010.
- The rates of students qualifying for free and reduced lunches in the school districts that were most damaged are as high as 95%.
- A majority of the households with income in Berks County have an income of less than \$50,000.

Most of the damaged homes have furnaces, hot water heaters and electric systems in their basements, and the purchase of these critical systems will likely be beyond the means of affected vulnerable populations. Most of these same households do not have flood insurance to pay for replacement of these items. Throughout the affected areas, low levels of insurance were observed. Many of the flooded areas are places that never experienced significant flooding and homeowners would not normally have needed or been required to have flood insurance.

A local government particularly devastated by the July 9, 2023, storm and flooding is the Antietam School District. The Antietam Middle Senior High School sustained enough damage from flooding that has rendered the building uninhabitable for the 2023/2024 school year. The Antietam School District does not have a bus system. Eighty-eight percent (88%) of the students in the primary and elementary schools are enrolled in the free and reduced lunch program, while approximately 50% of the students in the middle and high school are enrolled. Students in this school district are facing a major disruption to a safe location and daily meals, all while their families are trying to repair their homes.

This storm and flooding event has further eroded our internal capacity as a state to recover from the flooding, as many resources, including, donated funds and materials, cleaning and rebuilding assistance, and VOAD organization leadership have been expended. These

compounding situations have depleted mechanisms to recover from this disaster in a time frame that is conducive to re-inhabiting a residence prior to the onset of cold weather or remaining in a structure after the onset. This impending change in weather will further exacerbate the situation that many of our affected residents are facing.

Thousands of people in Pennsylvania were affected and the impact on vulnerable populations is magnified by the physical needs and lack of resources. Families will have to deal with months of attempting to restore residences to habitability. Individual Assistance to the impacted survivors is necessary to protect their property, health, and safety.

I certify that state and local government obligations and expenditures for this disaster request will comply with all applicable cost sharing requirements set forth in the Stafford Act.

I have designated Jeffrey Boyle, Executive Deputy Director, Pennsylvania Emergency Management Agency, as the Commonwealth Coordinating Officer for this request. Mr. Boyle will work with FEMA to complete damage assessments. Mr. Boyle is authorized to provide additional information or justification on my behalf.

Sincerely,



Governor Josh Shapiro

Enclosures

OMB No. 1660-0009/FEMA Form 010-0-13

A: Individual Assistance

B: Assistance from Other Federal Agency Programs

C: Severity and Magnitude of the July 9, 2023 Incident

ENCLOSURE A TO MAJOR DISASTER REQUEST

Estimated Requirements for Individual Assistance under the Stafford Act

Enclose Individual Assistance Joint Preliminary Damage Assessment Cost Estimate Worksheets

Individual Assistance - PDA Numbers

	IA Degree of Damage					Total
	County	Destroyed	Major	Minor	Affected	
PDA Date: 7/19/23	Berks	7	45	87	43	182
	Total	7	45	87	43	182



ENCLOSURE B TO MAJOR DISASTER REQUEST

Public Assistance

The PA Emergency Management Agency continues to conduct Public Assistance Preliminary Damage Assessment data following the event that occurred on July 9, 2023. The Commonwealth of Pennsylvania will be requesting a thirty-day extension to make a request for a Major Disaster. This extension is needed for the compilation of damage data.

ENCLOSURE E TO MAJOR DISASTER REQUEST

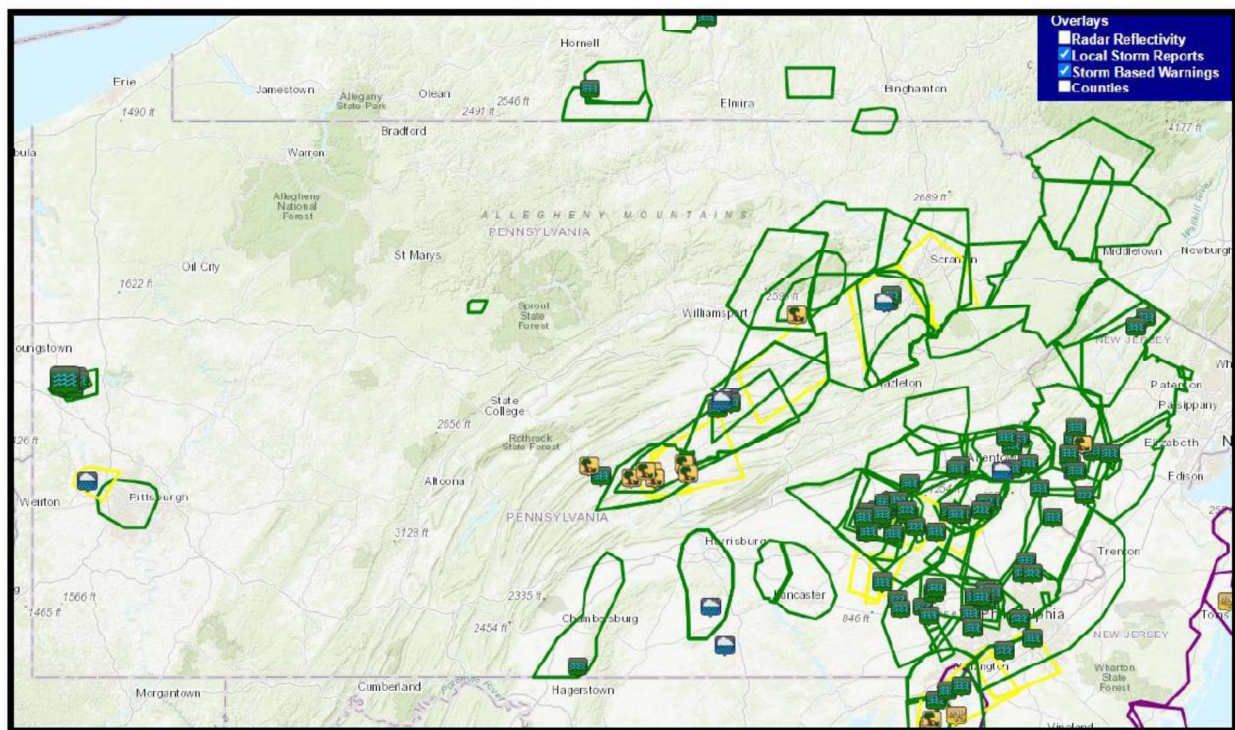


Figure 1. The weather setup across Pennsylvania on Sunday, July 9, 2023, resulted in the issuance of dozens of flood warnings and advisories (green outlines) with numerous reports flash flooding, as well as several severe thunderstorm warnings (yellow outlines) with wind damage reports, heavily confined to the eastern half of the Commonwealth.

