

Flood Event of 1/14/2005 - 1/16/2005

Brandywine

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Chadds Ford	9.00	1/14/2005	9.41	6,640	Minor	Christina	Brandywine Creek	Delaware	Delaware

Delaware

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Cooks Falls	10.00	1/14/2005	11.72	14,500	Minor	Delaware	Beaver Kill	Delaware	Delaware
Fishs Eddy	13.00	1/14/2005	15.34	18,500	Minor	Delaware	Delaware River	Delaware	Delaware

James

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Palmyra	17.00	1/14/2005	20.78	16,800	Minor	James	Rivanna River	Fluvanna	Fluvanna
Richmond	12.00	1/15/2005	14.40	60,800	Minor	James	James River	Henrico	Independent City

Main Stem Susquehanna

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Bloomsburg	19.00	1/15/2005	20.51	-9,999	Minor	Upper Main Stem Susquehanna	Susquehanna River	Columbia	Columbia
Danville	20.00	1/15/2005	20.56	149,000	Minor	Upper Main Stem Susquehanna	Susquehanna River	Montour	Montour
Harper Tavern	9.00	1/14/2005	10.29	8,980	Minor	Swatara	Swatara Creek	Lebanon	Lebanon
Hershey	7.00	1/15/2005	7.01	8,880	Minor	Swatara	Swatara Creek	Dauphin	Dauphin

Marietta	49.00	1/16/2005	49.10	301,000	Minor	Lower Main Stem Susquehanna	Susquehanna River	Lancaster	Lancaster
Meshoppen	27.00	1/15/2005	28.18	110,000	Minor	Upper Main Stem Susquehanna	Susquehanna River	Wyoming	Wyoming
Middletown (Old Site)	11.00	1/15/2005	11.30	-9,999	Minor	Lower Main Stem Susquehanna	Swatara Creek	Dauphin	Dauphin
Towanda	16.00	1/15/2005	17.37	110,000	Minor	Upper Main Stem Susquehanna	Susquehanna River	Bradford	Bradford
Tunkhannock	11.00	1/14/2005	13.20	18,400	Minor	Upper Main Stem Susquehanna	Tunkhannock Creek	Wyoming	Wyoming
Wilkes-Barre	22.00	1/15/2005	24.74	137,000	Moderate	Upper Main Stem Susquehanna	Susquehanna River	Luzerne	Luzerne

Neshaminy

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Langhorne	9.00	1/14/2005	9.82	7,820	Minor	Neshaminy	Neshaminy Creek	Bucks	Bucks

North Branch Susquehanna

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Bainbridge	13.00	1/14/2005	13.86	-9,999	Minor	North Branch Susquehanna	North Branch Susquehanna River	Chenango	Chenango
Conklin	11.00	1/14/2005	13.99	30,400	Minor	North Branch Susquehanna	North Branch Susquehanna River	Broome	Broome
Cortland	8.00	1/15/2005	8.49	4,370	Minor	North Branch Susquehanna	Tioughnioga River	Cortland	Cortland
Sherburne	8.00	1/14/2005	8.19	3,080	Minor	North Branch Susquehanna	Chenango River	Chenango	Chenango
Vestal	18.00	1/14/2005	20.11	-9,999	Minor	North Branch Susquehanna	North Branch Susquehanna River	Broome	Broome
Waverly	11.00	1/15/2005	14.52	63,600	Minor	North Branch Susquehanna	North Branch Susquehanna River	Bradford	Tioga

Passaic

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Pompton Lakes	9.00	1/15/2005	10.01	2,650	Missing	Passaic	Ramapo River	Passaic	Passaic
Wanaque	5.00	1/15/2005	5.26	1,120	Minor	Passaic	Wanaque River	Passaic	Passaic

Potomac

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Frederick	15.00	1/15/2005	16.98	17,600	Minor	Potomac	Monocacy River at Jug Bridge	Frederick	Frederick

South Branch Potomac

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Moorefield	10.00	1/15/2005	10.57	-9,999	Minor	South Branch Potomac	South Fork South Branch Potomac River	Hardy	Hardy

Weather Summary

After a series of low pressure systems following similar trajectories brought rain and snow to the Mid-Atlantic region, a powerful low began to take shape in Canada. As it surged southeastward across the Rocky Mountains and into Texas on January 12, it strengthened on account of the tremendous moisture provided by the Gulf of Mexico. The fast moving system then pulled northeastward with the jet stream into Canada and occluded. The cold, Canadian air behind the cold front, which dangled into the Gulf South, collided with the warm, moist Gulf air being pulled northward from the warm front positioned over the U.S. northern border. On the 13th, with high temperatures in the mid 60's over Pennsylvania and New York and 30's behind the cold front, strong winds developed from the gradient causing the snow, which normally covers the ground during the winter months over the northern Susquehanna Basins, to melt quickly. As the cold front began to pass over the area on January 14th, the area of heaviest precipitation positioned itself over the Passaic, Delaware, Central James and eastern basins of the Susquehanna with the western Potomac receiving locally heavy totals as lines of rain and thunderstorms hit the mountains of West Virginia. In addition to melting the nearly half-foot of snow over the North Branch of the Susquehanna, the system brought about 1 inch of rain between the 13th and 14th. Meanwhile, the Lower Main Stem, Passaic, Delaware and western Potomac Basins received between 1 and 2 inches with higher totals over the central James Basin which ranged from 2 - 3 inches.

Crest Statistics and Flood Information

First flood of 1 that occurred in Jan, 2005

First flood of 8 that occurred in 2005

Number of Floods at MARFC Forecast Points - 26

Number of Floods Cresting in Minor Range - 24

Number of Floods Cresting in Moderate Range - 1

Number of Floods Cresting in Major Range - 0

Number of Floods Cresting in Missing Range - 1