

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

July 2002

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

Adjusted streamflow in the upper Delaware River Basin during July was deficient. The maximum daily mean discharge of 3,300 cfs occurred on July 3. The minimum daily mean discharge was 1,470 cfs on July 14.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during July was 2,088 cfs, which is 84 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 1,239 cfs, or 55 percent of median (water years 1961-90).

On the basis of a 12-station average, precipitation during July was 1.46 inches, which is 36 percent of the 61-year average and the second driest July on record. The maximum daily-average precipitation during the month was 0.72 inches on July 24. Precipitation in the upper Delaware River Basin during the past 12 months was 4.96 inches less than the long-term average. Precipitation during July was 2.61 inches less than the long-term average for the month.

Combined storage August 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 77 percent of capacity above the point of maximum depletion. The combined storage of 207 billion gallons was 34 billion gallons less than that of one month ago and 14 billion gallons less than that of one year ago. Median storage on the first day of August in 35 years of record is 230 billion gallons.

As part of a statewide network, the USGS operates 12 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during July were below average in 10 of the wells. Water levels in all 12 of the wells were trending downward in comparison to June levels, and water levels in 10 of the wells were below July 2001 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 July 2001		August 2001 to July 2002					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Aug.	3.85	43.20	2.84	38.24	74	89	-1.01	-4.96
Sept.	3.83	39.35	5.37	35.40	140	90	+1.54	-3.95
Oct.	3.38	35.52	1.28	30.03	38	85	-2.10	-5.49
Nov.	3.83	32.14	1.37	28.75	36	89	-2.46	-3.39
Dec.	3.36	28.31	2.80	27.38	83	97	-.56	-.93
Jan.	3.00	24.95	*2.03	24.58	68	99	-.97	-.37
Feb.	2.65	21.95	*1.59	22.55	60	103	-1.06	+.60
Mar.	3.35	19.30	3.47	20.96	104	109	+.12	+1.66
Apr.	3.73	15.95	3.71	17.49	99	110	-.02	+1.54
May	4.19	12.22	6.00	13.78	143	113	+1.81	+1.56
June	3.96	8.03	6.32	7.78	160	97	+2.36	-.25
July	4.07	4.07	1.46	1.46	36	36	-2.61	-2.61

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	1940-2000			2002 Monthly mean	Percent of median
	Maximum	Median	Minimum		
July (observed)	11,220 (1945)	2,486	864 (1954)	2,088	84
July (adjusted)	11,470 (1945)	2,193	391 (1965)	1,239	56
August (observed)	14,230 (1955)	2,105	715 (1954)		
August (adjusted)	17,410 (1955)	1,418	364 (1964)		