

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

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

Adjusted streamflow in the upper Delaware River Basin during May was excessive. The maximum daily mean discharge of 28,600 cfs was recorded on May 21. The minimum daily mean discharge was 4,910 cfs on May 15.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during May was 13,810 cfs, which is 206 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 14,190 cfs, or 172 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during May was 5.79 inches, which is 140 percent of the 70-year average. The maximum daily-average precipitation during the month was 1.21 inches on May 19. Precipitation in the upper Delaware River Basin during the past 12 months was 11.93 inches more than the long-term average. Precipitation during May was 1.65 inches more than the long-term average for the month.

Combined storage June 1, 2011 in Pepacton, Cannonsville, and Neversink Reservoirs was 101 percent of capacity above the point of maximum depletion. The combined storage of 273 billion gallons was 5 billion gallons less than that of one month ago and 7 billion gallons more than that of one year ago. Median storage on the first day of June in 44 years of record is 269 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled a total of 17.4, 32.5, and 3.4 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 May were above average in 19 of 21 observation wells. Water levels in 13 of the wells were below April 2011 levels, and water levels in 16 of the wells were above May 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 May 2010		June 2010 to May 2011					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
June	4.14	44.07	3.90	56.00	94	127	-.24	+11.93
July	4.13	39.93	4.49	52.10	109	130	+.36	+12.17
Aug.	3.94	35.80	5.40	47.61	137	133	+1.46	+11.81
Sept.	4.03	31.86	2.44	42.21	61	132	-1.59	+10.35
Oct.	3.64	27.83	8.50	39.77	234	143	+4.86	+11.94
Nov.	3.77	24.19	3.00	31.27	80	129	-.77	+7.08
Dec.	3.46	20.42	3.84	28.27	111	138	+.38	+7.85
Jan.	3.04	16.96	1.75	24.43	58	144	-1.29	+7.47
Feb.	2.65	13.92	3.80	22.68	143	163	+1.15	+8.76
Mar.	3.39	11.27	6.09	18.88	180	168	+2.70	+7.61
Apr.	3.74	7.88	7.00	12.79	187	162	+3.26	+4.91
May	4.14	4.14	5.79	5.79	140	140	+1.65	+1.65

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

* Revised since last month.

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

Month	1940-2009			2011 Monthly mean	Percent of median
	Maximum	Median	Minimum		
May (observed)	16,090 (1943)	6,718	2,215 (1965)	13,810	206
May (adjusted)	18,970 (1989)	7,959	2,944 (1941)	14,190	178
June (observed)	20,130 (2006)	3,284	1,214 (1965)		
June (adjusted)	21,350 (2006)	3,961	1,024 (1962)		