

August 9 - 14 (Debby), 2024 Preliminary Flood Summary

Susquehanna Basin (North Branch)						
Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)	
<u>Conklin, New York - (CKLN6)</u>	Flood = 12.0	13.60	28,468	Flood = 12.0	12.0 (minor)	25.02
Susquehanna River (North BR) - (WFO BGM)	8/9/2024	August 10, 2024 00:46 EDT		8/10/2024	15.0 (moderate)	76,800
Gage & Town/Broome County	17:45			13:15	20.0 (major)	June 28, 2006
Chemung Basin						
Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)	
<u>Mansfield, Pennsylvania - (MFDP1)</u>	Flood = 12.0	12.19	12,647	Flood = 12.0	12.0 (minor)	20.13
Tioga River - (WFO CTP)	8/9/2024	August 9, 2024 14:46 EDT		8/9/2024	13.0 (moderate)	18,000
Gage & Town/Tioga County	13:45			15:00	14.0 (major)	September 25, 1975
<u>West Cameron, New York - (WCRN6)</u>	Flood = 17.0	17.77	18,135	Flood = 17.0	17.0 (minor)	23.48
Canisteo River - (WFO BGM)	8/9/2024	August 9, 2024 20:30 EDT		8/9/2024	18.0 (moderate)	43,000
Gage & Town/Steuben County	18:15			21:45	21.0 (major)	June 23, 1972
Juniata Basin						
Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)	
<u>Shirleysburg, Pennsylvania - (SLYP1)</u>	Flood = 10.0	11.74	8,137	Flood = 10.0	10.0 (minor)	19.46
Aughwick Creek - (WFO CTP)	8/9/2024	August 9, 2024 17:00 EDT		8/10/2024	12.0 (moderate)	44,400
Gage & Town/Huntingdon County	12:30			3:15 AM	20.0 (major)	January 19, 1996
<u>Spruce Creek, Pennsylvania - (SPKP1)</u>	Flood = 8.0	9.25	7,463	Flood = 8.0	8.0 (minor)	19.10
Little Juniata River - (WFO CTP)	8/9/2024	August 9, 2024 12:15 EDT		8/9/2024	10.0 (moderate)	39,800
Gage & Town/Huntingdon County	10:15			15:00	14.0 (major)	March 18, 1936
Susquehanna Basin (West Branch)						
Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)	
<u>Allenwood, Pennsylvania - (ALWP1)</u>	Flood = 24.0	24.75	106,000	Flood = 24.0	24.0 (minor)	26.07
West Branch Susquehanna River - (WFO CTP)	8/10/2024	August 10, 2024 15:30 EDT		8/10/2024	26.0 (moderate)	117,000
Gage & Town/Union County	9:45			20:30	30.0 (major)	September 11, 2018
<u>Muncy, Pennsylvania - (MCYP1)</u>	Flood = 20.0	20.44	M	Flood = 20.0	20.0 (minor)	37.45
West Branch Susquehanna River - (WFO CTP)	8/10/2024	August 10, 2024 10:53 EDT		8/10/2024	22 (moderate)	not available
Gage & Town/Lycoming County	9:23			16:43	28 (major)	June 23, 1972
<u>Beech Creek Station, Pennsylvania</u>	Flood = 11.0	11.68	4,376	Flood = 11.0	11.0 (minor)	15.96
Bald Eagle Creek - (WFO CTP) - (BECP1)	8/9/2024	August 10, 2024 00:00:00 EDT		8/10/2024	13.0 (moderate)	13,400
Gage & Town/Clinton County	16:45			4:00	14.0 (major)	September 18, 2004
<u>Milton, Pennsylvania - (ILTP1)</u>	Flood = 19.0	19.08	105,001	Flood = 19.0	19.0 (minor)	34.55
West Branch Susquehanna River - (WFO CTP)	8/10/2024	August 10, 2024 17:30 EDT		8/10/2024	22 (moderate)	not available
Gage/W. Milton-Union Co - Town/Northumberland C	15:15			19:00	25 (major)	June 24, 1972

