

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

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

Adjusted streamflow in the upper Delaware River Basin during September was excessive for the seventh consecutive month. The maximum daily mean discharge of 100,000 cfs was recorded on September 8. The minimum daily mean discharge was 7,880 cfs on September 21.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during September was 24,540 cfs, which is 1,231 percent of median and set a new maximum for September. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 24,300 cfs, or 1,580 percent of median, and also a new maximum for September.

On the basis of a 10-station average, precipitation during September was 11.59 inches, which is 290 percent of the 70-year average. The maximum daily-average precipitation during the month was 2.12 inches on September 7. Precipitation in the upper Delaware River Basin during the past 12 months was 30.16 inches more than the long-term average. Precipitation during September was 7.59 inches more than the long-term average for the month.

Combined storage October 1, 2011 in Pepacton, Cannonsville, and Neversink Reservoirs was 100 percent of capacity above the point of maximum depletion. The combined storage of 271 billion gallons was 0.5 billion gallons less than that of one month ago and 108 billion gallons more than that of one year ago. Median storage on the first day of October in 44 years of record is 178 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled a total of 31.9, 28.0, and 13.2 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 September were above average in all 21 observation wells. Water levels in all of the wells were above August 2011 levels, and water levels in 20 of the wells were above September 2010 levels. Water levels in many of these wells set new maximums for September.

## 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 Sept. 2010		October 2010 to September 2011					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Oct.	3.64	44.06	8.50	74.22	234	168	+4.86	+30.16
Nov.	3.77	40.42	3.00	65.72	80	163	-.77	+25.30
Dec.	3.46	36.65	3.84	62.72	111	171	+.38	+26.07
Jan.	3.04	33.19	1.75	58.88	58	177	-1.29	+25.69
Feb.	2.65	30.15	3.80	57.13	143	189	+1.15	+26.98
Mar.	3.39	27.50	6.09	53.33	180	194	+2.70	+25.83
Apr.	3.74	24.11	7.00	47.24	187	196	+3.26	+23.13
May	4.14	20.37	5.79	40.24	140	198	+1.65	+19.87
June	4.13	16.23	6.29	34.45	152	212	+2.16	+18.22
July	4.14	12.10	4.72	28.16	114	233	+.58	+16.06
Aug.	3.96	7.96	11.85	23.44	299	294	+7.89	+15.48
Sept.	4.00	4.00	11.59	11.59	290	290	+7.59	+7.59

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		
September (observed)	17,200 (2004)	1,994	892 (1941)	24,540	1,231
September (adjusted)	18,310 (2004)	1,538	324 (1964)	24,300	1,580
October (observed)	15,690 (1955)	2,495	807 (1941)		
October (adjusted)	18,570 (1955)	2,509	322 (1964)		