

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

September 2002

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

Adjusted streamflow in the upper Delaware River Basin during September was in the normal range. The maximum daily mean discharge of 3,500 cfs occurred on September 29. The minimum daily mean discharge was 1,020 cfs on September 23.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during September was 1,832 cfs, which is 91 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 1,151 cfs, or 94 percent of median (water years 1961-90).

On the basis of a 12-station average, precipitation during September was 4.86 inches, which is 126 percent of the 61-year average. The maximum daily-average precipitation during the month was 1.28 inches on September 16. Precipitation in the upper Delaware River Basin during the past 12 months was 5.22 inches less than the long-term average. Precipitation during September was 1.00 inches more than the long-term average for the month.

Combined storage October 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 50 percent of capacity above the point of maximum depletion. The combined storage of 137 billion gallons was 25 billion gallons less than that of one month ago and 4 billion gallons less than that of one year ago. Median storage on the first day of October in 35 years of record is 177 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 September were below average in 11 of the wells. Water levels in 11 of the wells were trending downward in comparison to August levels, and water levels in 11 of the wells were below September 2001 levels. Water levels in 6 of the wells set record lows for September, and water levels in 2 of the wells set new period of record lows regardless of month.

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 Sept. 2001		October 2001 to September 2002					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Oct.	3.38	43.21	1.28	37.99	38	88	-2.10	-5.22
Nov.	3.83	39.83	1.37	36.71	36	92	-2.46	-3.12
Dec.	3.36	36.00	2.80	35.34	83	98	-.56	-.66
Jan.	3.00	32.64	2.03	32.54	68	100	-.97	-.10
Feb.	2.65	29.64	1.59	30.51	60	103	-1.06	+.87
Mar.	3.35	26.99	*3.59	28.92	107	107	+.24	+1.93
Apr.	3.73	23.64	3.71	25.33	99	107	-.02	+1.69
May	4.19	19.91	6.00	21.62	143	109	+1.81	+1.71
June	3.96	15.72	6.32	15.62	160	99	+2.36	-.10
July	4.07	11.76	1.46	9.30	36	79	-2.61	-2.46
Aug.	3.83	7.69	2.98	7.84	78	102	-.85	+.15
Sept.	3.86	3.86	4.86	4.86	126	126	+1.00	+1.00

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		
September (observed)	9,167 (1960)	2,016	892 (1941)	1,832	91
September (adjusted)	10,720 (1960)	1,462	324 (1964)	1,151	79
October (observed)	15,690 (1955)	2,352	807 (1941)		
October (adjusted)	18,570 (1955)	2,199	322 (1964)		