Weather Pattern Overview:

On Sunday, July 9, 2023, the atmosphere across much of Pennsylvania was loaded for heavy rain and flooding. A surface low pressure system aligned with strong upper-level support combined with unusually high atmospheric moisture to produce areas of intense rainfall over a short period. The relentless rain fell onto already saturated ground in urban regions, resulting in several reports of significant flash flooding primarily in southeastern Pennsylvania (SEPA), with the Reading (Berks County) area especially hard hit. In addition, some of these storms produced damaging wind.

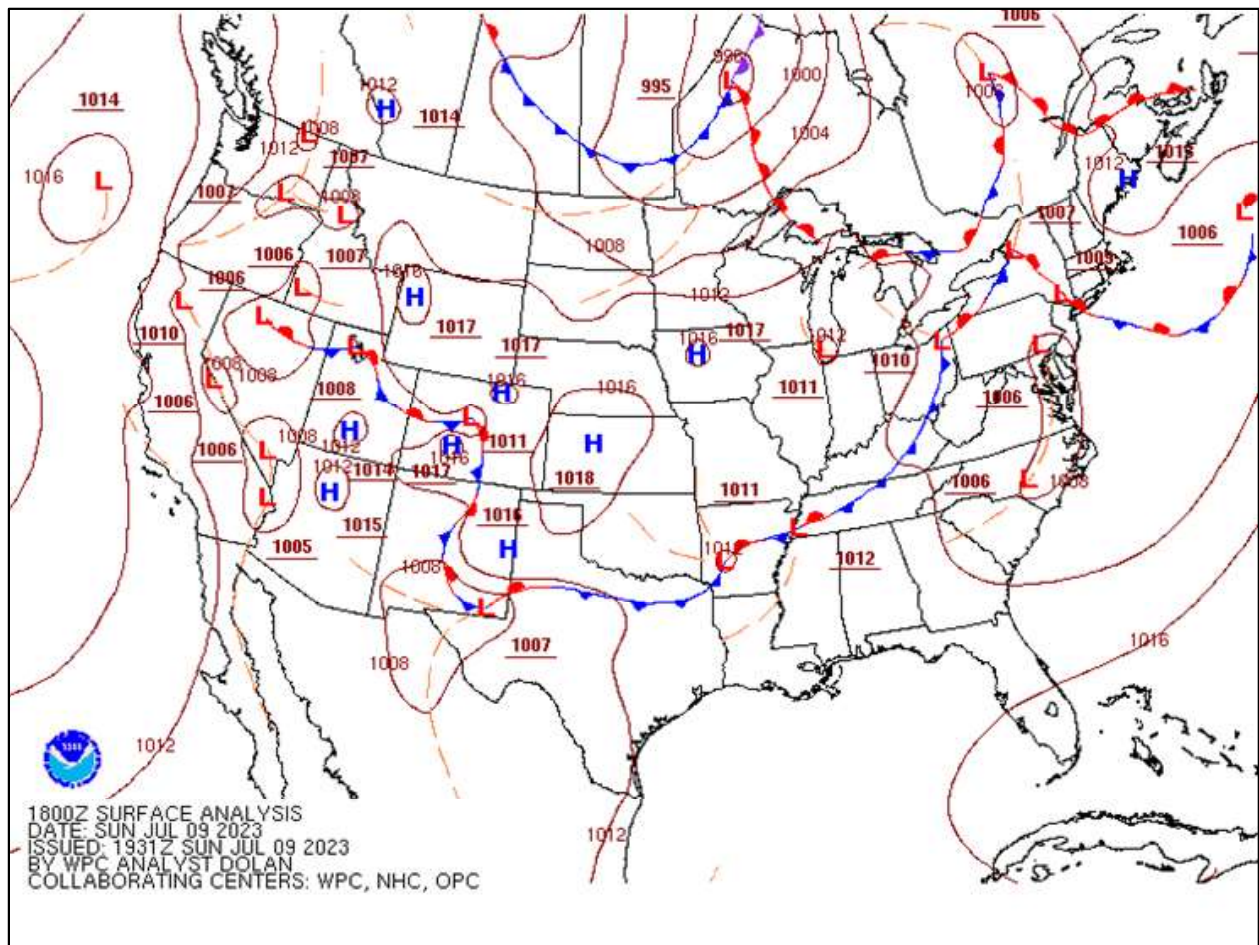


Figure 2. The National Weather Service Weather Prediction Center (WPC) issued this July 9, 2023, 2PM surface analysis showing a low pressure system located over SEPA providing the necessary energy and support for heavy rain and subsequent flooding across the commonwealth.

Weather Leading Up to July 9, 2023, Event:

From the winter of 2022 to spring of 2023, Pennsylvania slowly entered abnormally dry and drought conditions. However, late June leading into July, the pattern quickly shifted to a more active and wet one, and the Commonwealth began to chip away at the rainfall deficit. Many storms came in waves, producing rainfall which included areas of heavy downpours. Dry grounds began to rebound, and some with several areas receiving those heavy pockets of rainfall, resulting in sporadic flood reports. Flooding was caused by two distinct processes: both hardened, dry soils and recently saturated soils from multiple rounds of rain events. In either scenario, the soils are not able to effectively absorb new rainwater. The flood threat across the commonwealth was thus rather dynamic based on soil conditions, plus the added factor of urban development with impervious surfaces such as asphalt and concrete.

One area dealing with urban development and saturated soils was Reading. On July 7, only two days prior to the July 9 event, the Reading Regional Airport received 2.39" of rainfall, which broke the daily record of 2.10" from 1984. Per the WPC, some locations already had seen 300–400% of normal rainfall in the previous two weeks. In Mesoscale Precipitation Discussion (MPD) 654, issued Friday, July 7, at 1:38 PM EDT, WPC painted a picture of an area in SEPA prime for flooding later on the July 7:

“The past 14 days have been rather wet along the I-95 corridor from central VA on north into the Delaware Valley. AHPs shows as much as 300–400% of normal rainfall for much of the area. The greater concentration of hydrophobic surfaces along the I-95 corridor also conflates the flash flood potential this afternoon. West of I-95, some locations feature <2"/hr FFGs in the central Appalachians, Susquehanna Valley, and into northern NJ. Flash flooding is possible this afternoon with the urbanized metro areas and poor drainage areas most at-risk.”

