

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
December 2003**

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

Adjusted streamflow in the upper Delaware River Basin during December was excessive for the seventh consecutive month. The maximum daily mean discharge of 43,600 cfs occurred on December 12. The minimum daily mean discharge was 6,780 cfs on December 10.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during December was 16,370 cfs, which is 335 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 16,750 cfs, or 317 percent of median (water years 1961-90).

On the basis of an 5-station average, precipitation during December was 4.63 inches, which is 137 percent of the 62-year average. The maximum daily-average precipitation during the month was 0.87 inches on December 12 and 15. Precipitation in the upper Delaware River Basin during the past 12 months was 11.91 inches more than the long-term average. Precipitation during December was 1.26 inches more than the long-term average for the month. **Precipitation during 2003 was the third largest annual total since record keeping began in 1941.**

Combined storage January 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 101 percent of capacity above the point of maximum depletion. The combined storage of 274 billion gallons was 1 billion gallons more than that of one month ago and 49 billion gallons more than that of one year ago. **Combined storage on January 1, 2004, was the highest of record for the first day of January.** Median storage on the first day of January in 36 years of record is 188 billion gallons. Pepacton, Cannonsville and Neversink Reservoirs spilled 26, 39 and 12 billion gallons, respectively, in December.

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 above average in all of the wells. Water levels in 11 of the wells were above November 2003 levels, and water levels in all of the wells were above December 2002 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. 2002		January to December 2003					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Jan.	2.98	43.19	2.64	55.10	89	128	-.34	+11.91
Feb.	2.63	40.21	2.97	52.46	113	130	+.34	+12.25
Mar.	3.36	37.58	3.03	49.49	90	132	-.33	+11.91
Apr.	3.74	34.22	2.80	46.46	75	136	-.94	+12.24
May	4.22	30.48	3.71	43.66	88	143	-.51	+13.18
June	3.99	26.26	*6.57	39.95	165	152	+2.58	+13.69
July	4.02	22.27	3.95	33.38	98	150	-.07	+11.11
Aug.	3.82	18.25	4.80	29.43	126	161	+.98	+11.18
Sept.	3.88	14.43	10.39	24.63	268	171	+6.51	+10.20
Oct.	3.39	10.55	5.63	14.24	166	135	+2.24	+3.69
Nov.	3.79	7.16	3.98	8.61	105	120	+.19	+1.45
Dec.	3.37	3.37	4.63	4.63	137	137	+1.26	+1.26

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	1940-2002			2003 Monthly mean	Percent of median
	Maximum	Median	Minimum		
December (observed)	18,830 (1996)	4,890	1,665 (1998)	16,370	335
December (adjusted)	20,880 (1973)	6,276	1,624 (1998)	16,750	267
January (observed)	15,600 (1996)	4,885	1,318 (1981)		
January (adjusted)	21,330 (1996)	5,767	1,064 (1981)		