

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
December 2001**

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

Adjusted streamflow in the upper Delaware River Basin during December was deficient. The maximum daily mean discharge of 5,140 cfs occurred on December 19. The minimum daily mean discharge was 1,170 cfs on December 11.

On the basis of a multi-station average, precipitation during December was 2.71 inches, which is 81 percent of the 60-year average. The maximum daily-average precipitation during December was 0.86 inches on December 18. Precipitation in the upper Delaware River Basin during the past 12 months was 10.41 inches less than the long-term average. Precipitation during December was 0.65 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during December was 2,167 cfs, which is 44 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 3,061 cfs, or 58 percent of median (water years 1961-90).

Combined storage January 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 26 percent of capacity above the point of maximum depletion. The combined storage of 70 billion gallons was 4 billion gallons more than that of one month ago and 175 billion gallons less than that of one year ago. Median storage on the first day of January in 34 years of record is 188 billion gallons. Based on reservoir storage, the river basin entered drought on December 1, 2001. **The combined storage on January 1, 2002 was the lowest of record for the month of January.**

As part of a statewide network, the USGS operates 13 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during December were below average in all of the wells and new record low levels were set in 5 of the wells. Water levels in 8 of the wells were trending downward in comparison to November levels. Water levels in 12 of the wells were below December 2000 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. 2000		January 2001 to December 2001					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Jan.	3.02	43.28	1.46	32.87	48	76	-1.56	-10.41
Feb.	2.65	40.26	2.38	31.41	90	78	-.27	-8.85
Mar.	3.33	37.61	4.95	29.03	149	77	+1.62	-8.58
Apr.	3.77	34.28	1.35	24.08	36	70	-2.42	-10.20
May	4.21	30.51	3.08	22.73	73	75	-1.13	-7.78
June	3.96	26.30	*4.06	19.65	103	75	+.10	-6.65
July	4.09	22.34	*2.49	15.59	61	70	-1.60	-6.75
Aug.	3.85	18.25	2.58	13.10	67	72	-1.27	-5.15
Sept.	3.83	14.40	5.31	10.52	139	73	+1.48	-3.88
Oct.	3.38	10.57	1.18	5.21	35	49	-2.20	-5.36
Nov.	3.83	7.19	1.32	4.03	34	56	-2.51	-3.16
Dec.	3.36	3.36	2.71	2.71	81	81	-.65	-.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	1940-2000			2001 Monthly mean	Percent of median
	Maximum	Median	Minimum		
December (observed)	18,830 (1996)	4,890	1,665 (1998)	2,167	44
December (adjusted)	20,880 (1973)	6,276	1,624 (1998)	3,061	49
January (observed)	15,600 (1996)	4,960	1,318 (1981)		
January (adjusted)	21,330 (1996)	5,874	1,064 (1981)		