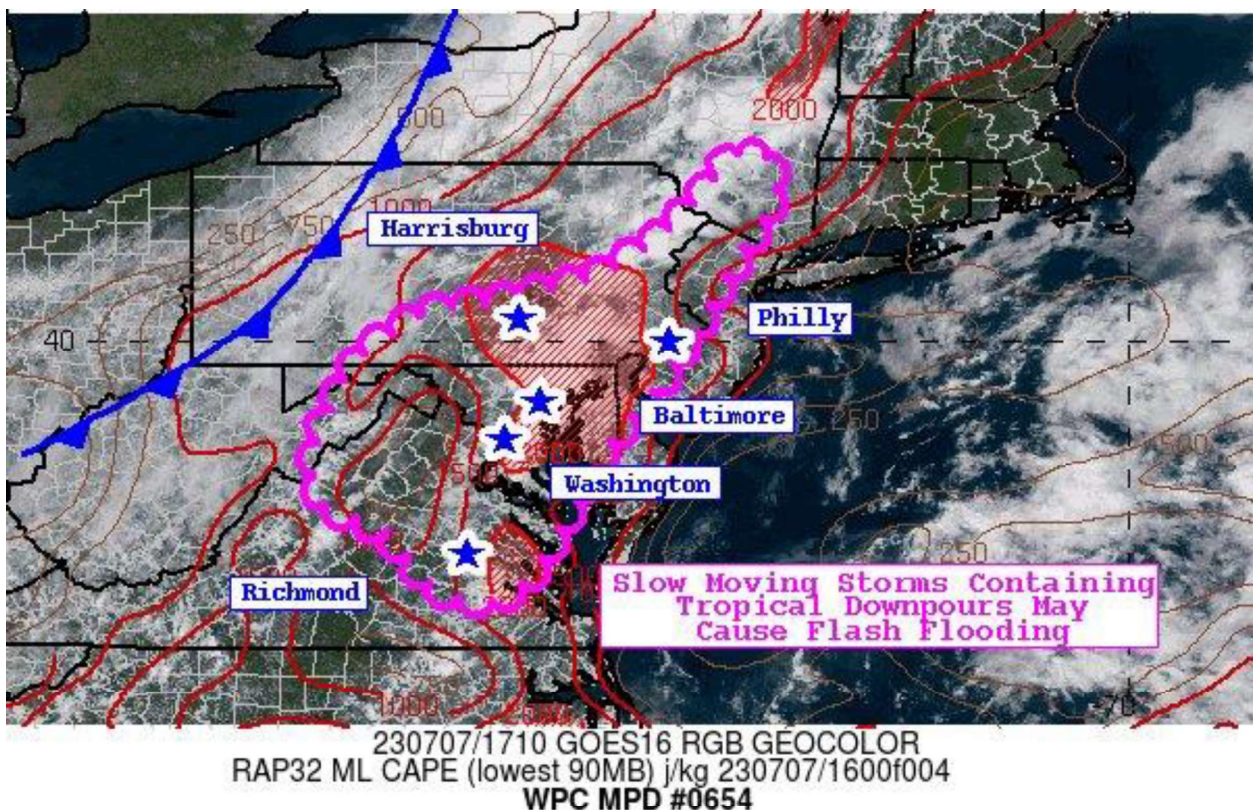


Figure 3. This image accompanied the WPC MPD 654 text showing the red hatched area which highlights a high susceptibility to flooding from intense rainfall on Friday, July 7, roughly 48 hours prior to the July 9 heavy rain event. Notice the SEPA corridor, including Reading, were primed for flooding. Reading eventually recorded over 2" of rainfall on July 7.

July 9, 2023, Event Forecast Lead-Up:

On Saturday, July 8, the WPC issued an Excessive Rain Outlook (ERO) for Sunday, July 9, showing the eastern half of Pennsylvania at a moderate risk, or level 3 out of 4, for flash flooding. In addition, the NWS Storm Prediction Center (SPC) issued a slight risk, or level 2 of 5, for severe storms for a similar area. Subsequently, the NWS local forecast offices in Binghamton, State College, and Mt. Holly coordinated to issue a Flood Watch for July 9, with a focus on flash flooding for areas coinciding with the moderate risk ERO area.

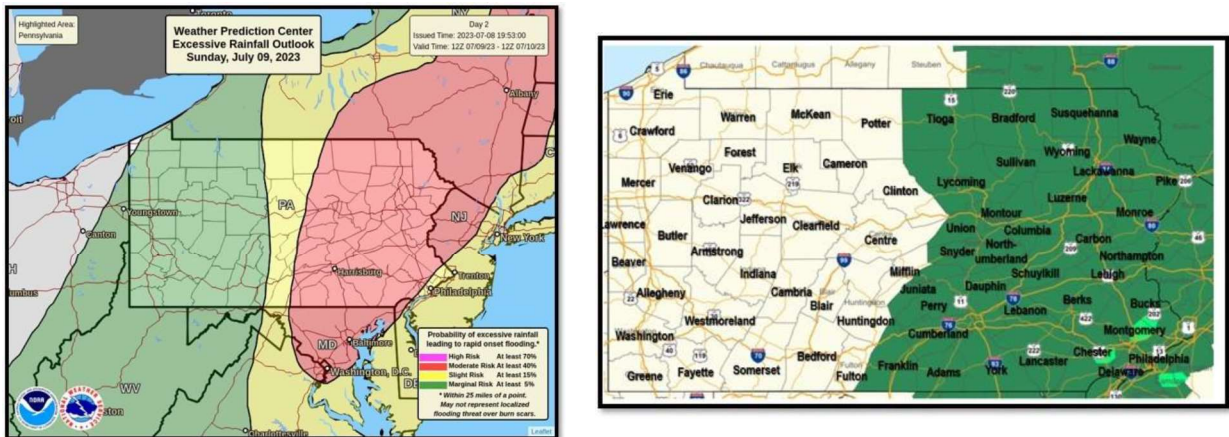


Figure 4. (Left) The WPC Day 2 ERO for Sunday, July 9, identified much of the eastern half of Pennsylvania at a moderate risk for excessive rainfall leading to flash flooding, which prompted the local NWS forecast offices to issue a flood watch in dark green for the same regions (right).