Susquehanna Basin (Upper Main Stem)	Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)
Tunkhannock, Pennsylvania - (TNKP1)	Flood = 11.0	16.03	25,591	Flood = 11.0	11.0 (minor)	20.90
Tunkhannock Creek - (WFO BGM)	8/9/2024	August 10, 2024 01:15 EDT		8/10/2024	14.0 (moderate)	39,500
Gage & Town/Wyoming County	16:15			8:13	17.0 (major)	June 28, 2006
Susquehanna (Lower Main Stem)	Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)
Penns Creek, Pennsylvania - (PNCP1)	Flood = 8.0	9.25	7,504	Flood = 8.0	8.0 (minor)	14.85
Penns Creek/Basin - (WFO CTP)	8/9/2024	August 9, 2024 16:30 EDT		8/10/2024	10.0 (moderate)	34,600
Gage/Union County - Town/Snyder County	11:00			6:30	12.0 (major)	June 23, 1972
Camp Hill, Pennsylvania - (CPHP1)	Flood = 7.0	10.42	4,934	Flood = 7.0	7.0 (minor)	18.77
Yellow Breeches Creek - (WFO CTP)	8/9/2024	August 9, 2024 20:31 EDT		8/10/2024	9.0 (moderate)	19,300
Gage & Town/Cumberland County	7:45			2:00	13.0 (major)	September 26, 1975
Delaware	Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)
Fishes Eddy, New York - (FSHN6)	Flood = 13.0	14.47	29,223	Flood = 13.0	13.0 (minor)	23.60
East Branch Delaware River - (WFO BGM)	8/9/2024	August 9, 2024 22:15 EDT		8/10/2024	16.0 (moderate)	70,000
Gage & Town/Delaware County	20:00			2:45	18.0 (major)	October 9, 1903
Harvard, New York - (HVDN6)	Flood = 10.0	11.41	9,974	Flood = 10.0	10.0 (minor)	16.93
East Branch Delaware River - (WFO BGM)	8/9/2024	August 9, 2024 20:16 EDT		8/9/2024	12.0 (moderate)	31,400
Gage & Town/Delaware County	18:15			23:00	15.0 (major)	September 22, 1938
Walton, New York - (WALN6)	Flood = 9.5	11.71	8,987	Flood = 9.5	9.5 (minor)	16.85
West Branch Delaware River - (WFO BGM)	8/9/2024	August 10, 2024 06:15 EDT		8/10/2024	14.0 (moderate)	28,600
Gage & Town/Delaware County	16:30			15:45	16.0 (major)	June 28, 2006
Cooks Falls, New York - (CKFN6)	Flood = 10.0	10.32	10,674	Flood = 10.0	10.0 (minor)	20.55
Beaver Kill - (WFO BGM)	8/9/2024	August 9, 2024 22:15 EDT		8/10/2024	16.0 (moderate)	62,400
Gage & Town/Delaware County	19:15			0:30	18.0 (major)	June 28, 2006

Southeast PA & Delaware		Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)
<u>Chadds Ford, Pennsylvania - (CDFP1)</u>		Flood = 9.0	9.64	5,843	Flood = 9.0	9.0 (minor)	17.15
Brandywine Creek/Christina Basin - (WFO PHI)		8/9/2024	August 9, 2024 10:30:00 EDT		8/9/2024	11.0 (moderate)	26,900
Gage & Town/Delaware County		7:30			12:45	13.0 (major)	September 17, 1999
Potomac		Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)
<u>Great Cacapon, West Virginia - (GCPW2)</u>		Flood = 9.0	11.20	11,057	Flood = 9.0	9.0 (minor)	30.10
Cacapon River - (WFO LWX)		8/9/2024	August 9, 2024 20:15 EDT		8/10/2024	16.0 (moderate)	87,600
Gage & Town/Morgan County		17:45			1:45	20.0 (major)	March 18, 1936
<u>Martinsburg, West Virginia - (MBGW2)</u>		Flood = 10.0	11.70	3,780	Flood = 10.0	10.0 (minor)	18.76
Opequon Creek - (WFO LWX)		8/9/2024	August 9, 2024 10:01 EDT		8/10/2024	12.5 (moderate)	23,400
Gage & Town/Berkeley County		3:15			1:00	15.0 (major)	January 20, 1996
Shenandoah		Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)
<u>Millville, West Virginia - (MILW2)</u>		Flood = 10.0	10.39	23,388	Flood = 10.0	10.0 (minor)	32.40
Shenandoah River - (WFO LWX)		8/9/2024	August 10, 2024 01:30 EDT		8/10/2024	14.0 (moderate)	230,000
Gage & Town/Jefferson County		23:00			5:15	17.0 (major)	October 16, 1942
Appomattox		Above FS (ft)	Crest (ft)	Streamflow (cfs)	Below FS (ft)	Category (ft)	Record (ft) - (cfs)
<u>Farmville, Virginia - (FRMV2)</u>		Flood = 16.0	21.93	12,598	Flood = 16.0	16.0 (minor)	29.70
Appomattox River - (WFO AKQ)		8/9/2024	August 10, 2024 00:15 EDT		8/10/2024	20.0 (moderate)	33,100
Gage/Cumberland Co - Town/Prince Edward Co		13:00			21:00	25.0 (major)	June 22, 1972
<u>Mattoax, Virginia - (MTXV2)</u>		Flood = 21.0	22.17	5,130	Flood = 21.0	21.0 (minor)	35.30
Appomattox River - (WFO AKQ)		8/13/2024	August 13, 2024 16:30 EDT		8/14/2024	25.0 (moderate)	35,000
Gage & Town/Amelia Co		7:45			11:00	28.0 (major)	August 18, 1940

