

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

December 2002

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

Adjusted streamflow in the upper Delaware River Basin during December was in the normal range. The maximum daily mean discharge of 11,000 cfs occurred on December 22. The minimum daily mean discharge was 3,210 cfs on December 9.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during December was 6,143 cfs, which is 125 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 8,149 cfs, or 154 percent of median (water years 1961-90).

On the basis of a 5-station average, precipitation during December was 4.68 inches, which is 140 percent of the 61-year average. The maximum daily-average precipitation during the month was 1.58 inches on December 26. Precipitation in the upper Delaware River Basin during the past 12 months was 3.48 inches more than the long-term average. Precipitation during December was 1.33 inches more than the long-term average for the month.

Combined storage January 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 83 percent of capacity above the point of maximum depletion. The combined storage of 225 billion gallons was 31 billion gallons more than that of one month ago and 155 billion gallons more than that of one year ago. Median storage on the first day of January in 35 years of record is 186 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 December were below average in 7 of the wells. Water levels in 10 of the wells were above November 2002 levels, and water levels in all 12 wells were above December 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 Dec. 2001		January to December 2002					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Jan.	3.00	43.13	2.03	46.61	68	108	-.97	+3.48
Feb.	2.65	40.13	1.59	44.58	60	111	-1.06	+4.45
Mar.	3.35	37.48	3.59	42.99	107	115	+.24	+5.51
Apr.	3.73	34.13	3.89	39.40	104	115	+.16	+5.27
May	4.19	30.40	5.94	35.51	142	117	+1.75	+5.11
June	3.96	26.21	5.74	29.57	145	113	+1.78	+3.36
July	4.07	22.25	*1.32	23.83	32	107	-2.75	+1.58
Aug.	3.83	18.18	2.98	22.51	78	124	-.85	+4.33
Sept.	3.86	14.35	4.86	19.53	126	136	+1.00	+5.18
Oct.	3.35	10.49	6.31	14.67	188	140	+2.96	+4.18
Nov.	3.79	7.14	3.68	8.36	97	117	-.11	+1.22
Dec.	3.35	3.35	4.68	4.68	140	140	+1.33	+1.33

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	1940-2001			2002 Monthly mean	Percent of median
	Maximum	Median	Minimum		
December (observed)	18,830 (1996)	4,916	1,665 (1998)	6,143	125
December (adjusted)	20,880 (1973)	6,506	1,624 (1998)	8,149	125
January (observed)	15,600 (1996)	4,922	1,318 (1981)		
January (adjusted)	21,330 (1996)	5,820	1,064 (1981)		