By Sunday morning, July 9, the WPC and SPC outlooks were updated with limited changes to the areas covered as the flood and severe threats evolved. On ERO moderate risk days, Pennsylvania has a history of flooding, with life safety and property damages reported. Per the NWS WPC archives, Pennsylvania averages four moderate risk days per year, so a moderate risk is a rare occurrence annually, at 0.1% chance on any given day.

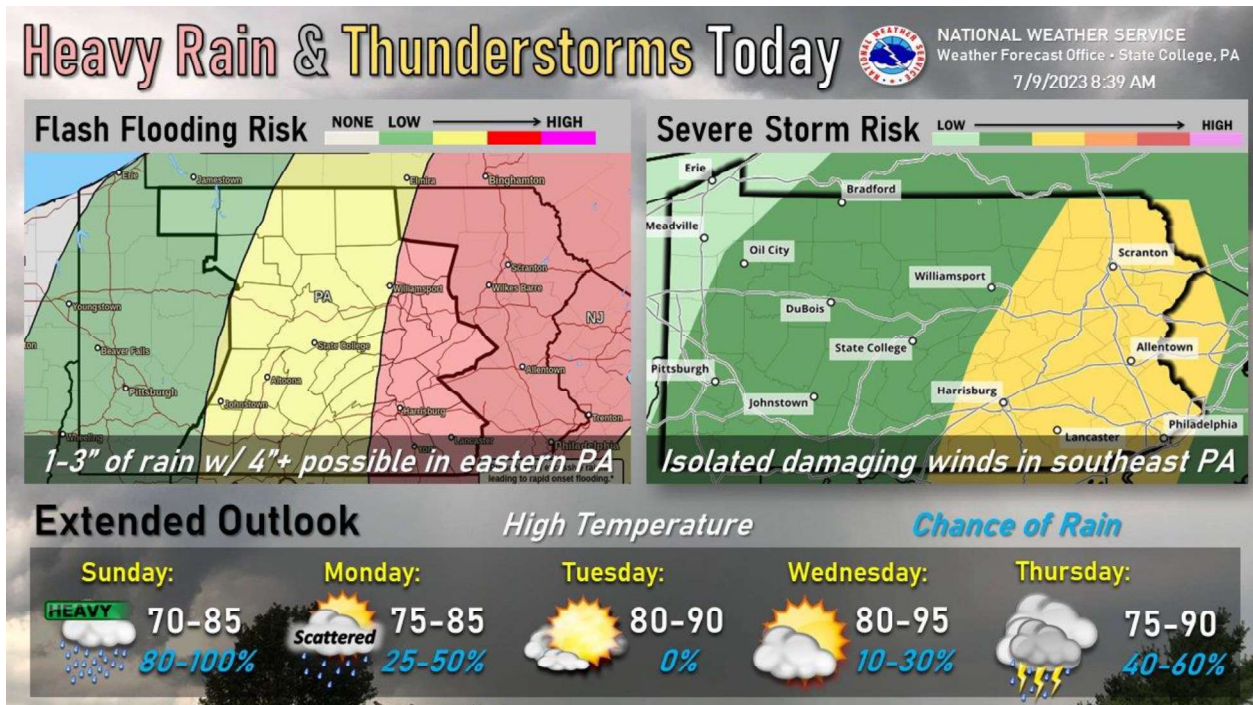


Figure 5. At 8:39AM EDT Sunday, July 9, NWS State College posted the WPC and SPC risks for flash flooding and severe weather risks to social media. The flood risk included a forecast which highlighted 1-3" or rain, with 4"+ possible.

At 9:29 AM EDT on July 9, the WPC issued MPD 673 with concerning language for likely flash flooding:

“An unusually strong upper trough for mid-July coinciding with copious amounts of moisture and sufficient instability will result in areas of flash flooding this today. Some cases of flash flooding could be significant with areas sporting more saturated soils most at-risk...In the hardest hit areas, water rises in poor drainage areas, along roadways, and along creeks and streams can occur very quickly and pose a larger threat to life and property.”

