Delaware River Flooding from Tropical Storm Ivan – September 18-20, 2004
On September 17 and early on September 18, 2004, most of the Delaware River Basin upstream of Trenton received 3 to 5 inches of rain from Tropical Storm Ivan in a 12-hour period. Much of the heavier rain occurred in the mountainous sections of the basin in the Poconos and Catskills.

This rain fell on soils already saturated by rain from tropical storm Frances and previous storms.

Based on this rainfall and runoff modeling results, the National Weather Service predicted major flooding along the full non-tidal reach of the Delaware River. Major flooding did occur on September 18-20.
September 17-18 Rainfall in Upper Delaware Basin
By afternoon on September 18, USGS stream gages indicated that major flooding was occurring in the upper Delaware River and tributaries.
By the afternoon of September 18, approximately 250 stream gages included in the National Weather Service’s AHPS prediction network were above or near flood stage in the Eastern United States.
Observed Stages for Fishs Eddy, NY on E. Br. Delaware R.

Date / Time (Local Time)
Middle Atlantic River Forecast Center, State College PA
Observed Stages for Callicoon, NY on Delaware River

Date / Time (Local Time)
Middle Atlantic River Forecast Center, State College PA
Observed Stages for Port Jervis, NY on Delaware River

Date / Time (Local Time)
Middle Atlantic River Forecast Center, State College PA
Observed Stages for Walnutport, PA on Lehigh River

Date / Time (Local Time)
Middle Atlantic River Forecast Center, State College PA
Observed Stages for Graterford, PA on Perkiomen Creek

Stage (feet)

Date / Time (Local Time)
Middle Atlantic River Forecast Center, State College PA
Washington Crossing, NJ
Washington Crossing, NJ - - Upstream of Bridge - - September 19, 2004 - - 3 P.M.
Trenton Stage = 23.2 ft.
Washington Crossing, NJ - Downstream of Bridge - September 19, 2004 - 3:15 P.M.
Trenton Stage = 23.2 ft.
Flood Spectators - Washington Crossing, NJ - Downstream of Bridge - September 19, 2004 - 3:15 P.M.
Trenton Stage = 23.2 ft.
Police, fire, and emergency personnel from riverside and nearby communities worked around the clock to barricade flooded roadways, close bridges, and assist flooded residents. The flood was widely covered by the television networks.
Trenton Stage = 23.2 ft. - All DRJTBC Bridges other than I-95, Rt 202 Expressway, and Rt 1 Closed.
Yardley, PA - - 0.2 Miles North of Afton Ave, Taken from Canal Path looking toward Delaware River.
September 19, 2004 - - 4:10 P.M.  Trenton Stage = 23.2 ft. – Flooded homes between River and Canal
Yardley, PA - at Afton Ave, Taken from Canal Path looking toward Delaware River. September 19, 2004 - 4:15 P.M. Trenton Stage = 23.2 ft. – Flooded Gas Station Parking Lot.