SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN October 2003

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

Adjusted streamflow in the upper Delaware River Basin during October was excessive for the fifth consecutive month. The maximum daily mean discharge of 49,900 cfs occurred on October 30. The minimum daily mean discharge was 4,450 cfs on October 13 and 14.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during October was 11,030 cfs, which is 470 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 12,340 cfs, or 561 percent of median (water years 1961-90).

On the basis of an 5-station average, precipitation during October was 5.63 inches, which is 166 percent of the 62-year average. The maximum daily-average precipitation during the month was 1.31 inches on October 15. Precipitation in the upper Delaware River Basin during the past 12 months was 11.90 inches more than the long-term average. Precipitation during October was 2.24 inches more than the long-term average for the month.

Combined storage November 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 103 percent of capacity above the point of maximum depletion. The combined storage of 278 billion gallons was 3 billion gallons more than that of one month ago and 122 billion gallons more than that of one year ago. **Combined storage on November 1, 2003, was the highest of record for the first day of November.** Median storage on the first day of November in 36 years of record is 148 billion gallons. Pepacton, Cannonsville and Neversink Reservoirs spilled 24, 21 and 2.4 billion gallons, respectively, in October.

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 October were above average in all of the wells. Water levels in all of the wells were above September 2003 and October 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 Oct. 2002		November 2002 to October 2003						
Ī	Average		Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
Nov.	3.79	43.17	3.96	55.07	104	128	+.17	+11.90	
Dec.	3.35	39.38	4.66	51.11	139	130	+1.31	+11.73	
Jan.	2.98	36.03	2.64	46.45	89	129	34	+10.42	
Feb.	2.63	33.05	*2.97	43.81	113	133	+.34	+10.76	
Mar.	3.36	30.42	3.00	40.84	89	134	36	+10.42	
Apr.	3.74	27.06	2.63	37.84	70	140	-1.11	+10.78	
May	4.22	23.32	3.57	35.21	85	151	65	+11.89	
June	3.99	19.10	6.87	31.64	172	166	+2.88	+12.54	
July	4.02	15.11	3.95	24.77	98	164	07	+9.66	
Aug.	3.82	11.09	4.80	20.82	126	188	+.98	+9.73	
Sept.	3.88	7.27	10.39	16.02	268	220	+6.51	+8.75	
Oct.	3.39	3.39	5.63	5.63	166	166	+2.24	+2.24	

Note: Amount shown in cumulative columns is total from month shown to present.

<u>STREAMFLOW, IN CFS</u> DELAWARE RIVER AT MONTAGUE, N.J.

		1940-2002	2003	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
October (observed)	15,690 (1955)	2,348	807 (1941)	11,030	470
October (adjusted)	18,570 (1955)	2,147	322 (1964)	12,340	575
November (observed)	11,760 (1951)	4,396	995 (1964)		
November (adjusted)	16,160 (1972)	5,673	390 (1964)		

^{*} Revised since last month.