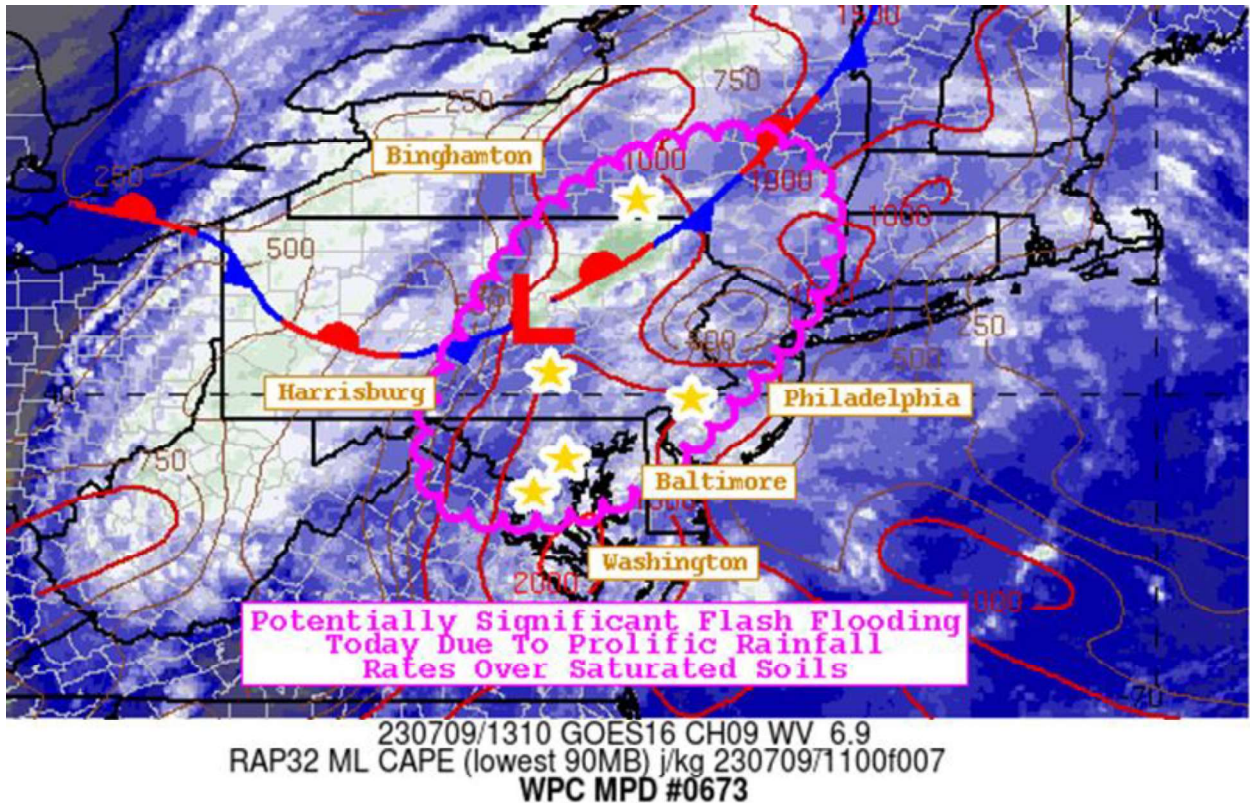


Figure 6. This image accompanied the WPC MPD 673 text, highlighting the eastern half of PA as having the potential for “Significant Flash Flooding Due to Prolific Rainfall Rates Over Saturated Soils”. This MPD included some of the same cities outlined and impacted during the July 7 event.

July 9 Event Details and Results:

The heavy rain arrived, as advertised, with dozens flood and flash flood warnings issued by NWS offices. Nearly 80 reports of flooding coupled with some wind damage reports were made to the NWS through the afternoon. Subsequent property and life safety hazards arose due to flooding. Rain rates exceeded 2”/hr in many spots, and some regions featured “training” and “back building” of storms, which allowed extended period of heavy rain, confirmed by high rainfall gauge readings.



Total Flash Flood Warning (FF.W)

Plotted for Pennsylvania, based on IEM Archives between 09 Jul 2023 0400 and 10 Jul 2023 0400 UTC

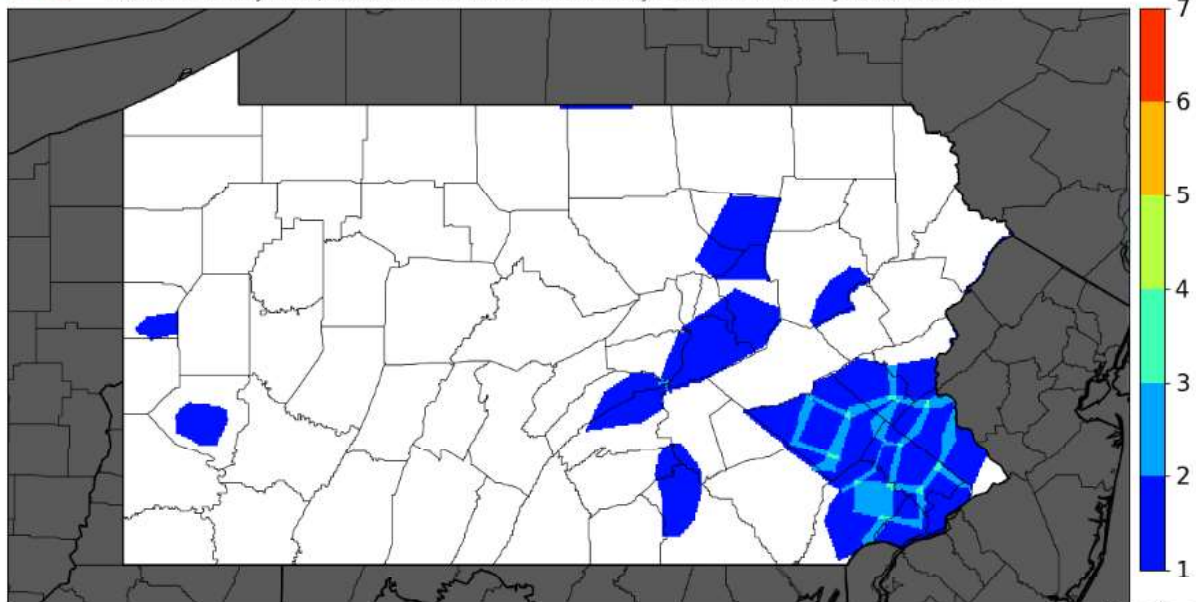


Figure 7. A map of NWS flash flood warnings for the July 9 event show nearly all of SEPA covered with a warning for the event with other counties north and west seeing pockets of flooding.

Rainfall measurements broke records. At the Reading Regional Airport, 5.35” of rain fell on the July 9, much of it in a short 4 to 6-hour window. This rain broke the previous single day July 9 record of 3.74” in 1952 by more than 1.5”. In addition, the 5.35” amount now sits as the seventh wettest single day of rainfall in Reading in 165 years of records. July 9, 2023 is now the wettest July day on record for Reading. The entire month of July averages 4.77” in Reading, and this rain event exceeded that monthly total in less than six hours on a single day. This high intensity rainfall over saturated ground led to numerous flooding issues for the region, with the event exceeding the 200-year annual return interval in western and eastern Reading. Similar hot spots of rainfall totals were seen in other parts of southcentral and southeastern Pennsylvania on July 9. Even lesser amounts of rainfall caused flooding due to the high rainfall rates over a short duration, such as Lawrence County in far western PA.

