

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
August 2011**

Prepared by the
Office of the Delaware River Master
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during August was excessive for the sixth consecutive month. The maximum daily mean discharge of 78,700 cfs was recorded on August 29. The minimum daily mean discharge was 2,670 cfs on August 3.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during August was 11,130 cfs, which is 521 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 13,270 cfs, or 838 percent of median.

On the basis of a 10-station average, precipitation during August was 11.85 inches, which is 299 percent of the 70-year average. The maximum daily-average precipitation during the month was 3.75 inches on August 28 when Hurricane Irene passed over the area. Precipitation in the upper Delaware River Basin during the past 12 months was 20.98 inches more than the long-term average. Precipitation during August was 7.89 inches more than the long-term average for the month.

Combined storage September 1, 2011 in Pepacton, Cannonsville, and Neversink Reservoirs was 100 percent of capacity above the point of maximum depletion and set a new September 1 maximum for the period of record. The combined storage of 271 billion gallons was 24 billion gallons more than that of one month ago and 87 billion gallons more than that of one year ago. Median storage on the first day of September in 44 years of record is 203 billion gallons. Pepacton and Neversink Reservoirs spilled a total of 14.7, and 5.7 billion gallons, respectively, during the month.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during August were above average in 15 of 21 observation wells. Water levels in 19 of the wells were below July 2011 levels, and water levels in 16 of the wells were above August 2010 levels.

HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Aug. 2010		September 2010 to August 2011					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Sept.	4.03	44.09	2.44	65.07	61	148	-1.59	+20.98
Oct.	3.64	40.06	8.50	62.63	234	156	+4.86	+22.57
Nov.	3.77	36.42	3.00	54.13	80	149	-.77	+17.71
Dec.	3.46	32.65	3.84	51.13	111	157	+.38	+18.48
Jan.	3.04	29.19	1.75	47.29	58	162	-1.29	+18.10
Feb.	2.65	26.15	3.80	45.54	143	174	+1.15	+19.39
Mar.	3.39	23.50	6.09	41.74	180	178	+2.70	+18.24
Apr.	3.74	20.11	7.00	35.65	187	177	+3.26	+15.54
May	4.14	16.37	5.79	28.65	140	175	+1.65	+12.28
June	4.13	12.23	6.29	22.86	152	187	+2.16	+10.63
July	4.14	8.10	4.72	16.57	114	205	+.58	+8.47
Aug.	3.96	3.96	11.85	11.85	299	299	+7.89	+7.89

Note: Amount shown in cumulative columns is total from month shown to present.

STREAMFLOW, IN CFS DELAWARE RIVER AT MONTAGUE, N.J.

Month	1940-2010			2011 Monthly mean	Percent of median
	Maximum	Median	Minimum		
August (observed)	14,230 (1955)	2,138	715 (1954)	11,130	521
August (adjusted)	17,410 (1955)	1,583	364 (1964)	13,270	838
September (observed)	17,200 (2004)	1,994	892 (1941)		
September (adjusted)	18,310 (2004)	1,538	324 (1964)		