

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
September 2006**

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

Adjusted streamflow in the upper Delaware River Basin during September was excessive for the fourth consecutive month. The maximum daily mean discharge of 14,600 cfs was recorded on September 16. The minimum daily mean discharge was 2,790 cfs on September 14.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during September was 5,583 cfs, which is 277 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 5,971 cfs, or 395 percent of median (water years 1971-2000).

On the basis of an 11-station average, precipitation during September was 4.90 inches, which is 121 percent of the 65-year average. The maximum daily-average precipitation during the month was 1.79 inches on September 15. Precipitation in the upper Delaware River Basin during the past 12 months was 15.56 inches more than the long-term average. Precipitation during September was 0.86 inches more than the long-term average for the month.

Combined storage October 1, 2006 in Pepacton, Cannonsville, and Neversink Reservoirs was 91 percent of capacity above the point of maximum depletion. The combined storage of 247 billion gallons was 1 billion gallons less than that of one month ago and 119 billion gallons more than that of one year ago. Median storage on the first day of October in 39 years of record is 177 billion gallons. Cannonsville Reservoir spilled 7.2 billion gallons in September.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during September were above average in 18 of 20 observation wells. Water levels in 12 of 20 wells were above August 2006 levels, and water levels in 18 of 20 wells were above September 2005 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 Sept. 2005		October 2005 to September 2006					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Oct.	3.42	43.54	11.28	59.10	330	136	+7.86	+15.56
Nov.	3.79	40.12	4.23	47.82	112	119	+44	+7.70
Dec.	3.41	36.33	2.96	43.59	87	120	-.45	+7.26
Jan.	3.02	32.92	5.19	40.63	172	123	+2.17	+7.71
Feb.	2.61	29.90	1.56	35.44	60	119	-1.05	+5.54
Mar.	3.36	27.29	*1.32	33.88	39	124	-2.04	+6.59
Apr.	3.76	23.93	3.76	32.56	100	136	0	+8.63
May	4.18	20.17	4.45	28.80	106	143	+27	+8.63
June	4.00	15.99	10.89	24.35	272	152	+6.89	+8.36
July	4.06	11.99	3.16	13.46	78	112	-.90	+1.47
Aug.	3.89	7.93	5.40	10.30	139	130	+1.51	+2.37
Sept.	4.04	4.04	4.90	4.90	121	121	+86	+86

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	1940-2005			2006 Monthly mean	Percent of median
	Maximum	Median	Minimum		
September (observed)	17,200 (2004)	2,016	892 (1941)	5,583	277
September (adjusted)	18,310 (2004)	1,462	324 (1964)	5,971	408
October (observed)	15,690 (1955)	2,390	807 (1941)		
October (adjusted)	18,570 (1955)	2,279	322 (1964)		