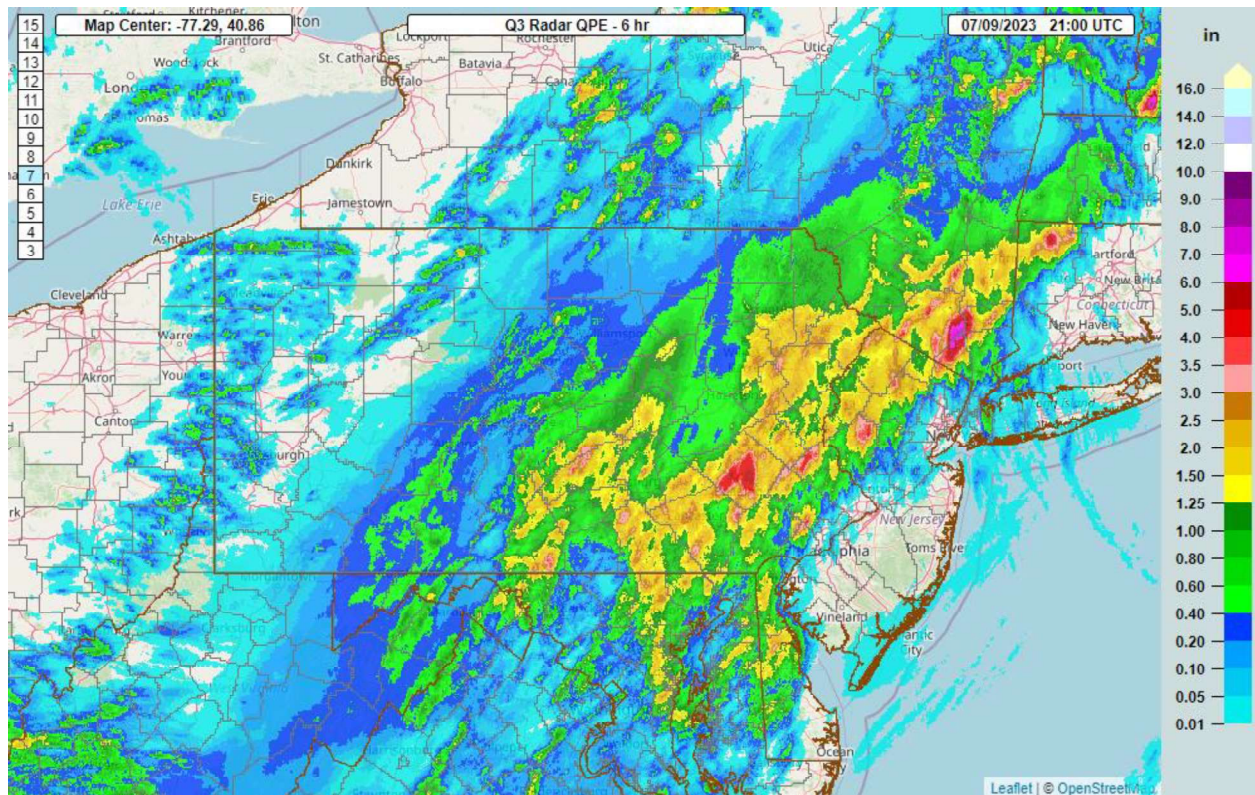


Figure 8. A map of the Quantitative Precipitation Estimates (QPE) from radar between 3–9PM EDT on July 9, 2023, shows a widespread 1–2” of rainfall for all central and eastern Pennsylvania, with hot spots exceeding 4”.

Maximum 1-Day Total Precipitation for Reading Area, PA (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date
1	6.73	1869-10-04
2	6.49	1972-06-23
3	6.25	1987-09-09
4	6.08	1950-11-25
5	5.89	2020-08-02
6	5.64	2005-10-08
7	5.35	2023-07-09
8	5.28	1916-07-21
9	5.25	1873-10-21
10	5.15	2010-09-30
Period of record: 1858-02-01 to 2023-07-12		

Figure 9. A list of the top ten, all-time single day rainfall records for the Reading Regional Airport shows July 9, 2023, ranked at number seven. Precipitation reports date back 165 years to 1858.

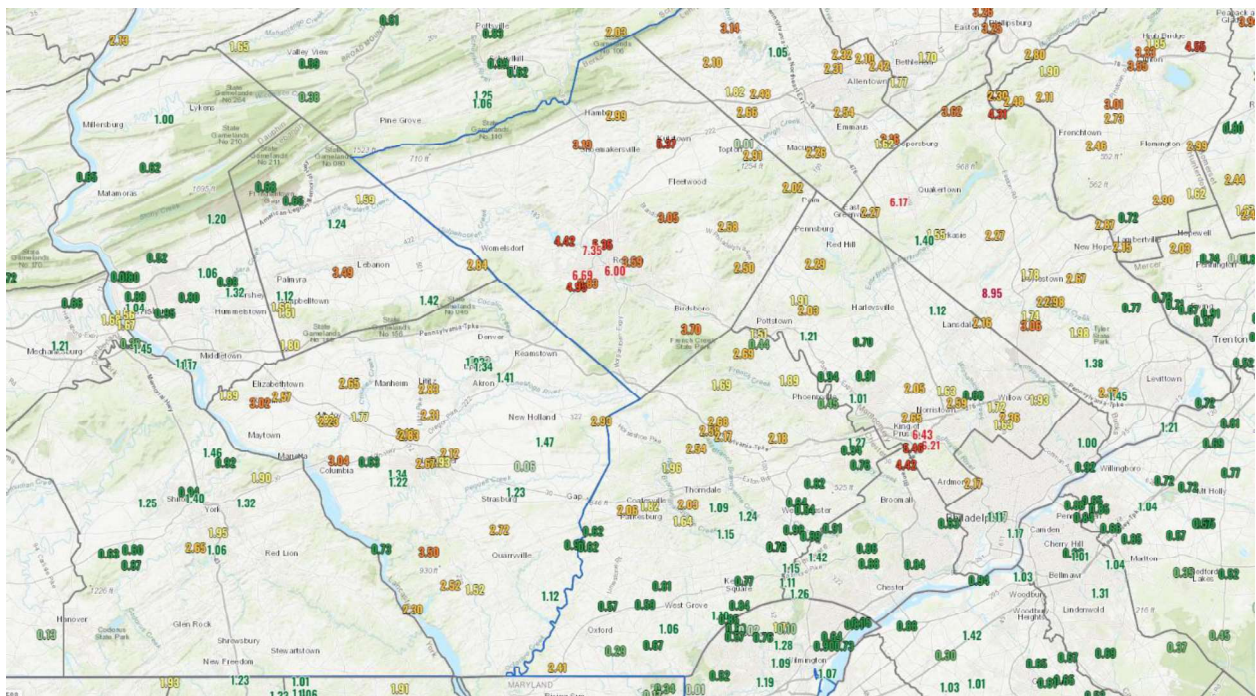


Figure 10: A map of rainfall totals for July 9, 2023, shows many areas receiving pockets of rain exceeding 2", with the Reading area reporting several locations of 6-7"+ in a less than six hours.