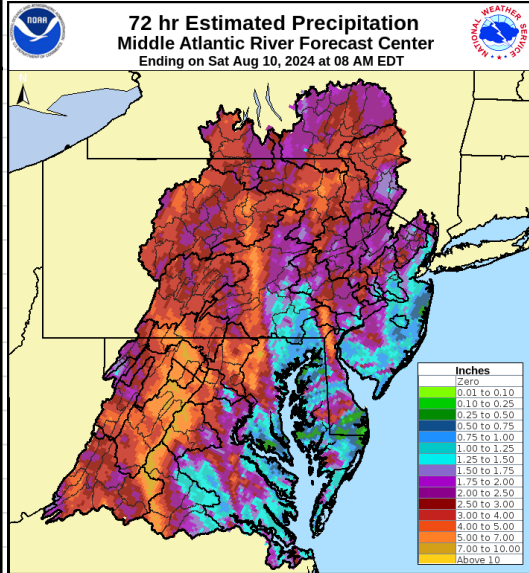
Crest Statistics

Flooding - 8/9/2024 - 8/14/2024
 Crests - 8/9/2024 - 8/13/2024
 First flood of 1 - August, 2024
 Seventh flood in 2024
 Number of MARFC Forecast Points Flooding - **22**
 Number of Floods Cresting in **Minor** Range - **19**
 Number of Floods Cresting in **Moderate** Range - **3**
 Number of Floods Cresting in **Major** Range - **0**
 Number of Floods Cresting in **Missing** Range - **0**
MARFC Power Ranking - 34 (Minor = 1 - Moderate = 5 - Major = 10 - Missing =1)
 Number of MARFC records - **0**
 E = Estimated

Weather Summary

The remnants of Hurricane Debby interacted with a stalled frontal boundary over the Mid-Atlantic, producing heavy rain from Virginia through New York. Widespread rainfall of 3-5", locally 7"+ was reported. Flash flood emergencies were declared in portions of Tioga County, PA and Steuben County, NY (Chemung River basin), where extensive flood damages occurred in some communities, including areas affected by Tropical Storm Fred in 2021. Elsewhere, despite excessive rainfall, drought conditions south of Pennsylvania helped to limit the severity of river flooding.

TOP 72-HOUR PRECIPITATION AMOUNTS (Liquid Equivalent and in inches)

8/7/2024 (12 Z) - 8/10/2024 (12 Z)		
Amount Location State County		
8.69 Shannondale, WV Jefferson	 <p style="font-size: small; text-align: center;"> 72 hr Estimated Precipitation Middle Atlantic River Forecast Center Ending on Sat Aug 10, 2024 at 08 AM EDT </p> <p style="font-size: x-small;"> Legend: ■ MARFC Forecast Area ■ Basin Boundaries ■ Forecast Group Boundaries </p>	
8.13 Avondale, PA Chester		
8.03 Newark, DE New Castle		
7.58 Front Royal, VA Warren		
7.48 Kennett Square, PA Chester		
7.08 Modena, PA Chester		
7.04 Berryville, VA Clarke		
7.01 Westminster, MD Carroll		
6.95 Orrtanna, PA Adams		
6.85 Strasburg, PA Shenandoah		
6.67 Martinsburg, WV Berkeley		
6.66 Riegelsville, PA Bucks		
6.65 Duncannon, PA Perry		
6.60 Marshallton, PA Chester		
6.46 Westminster, MD Carroll		
6.44 Basking Ridge, NJ Morris		

Floods by MARFC Basins						
MARFC Basins	Fcst Points	Minor	Moderate	Major	Unknown	Mod & Major
Appomattox	2	1	1	0	0	1
Chemung	2	2	0	0	0	0
Delaware	4	4	0	0	0	0
James	0	0	0	0	0	0
Juniata	2	2	0	0	0	0
Lehigh	0	0	0	0	0	0
Lower Main Stem Susquehanna	2	1	1	0	0	1
North Branch Susquehanna	1	1	0	0	0	0
Passaic	0	0	0	0	0	0
Potomac	2	2	0	0	0	0
Rappahannock	0	0	0	0	0	0
Raritan	0	0	0	0	0	0
SE PA and Delaware (state)	1	1	0	0	0	0
Shenandoah	1	1	0	0	0	0
Upper Main Stem Susquehanna	1	0	1	0	0	1
West Branch Susquehanna	4	4	0	0	0	0
Floods by NWS Weather Forecast Offices						
Forecast Office	Fcst Points	Minor	Moderate	Major	Unknown	Mod & Major
Blacksburg, VA (RNK)	0	0	0	0	0	0
Binghamton, NY (BGM)	7	6	1	0	0	1
Brookhaven, NY (OKX)	0	0	0	0	0	0
Philadelphia, PA (PHI)	1	1	0	0	0	0
State College, PA (CTP)	9	8	1	0	0	1
Sterling, VA (LWX)	3	3	0	0	0	0
Wakefield, VA (AKQ)	2	1	1	0	0	1