

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

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

Adjusted streamflow in the upper Delaware River Basin during April was excessive. The maximum daily mean discharge of 46,700 cfs was recorded on April 29. The minimum daily mean discharge was 8,220 cfs on April 1.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during April was 16,290 cfs, which is 148 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 18,240 cfs, or 142 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during April was 7.00 inches, which is 187 percent of the 70-year average. The maximum daily-average precipitation during the month was 1.59 inches on April 17. Precipitation in the upper Delaware River Basin during the past 12 months was 12.32 inches more than the long-term average. Precipitation during April was 3.26 inches more than the long-term average for the month.

Combined storage May 1, 2011 in Pepacton, Cannonsville, and Neversink Reservoirs was 102 percent of capacity above the point of maximum depletion. The combined storage of 278 billion gallons was 12 billion gallons more than that of one month ago and 9 billion gallons more than that of one year ago. Median storage on the first day of May in 43 years of record is 271 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled a total of 15.1, 15.1, and 2.5 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 20 of 21 observation wells. Water levels in 14 of the wells were above March 2011 levels, and water levels in 13 of the wells were above April 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 Apr. 2010		May 2010 to April 2011					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
May	4.16	44.09	3.02	53.23	73	121	-1.14	+12.32
June	4.14	39.93	3.90	50.21	94	126	-.24	+13.46
July	4.13	35.79	4.49	46.31	109	129	+.36	+13.70
Aug.	3.94	31.66	5.40	41.82	137	132	+1.46	+13.34
Sept.	4.03	27.72	2.44	36.42	61	131	+1.59	+11.88
Oct.	3.64	23.69	8.50	33.98	234	143	+4.86	+10.29
Nov.	3.77	20.05	3.00	25.48	80	127	-.77	+5.43
Dec.	3.46	16.28	*3.84	22.48	111	138	+.38	+6.20
Jan.	3.04	12.82	1.75	18.64	58	145	-1.29	+5.82
Feb.	2.65	9.78	3.80	16.89	143	173	+1.15	+7.11
Mar.	3.39	7.13	6.09	13.09	180	184	+2.70	+5.96
Apr.	3.74	3.74	7.00	7.00	187	187	+3.26	+3.26

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		
April (observed)	31,560 (1940)	11,010	3,322 (1985)	16,290	148
April (adjusted)	33,010 (1940)	13,585	3,847 (1946)	18,240	134
May (observed)	16,090 (1943)	6,718	2,215 (1965)		
May (adjusted)	18,970 (1989)	7,959	2,944 (1941)		