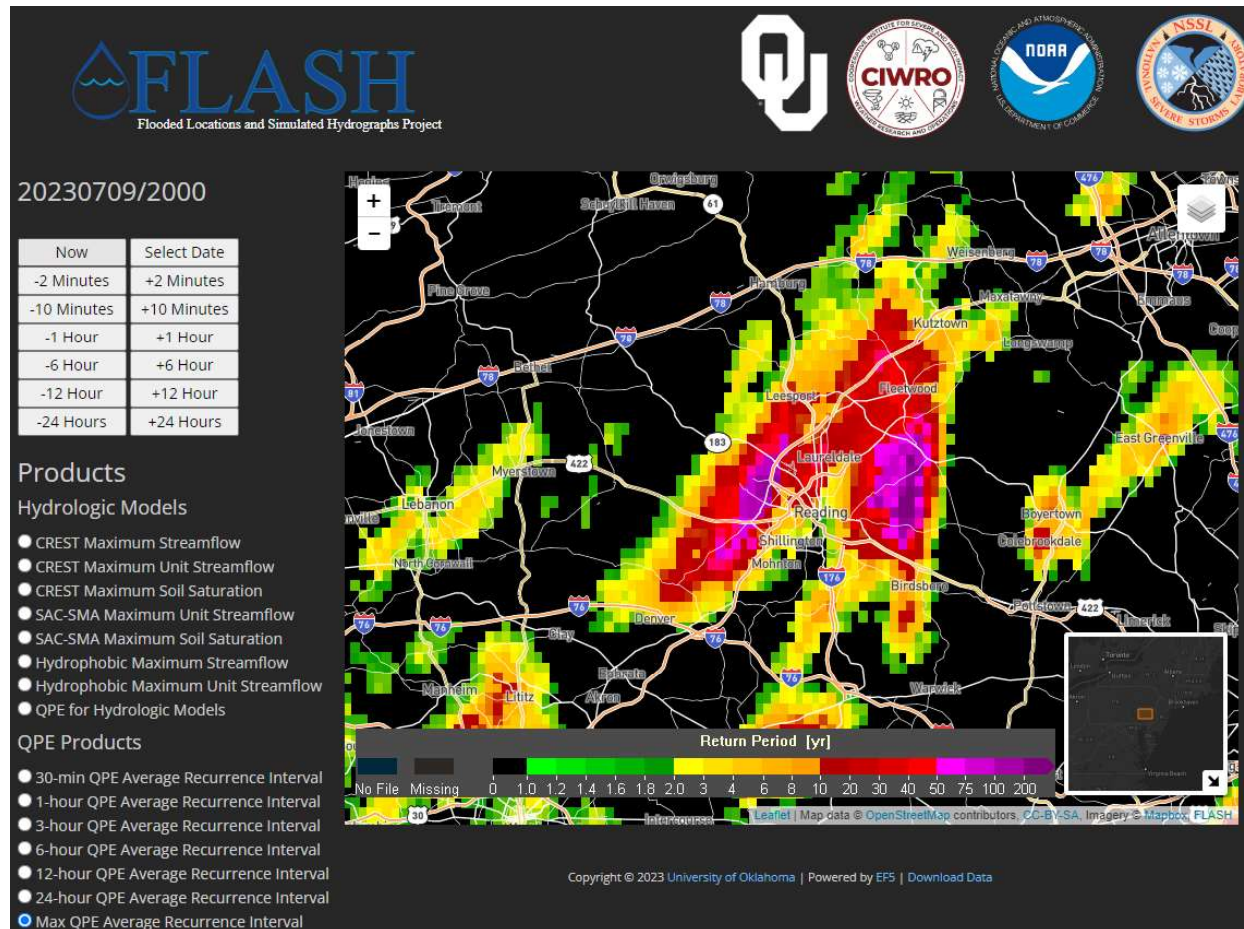


Figure 11: This map compares the rainfall from an event to the average recurrence interval for an event of that magnitude and time. Note the areas in deep purple shading surrounding Reading showing a greater than 1 in 200-year event, or 0.5% annual chance of occurring. This rain event was historic for this region.

River Flooding:

Most mainstem gauged waterways were able to handle the influx of water with only reports of action and minor stage being reached; however, there were many reports of bank full waterways and smaller non-monitored tributaries with flooding issues. USGS streamflow's were pegged at high for many eastern Pennsylvanian waterways. While this was not a mainstem waterway flood event, the flash flood impacts were devastating in local areas.

Past 24-Hour Rainfall & Current Streamflows

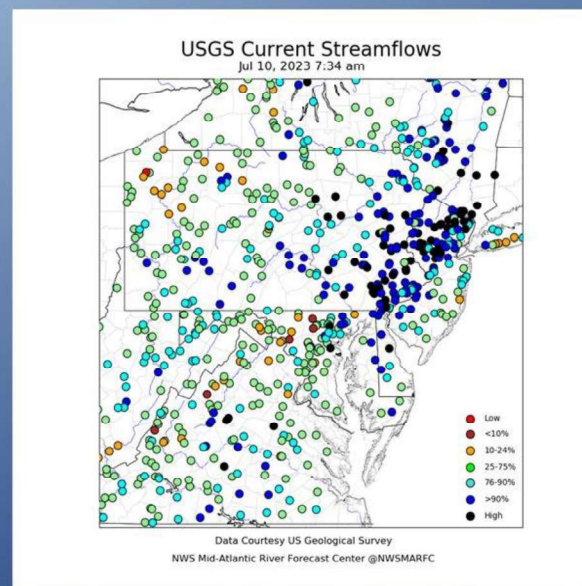
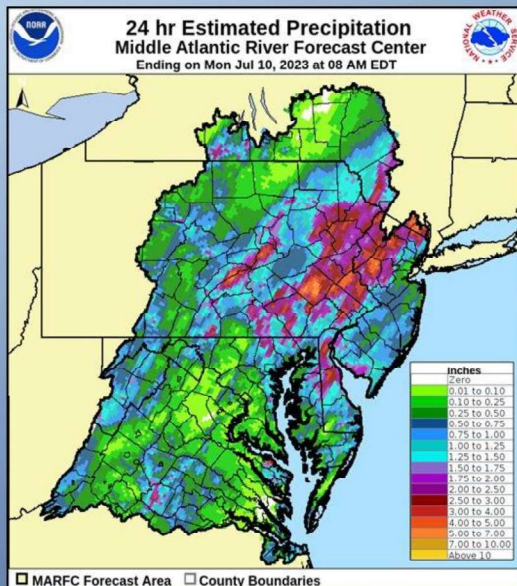


Figure 12: The NWS Middle Atlantic River Forecast Center posted rainfall totals (left) with a comparison to streamflows (right). Note that most of eastern PA shows streamflows at >90% of their average compared to a normal July 9 due to the influx of heavy rain in the basins.

