

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
April 2010**

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

Adjusted streamflow in the upper Delaware River Basin during April was in the normal range. The maximum daily mean discharge of 33,500 cfs was recorded on April 1. The minimum daily mean discharge was 3,370 cfs on April 25.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during April was 9,093 cfs, which is 82 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 9,811 cfs, or 77 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during April was 2.89 inches, which is 77 percent of the 69-year average. The maximum daily-average precipitation during the month was 0.68 inches on April 27. Precipitation in the upper Delaware River Basin during the past 12 months was 9.35 inches more than the long-term average. Precipitation during April was 0.86 inches less than the long-term average for the month.

Combined storage May 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 99 percent of capacity above the point of maximum depletion. The combined storage of 269 billion gallons was 8 billion gallons less than that of one month ago and 3 billion gallons more than that of one year ago. Median storage on the first day of May in 42 years of record is 271 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled a total of 9.3, 4.9, and 2.8 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 April were above average in 14 of 20 observation wells. Water levels in 12 of the wells were above March 2010 levels, and water levels in 18 of the wells were above April 2009 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 Apr. 2009		May 2009 to April 2010					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
May	4.13	43.93	6.14	53.28	149	121	+2.01	+9.35
June	4.09	39.80	7.08	47.14	173	118	+2.99	+7.34
July	4.10	35.71	6.49	40.06	158	112	+2.39	+4.35
Aug.	3.89	31.61	7.03	33.57	181	106	+3.14	+1.96
Sept.	4.05	27.72	2.23	26.54	55	96	-1.82	-1.18
Oct.	3.62	23.67	4.82	24.31	133	103	+1.20	+0.64
Nov.	3.80	20.05	1.50	19.49	39	97	-2.30	-0.56
Dec.	3.45	16.25	4.28	17.99	124	111	+0.83	+1.74
Jan.	3.05	12.80	2.71	13.71	89	107	-0.34	+0.91
Feb.	2.64	9.75	3.00	11.00	114	113	+0.36	+1.25
Mar.	3.36	7.11	5.11	8.00	152	113	+1.75	+0.89
Apr.	3.75	3.75	2.89	2.89	77	77	-0.86	-0.86

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

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

Month	1940-2008			2010 Monthly mean	Percent of median
	Maximum	Median	Minimum		
April (observed)	31,560 (1940)	11,130	3,322 (1985)	9,093	82
April (adjusted)	33,010 (1940)	13,780	3,847 (1946)	9,811	71
May (observed)	16,090 (1943)	6,743	2,215 (1965)		
May (adjusted)	18,970 (1989)	8,015	2,944 (1941)		