Wind Damage:

Roughly 17 wind damage reports were primarily focused to a severe and slow-moving storm in central PA focused on Juniata County and surrounding counties. The wind caused downed trees and utility outages, and at times combined with flooding to impact travel.

In addition to the devastating weather effects of the storm set forth herein, these conditions caused in excess of 12,000 power outages, road closures, travel disruptions and damage to public and private property. The impacts of the storm are of such severity and magnitude that an effective response is now beyond the capability of the Commonwealth.

10. Joint Preliminary Damage Assessment*

Individual Assistance Dates Performed **Requested** Jul 14, 2023 **Start** Jul 19, 2023 **End** July 20, 2023

Individual Assistance Accessibility Problems (Areas that could not be accessed, and why)
N/A

Public Assistance Dates Performed **Requested** Jul 14, 2023 **Start** Jul 19, 2023 **End** Continuing

Public Assistance Accessibility Problems (Areas that could not be accessed, and why)
Public Assistance Preliminary Damage Assessment's are ongoing.

11. Programs and Areas Requested

Individual Assistance N/A Individuals and Households Program Crisis Counseling Program Disaster Unemployment Assistance
 All Disaster Case Management Disaster Legal Services Small Business Administration (SBA) Disaster Assistance

For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; for Indian tribal government, list tribe(s) and/or tribal area(s)) If additional space is needed, please enclose additional documentation).
The following counties are requested for all programs within Individual Assistance: Berks County.

For States, identify Federally-recognized Tribes in the requested counties (if applicable).

Please see **Enclosure A: Supplemental Information for Individual Assistance** for additional information in support of this request*.

**Not Required for Emergency Declaration Request*

11. Programs and Areas Requested (Continued)

Public Assistance N/A Debris Removal (Category A) Emergency Protective Measures (Category B) Permanent Work (Categories C-G)* (not available for Emergency Declaration Requests)

For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; for Indian tribal government, list tribe(s) and/or tribal area(s)). If additional space is needed or your request includes different categories of work for different jurisdictions; please enclose additional documentation.

The following counties will be requested for all categories of work for Public Assistance: Berks County.

For States, identify Federally-recognized Tribes included in the requested counties (if applicable).

Please see **Enclosure B: Supplemental Information for Public Assistance** for additional information in support of this request*.

Indemnification for Debris Removal Activity

I do not anticipate the need for debris removal.

I anticipate the need for debris removal, which poses an immediate threat to lives, public health and safety. Pursuant to Sections 403 and 407 of the Stafford Act, 42 U.S.C. §§ 5170b & 5173, the State or Indian tribal government agrees to indemnify and hold harmless the United States of America for any claims arising from the removal of debris or wreckage for this disaster. The State or Indian tribal government agrees that debris removal from public and private property will not occur until the landowner signs an unconditional authorization for the removal of debris.

Request for Direct Federal Assistance

I do not request direct Federal assistance at this time.

I request direct Federal assistance for work and services to save lives and protect property, and:

a. I request the following type(s) of assistance:

b. List of reasons why State and local or Indian tribal government cannot perform, or contract for, required work and services.

c. In accordance with 44 C.F.R. § 206.208, the State or Indian tribal government agrees that it will, with respect to direct Federal assistance: (1) Provide without cost to the United States all lands, easements, and rights-of-ways necessary to accomplish the approved work; (2) Hold and save the United States free from damages due to the requested work, and shall indemnify the Federal Government against any claims arising from such work; (3) Provide reimbursement to FEMA for the non-Federal share of the cost of such work in accordance with the provisions of the FEMA-State or FEMA-Tribe Agreement ; and (4) Assist the performing Federal agency in all support and local jurisdictional matters.

Request for Snow Assistance

N/A I request snow assistance.

Snow assistance for the following jurisdictions (Specify counties, independent cities or tribes and/or tribal areas).

Please see **Enclosure D: Historic and Current Snowfall Data** for additional information in support of this request*.

*Not Required for Emergency Declaration Request

11. Programs and Areas Requested (Continued)

Hazard Mitigation* Statewide **OR**

For the following specific counties, parishes, independent cities or tribes and/or tribal areas.

12. Mitigation Plan Information*

a. Mitigation Plan Expiration Date Oct 10, 2023 b. Type of Plan Enhanced Standard

13. Other Federal Agency Programs

I do not anticipate requirements from Other Federal Agencies I do anticipate requirements from Other Federal Agencies

Please see **Enclosure C**: Requirements for Other Federal Agency Programs for additional information in support of this request*.

14. Findings and Certifications

I certify the following:

- a. I have determined that this incident is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local government or Indian tribal government and that supplementary federal assistance is necessary.
- b. In response to this incident, I have taken appropriate action under State or tribal law and have directed the execution of the State or Tribal Emergency Plan on Jul 09, 2023 in accordance with the Stafford Act.
- c. The State and local governments, or Indian tribal government will assume all applicable non-Federal share of costs required by the Stafford Act.

15. List of Enclosures and Supporting Documentation

- Cover Letter Enclosure A (Individual Assistance)* Enclosure B (Public Assistance)*
- Enclosure C (Requirements for Other Federal Agency Programs) Enclosure D (Historic and Current Snowfall Data)
- Additional Supporting Documentation E: Weather Analysis for July 9, 2023 Event



Governor's or Tribal Chief Executive's Signature

07/31/2023

Date

If anyone except the Governor or Tribal Chief Executive signs this document, please provide the documentation that establishes that this individual has the legal authority to act on behalf of the Governor or Tribal Chief Executive.

*Not Required for Emergency Declaration Request